Cultivating Good Minds

A Philosophical & Practical Guide to Educating for Intellectual Virtues

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 $Cultivating\ Good\ Minds:\ A\ Philosophical\ \ \ \ Practical\ Guide\ to\ Educating\ for\ Intellectual\ Virtues$

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For the students and staff of the Intellectual Virtues Academy of Long Beach

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How to Use This Guide

You will likely already have noticed that this guide is rather lengthy! Therefore, except in rare cases, I would encourage you not to try to read the entire thing cover to cover.

Rather, I'd suggest paying careful attention to the Table of Contents and skipping to the chapters that are likely to be of the most use or interest to you. As you do so, it may be worth bearing in mind that the chapters in Parts I and II of the guide provide an overview of intellectual virtues and their importance to education, the chapters in Part III are written primarily for administrators and other non-teaching school stakeholders, and the chapters in Part IV are aimed primarily at classroom instructors.

At the end of each chapter, there is a set of discussion questions. These are intended to promote thoughtful reflection and discussion among educators (or other interested readers) who are reading parts of the guide in a group setting (e.g. as part of a professional development program).

Finally, to return to the Table of Contents from any point in the guide, simply click on the header of the page you are on. When viewing the Table of Contents, you can immediately get to any chapter by clicking on the chapter title.

This guide is rooted in the idea that education is best practiced with a clear sense of what education is *for*, that is, of its proper *aims* or *goals*. Too often teachers go about their careers focusing on their day-to-day responsibilities (which are several and challenging) without stopping to reflect on big questions like: What am I really trying to accomplish? In the broader scheme of things, how can my work as a teacher be evaluated? What do I ultimately hope my students will receive from their education?

In the chapters that follow, I defend and explore the idea that a critical purpose of education is growth in "intellectual virtues," which are the character traits of a good thinker or learner, including curiosity, open-mindedness, attentiveness, intellectual autonomy, intellectual humility, intellectual tenacity, and more. This may sound obvious. *Of course* education should make students more curious, open-minded, and so on. Less obvious, however, is what it might look like to pursue this goal in a deliberate, explicit, and systematic way. This is precisely what I hope to shed light on in the pages that follow.

In my work with teachers in recent years, I have found, somewhat surprisingly, that many of them are very eager to grapple

with big questions and concepts in education. They are tired of learning about the latest pedagogical technique or technological innovation. Instead they are hungry for reflection on questions like: What's the point of education? What are the character traits of an ideal thinker or learner? How are knowledge and learning connected with human flourishing? I have also found teachers to be very amenable to the idea that education should aim at growth in intellectual virtues. As many of them have said to me, this way of thinking about education brings "meaning and purpose" to their work as teachers—meaning and purpose that isn't so clear when the main goal is to raise standardized test scores or even to help students gain admission to a university or to prepare them for successful careers.

As the title suggests, the guide is intended as a "philosophical and practical" resource for educators. It is philosophical in at least two respects. First, it addresses what is ultimately a philosophical issue: namely, the proper aims or goals of education. Second, it offers an extended answer to this question that draws on recent work in philosophy. "Epistemology" is the branch of philosophy that deals with knowledge and knowing. "Virtue epistemology" is an approach to epistemology that focuses on intellectual virtues, which again are the deep personal qualities or character traits of a good thinker, learner, or "knower." In recent years, philosophers working in this area have developed rigorous theoretical models of intellectual virtue as well as detailed accounts of particular virtues like open-mindedness, curiosity, intellectual humility, and

intellectual courage. These models are ripe for application to educational theory and practice. And it is precisely such application that I undertake in this guide. My primary aim is to provide a clear, concrete, and detailed response to the question: What can we as educators do to help our students experience "meaningful growth" in intellectual virtues within an academic context?

The guide is pitched primarily to middle school and high school educators, including administrators and teachers. However, nearly everything contained herein has application to other educational levels as well, from elementary school up through university. Therefore, while some educators might need to adapt certain suggestions to better fit the developmental stages of their students, the intended audience of the guide is very broad. Anyone interested in educating for growth in intellectual virtues should be able to derive a wide range of useful principles and practices from it.

The guide brings together knowledge and experience from three main sources. The first, alluded to above, is virtue epistemology. By training and profession, I'm a philosopher. I work mainly in the area of virtue epistemology. In the chapters that follow, I draw extensively on some of my previous work in this area and on the work of several of my colleagues. This work sheds important light on questions like: What exactly are intellectual virtues? How are intellectual virtues related to "moral" virtues? How are they related to other, more familiar educational concepts like knowledge and skills? In what ways are intellectual virtues valuable? While

the primary focus of the guide is extremely practical, the practical material is presented against a philosophical or theoretical backdrop (Chapters 1-12) that addresses these and related questions.

Second, in recent years, I have directed or co-led a pair of projects, sponsored by generous grants from the John Templeton Foundation, that have involved the application of virtue epistemology to educational theory and practice. This has included organizing conferences and workshops for teachers and leading scholars from several disciplines on the topic of intellectual virtues and education. It has also included the co-founding of the Intellectual Virtues Academy of Long Beach, a new charter middle school whose mission is to "foster meaningful growth in intellectual character virtues in a thoughtful, challenging, and supportive academic environment." I have learned a great deal about what works and what doesn't work in the area of "intellectual character education" from these experiences. The guide is an attempt to distill, organize, and share a significant amount of this knowledge and experience.

A third source of many of the ideas and suggestions presented in the guide is related research in educational theory and psychology, especially research that has come out of <u>Project Zero</u> at the Harvard Graduate School of Education. Years ago, when I had just begun to think about the application of virtue epistemology to education, I was thrilled to come across the work of Project Zero researchers like David Perkins, Shari Tishman, and Ron

Ritchhart. One major emphasis of their work, which is highly practical but grounded in empirical observation and research, has been educating for growth in "thinking dispositions." While thinking dispositions aren't quite the same thing as intellectual virtues, they are very closely related, such that a great deal of what these authors say about how to educate for thinking dispositions applies equally well to educating for intellectual virtues. Of special importance here is Ron Ritchhart's work, especially his 2002 book *Intellectual Character: What It Is, Why It Matters, and How Get It.* Readers who are well acquainted with Ron's work might read many of the chapters that follow and conclude that I am simply reinterpreting Ron's work (and that of his colleagues at Project Zero) through an intellectual virtues conceptual framework. This would not be an unfair or inaccurate characterization of a good deal of the guide; indeed I think it's largely accurate!

This point notwithstanding, several chapters of the guide (especially Chapters 1-12) go considerably beyond existing work in education, drawing on the research in virtue epistemology noted above. Moreover, I have found that examining Ron's work on thinking dispositions and related concepts through the lens of virtue epistemology offers a fresh and compelling perspective on the subject matter. Finally, while the guide draws heavily from Project Zero research, it draws from other bodies of educational scholarship as well, including research on (traditional) character education, habits of mind, critical thinking, growth mindset, and intrinsic motivation. My hope, then, is that while many of the

ideas contained in the guide are "nothing new," its distinctive angle and approach are sufficiently original to avoid redundancy and merit serious consideration.

The structure of the guide is as follows. Chapters 1-3 provide an overview of the nature and value of intellectual virtues. They also explore and defend the enterprise of educating for growth in these qualities. Chapters 4-12 provide an in-depth look at nine specific intellectual virtues: curiosity, intellectual autonomy, intellectual humility, attentiveness, intellectual carefulness, intellectual thoroughness, open-mindedness, intellectual courage, and intellectual tenacity. Chapters 13-19 discuss a range of practices aimed at fostering intellectual character growth that can be employed *outside* of a classroom setting, for example, by administrators on a school-wide scale. Chapters 20-34 explore a range of principles and practices that can be employed in the context of academic instruction.

I conclude with a quotation from Ron Ritchhart that aptly captures the guiding vision of the present work:

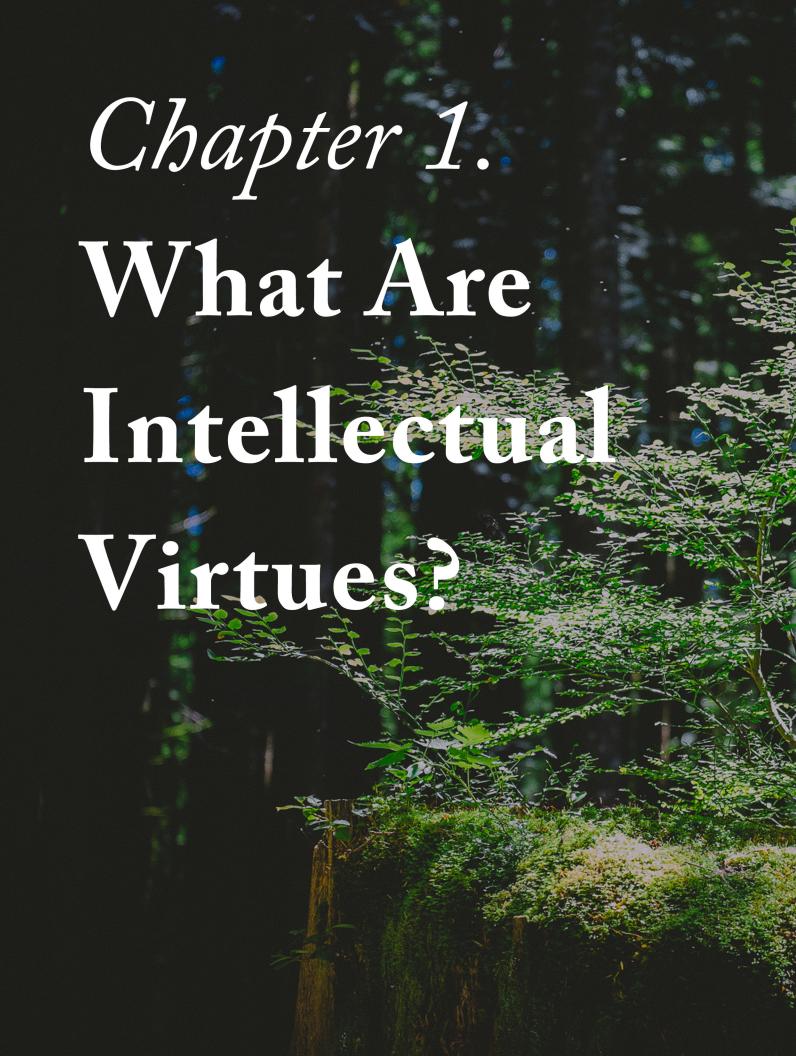
When all is said and done, when the last test is taken, what will stay with a student from his or her education? Memories, certainly. Treasured experiences, positive relationships, meaningful interactions, yes. But what about the knowledge and skills teachers have worked so hard to impart? Surprisingly, we don't have much evidence that these have a very long shelf life. So what sticks? What kind of learning lasts beyond a given year that we can grab hold of to guide our vision? I contend that what stays with us from our education are

patterns: patterns of behavior, patterns of thinking, patterns of interaction. These patterns make up our character, specifically our intellectual character. Through our patterns of behavior, thinking, and interaction, we show what we are made of as thinkers and learners. Schools can do much to shape and influence these patterns. This is the kind of long-term vision we need for education: to be shapers of students' intellectual character. (2012: 9)

My hope is that this guide will provide educators with a better sense of what it might look like to educate for intellectual character growth and that it might bolster their motivation to begin aligning their educational beliefs and practices with this important goal.

Part 1.

What Are Intellectual Virtues and Why Are They Important?



CHAPTER I

What Are Intellectual Virtues?

Intellectual virtues are the character traits of a good thinker or learner. To make sense of this idea, ask yourself: What qualities or abilities do you tend to associate with people you consider to be good thinkers or learners?

INTELLECTUAL CHARACTER, INTELLECTUAL VIRTUES

One likely answer is *knowledge*—good thinkers, or people we consider smart, tend to be people who know a lot; they aren't, in any case, ignorant. Another likely answer pertains to "raw" intellectual ability, sometimes referred to as IQ or intelligence. This includes things like general problem-solving ability, linguistic ability, memory, and the ability to perceive connections. However, while knowledge and raw intellectual ability are good things, while they can help facilitate good thinking and learning, they are not the whole story. To see why, consider the fact that good thinking and learning often make demands, not just on how much a person knows or on how high her IQ is, but also on things like: how much she *cares* about learning, what she *believes* is worth doing or knowing, whether she is *motivated* to learn, whether she has good *judgment* about when to use her intellectual skills, and so on. This suggests that good thinking and learning are partly a

matter of how a person is disposed to *act*, *think*, *and feel*—and that such dispositions are largely independent of how much knowledge the person has or of how naturally intellectually gifted the person may (or may not) be.

This is the domain of intellectual character. Typically, when we think of character we think of *moral* character or moral virtues. You can think of moral virtues as the character traits of a good neighbor. They include qualities like compassion, kindness, and generosity. We also sometimes associate talk of character with ideas about *civic* character or civic virtues. Civic virtues are the

"[I]ntellectual character is the part of your character—
your dispositions to act, think, and feel—that pertains to
thinking and learning."

character traits of a good citizen, including tolerance, respect, and community-mindedness. Distinct from moral virtues and civic virtues, *intellectual* virtues again are the character traits or personal qualities of a good thinker or learner. These include traits like curiosity, intellectual autonomy, attentiveness, intellectual carefulness, intellectual thoroughness, open-mindedness, intellectual humility, and intellectual tenacity. (While not the same thing as moral or civic virtues, intellectual virtues do overlap with and intersect with these other types of virtues. For a philosophi-

cal treatment of the relationship between intellectual virtues and moral virtues, see Baehr 2013: Appendix.)

To see that intellectual character differs, not just from moral and civic character, but also from knowledge and raw intellectual ability, consider whether it's possible for a person to know a lot about a lot of things while still lacking many intellectual virtues. For instance, have you ever known someone who has a lot of knowledge but who is intellectually arrogant, dishonest, and closed-minded? I bet you have. You might even think that most people with a lot of knowledge are like this! The intellectual character of such persons is marked by intellectual vices. Intellectual vices are the opposite of intellectual virtues. They are defects of intellectual character.

A very similar point can be made about the relationship between raw cognitive ability and intellectual virtues. As a philosopher, I've encountered more than one person who is highly "intelligent" (in the relevant sense) but also intellectually unfair, uncharitable, narrow-minded, or arrogant. Many of us probably also know people who are highly intellectually gifted but who have a difficult time *applying* their intelligence. Such people can sometimes be characterized as "smart" but intellectually lazy, hasty, careless, or impatient.

To summarize: intellectual *character* is the part of your character—your dispositions to act, think, and feel—that pertains to

thinking and learning. Intellectual *virtues* are "excellences" of this aspect of character. They are the personal qualities or character traits of a good thinker or learner. As such, they are distinct from knowledge and raw intelligence. While they are closely related to and overlap with moral virtues and civic virtues, they are also distinct from these qualities. (On certain ways of thinking about intelligence, it is malleable. See, for example, Perkins 1995 and Blackwell et al 2007. Here, intelligence is partly *constituted* by intellectual character.)

THREE DIMENSIONS OF AN INTELLECTUAL VIRTUE

Before turning to look at why intellectual virtues are important in education, I want to introduce a three-part model of intellectual virtue. While it's not important that all aspects of this model make perfect sense to you now, it will be helpful to have the model before us in several of the chapters that follow. (This model is similar to and has been influenced by similar models in Ritchhart 2002 and Tishman et al 1995. In Baehr 2015, I defend a *four*-dimensional model of intellectual virtues. But the fourth dimension—proper epistemic affections or feelings—is less central to our purposes here and so will be set aside until Chapter 33.)

According to the model, intellectual virtues have three main parts or dimensions. First, for each intellectual virtue like curiosity or open-mindedness, there is a certain ability or skill that is specific to this virtue on the basis of which it can be distinguished

from other intellectual virtues. So, for instance, curiosity involves the ability to ask thoughtful and insightful questions, whereas open-mindedness involves the ability to switch perspectives, and intellectual autonomy the ability to think and form beliefs for oneself. This is the "ability" or "skill" dimension of an intellectual virtue.

Second, it's not sufficient for possessing an intellectual virtue that one simply have the ability to ask thoughtful questions, switch

"[P]ossessing an intellectual virtue isn't an all-or-nothing affair. For most of us, to the extent that we possess intellectual virtues, we possess them in degrees."

perspectives, or think for oneself. One must also be *motivated* to do these things—to *use* the abilities. One must be ready and willing to practice the abilities characteristic of the virtues one possesses. Accordingly, intellectual virtues also have a "motivational" dimension.

In its ideal form, this dimension has an additional aspect to it. Philosophers sometimes describe intellectual virtues as traits that flow from a love of truth, knowledge, understanding, or even wisdom. Put another way, in their purest or ideal form, intellectual virtues are rooted or grounded in a desire for things like

knowledge and understanding. An intellectually virtuous person is disposed to ask thoughtful questions, switch perspectives, and think for herself *because* she wants to reach the truth, acquire knowledge, or form a deeper understanding.

This may sound like a high bar for intellectual virtue. However, we needn't worry about this here. By sketching a conceptual model of intellectual virtue, I'm describing intellectual virtues in their purest or most ideal form. But possessing an intellectual virtue isn't an all-or-nothing affair. For most of us, to the extent that we possess intellectual virtues, we possess them in *degrees*. We are more or less curious, open-minded, intellectually autonomous, intellectually humble, or intellectually courageous. Therefore, if a person is disposed to think for herself or to take up alternative perspectives on a regular basis, but her motivation for doing so isn't rooted in a desire for knowledge, she might still be intellectually autonomous or open-minded, at least to a significant extent.

You might be tempted to think that this model is complete. After all, if I have the *ability* to think in ways that are open-minded, intellectually autonomous, and so on, and I'm also *motivated* to think in these ways, what more could be required? Surprisingly, this expectation is mistaken. In a series of studies conducted by researchers at Harvard University's Project Zero, it was discovered that students often have the ability to think in intellectually virtuous ways, and are motivated to use these abilities, but nev-

ertheless fail to do so. How could this be? Researchers concluded that students fail to think virtuously because they lack an appropriate *sensitivity* to or *judgment* about when they should exercise their abilities. That is, they fail to recognize occasions on which it's appropriate to switch perspectives, think for themselves, and so on (see Ritchhart and Perkins 2000).

This shows that in addition to an ability or skill dimension and a motivational dimension, intellectual virtues also have a third com-

"[S]tudents often have the ability to think in intellectually virtuous ways, and are motivated to use these abilities, but nevertheless fail to do so."

ponent, which I will refer to as a "judgment" dimension. Again, to be open-minded, one must be skilled at taking up alternative standpoints, motivated to use this ability (ideally, motivated to use it because one desires to reach the truth or acquire a deeper understanding), and able to recognize occasions that call for it. Conspiracy theorists provide a nice example of what it might look like to have the ability to be open-minded, to be motivated to use this ability, but to lack good judgment about when to use it. Conspiracy theorists tend to be too open-minded or open-minded to a fault. They practice open-mindedness when they really shouldn't.

(For a recent discussion of conspiracy theorists and intellectual character, see here.)

It will be helpful to have this three-dimensional model of intellectual virtues at our disposal when it comes, in later chapters, to thinking about how to foster growth in intellectual virtues. This shouldn't be too surprising. If intellectual virtues have notably different dimensions or components, it may be that different components are best fostered by different means or practices. For example, helping students learn *how* to ask good questions may require a different approach than helping them *want* to ask such questions. Moreover, when it comes to trying to track a student's growth or progress in a particular virtue, it may be most effective to do so along these different dimensions instead of in relation to the virtue considered as a whole.

DISCUSSION QUESTIONS

- I. The chapter suggests that compassion is principally a moral virtue and tolerance a civic virtue. While moral virtues and civic virtues aren't the same thing as intellectual virtues, they are related to each other in important ways. How might intellectual virtues like curiosity, attentiveness, intellectual carefulness, and open-mindedness facilitate the practice of compassion or tolerance? That is, how might a person with intellectual virtues be *more likely* also to be compassionate and tolerant?
- 2. Identify two or three virtues you think are important to a subject you teach or are interested in. Then ask yourself: when it comes to learn-

ing about (or teaching) this subject matter, what do the virtues in question *look* like? What sorts of intellectual actions or "mental moves" do they involve? Note that in answering these questions, you are helping "flesh out" the skill or ability components of the virtues you have identified.

3. The chapter says that, ideally, intellectual virtues will flow from a desire to learn or understand. In other words, an ideally intellectually virtuous person will think and reason in ways that are careful, thorough, fair, open, and so on, *because* he wants to get things right or to develop a genuine understanding of the subject matter. What might an *alternative* motivation look like? Put another way, why else might students be motivated to think in ways that are careful, thorough, fair, and so on? What other incentives might they have to practice these virtuous abilities? Finally, what do you think about these alternative motivations? From an educational standpoint, are they better, worse, or the same when compared to a love of learning or a desire for understanding? Why?

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CHAPTER 2

Why Educate for Intellectual Virtues?

For some readers, the value of educating for growth in intellectual virtues will be obvious. If you're one of those readers, you may wish to skip ahead to Chapter 4. However, even if you're already convinced that intellectual character growth is an important educational aim, you may still want to read this chapter and the next one. These chapters will examine the educational importance of intellectual virtues (Ch.3) and consider some objections to the idea that educators should try to foster growth in these qualities (Ch. 4). If nothing else, getting a better grasp of these issues may equip you to convince some of your colleagues of the viability and value of intellectual character education, which in turn might enhance some of your own pedagogical efforts and result in a positive impact on your students.

"THICKENING" OTHER IMPORTANT BUT ELUSIVE EDUCATION GOALS

Curiosity, open-mindedness, intellectual courage, intellectual tenacity, and the like are what philosophers call "thick concepts" (Williams 1985). This means that they are, on the one hand, richly detailed and descriptive. To say that Steve is curious or open-minded is to say something quite specific about his psychol-

ogy (e.g. that he tends to ask a lot of thoughtful why-questions or gives serious consideration to alternative points of view). This is much different than saying that Steve is a "good" guy or that

"[V]irtue concepts provide a way of fleshing out or making concrete several other familiar educational goals that are important but notoriously elusive."

one of his actions is "right." The latter are thin concepts, lacking much in the way of descriptive detail or content. Thick concepts are also strongly evaluative—they pick out something attractive, compelling, and action-guiding. Again, to say that Steve is curious or open-minded is to say something good or favorable about him as a person (compare this with the observation that Steve is left-handed).

Partly on account of their "thickness," virtue concepts provide a way of fleshing out or making concrete several other familiar educational goals that are important but notoriously elusive. Think, for example, about the idea that education should foster "a love of learning" or "lifelong learning." What do these terms mean? Imagine asking your average teacher or school principal: "What exactly do you mean when you say that you're preparing students to become lifelong learners? What are the defining attitudes, beliefs, feelings, skills, and other qualities of lifelong learners? And

what exactly are you doing in your school or classroom today or this week to foster these qualities?" If your experience is anything like mine, you're unlikely to receive an especially informative or compelling response.

Virtue concepts like curiosity, intellectual humility, intellectual thoroughness, and intellectual tenacity are very well suited to provide a more concrete description of these important but elusive educational goals. Intellectual virtues are character traits that flow from a love of learning. An intellectually virtuous person, in an ideal form at least, is one who cares passionately about reaching the truth and acquiring deep knowledge and understanding. Indeed it's her deep commitment to these things that compels her to ask thoughtful questions, pay close attention to details, honestly acknowledge what she doesn't know, probe for deeper meaning, and persist in the face of obstacles. Similarly, consider what it takes to be lifelong learner. To be sure, being a lifelong learner requires a basic foundation of knowledge and host of basic intellectual skills (e.g. the ability to locate relevance sources of information, to read or otherwise decode these sources, to draw reasonable inferences, etc.). These are things that most people already possess. However, most people probably aren't "lifelong learners" of the sort that educators aspire to train up. So what else is required? A very plausible answer is that several personal qualities are also necessary—qualities, again, like curiosity, attentiveness, intellectual autonomy, intellectual tenacity, and intellectual thoroughness. These qualities capture nicely what being a lifelong

learner involves beyond the possession of basic knowledge and skills.

Another quick example is critical thinking. Many teachers view critical thinking as important and see themselves as trying to foster it. But what exactly is critical thinking? This concept has been pulled in many different directions, with the result that it has no firm or univocal content (Perkins 1995: Ch. 11). Here as well the thickness of virtue concepts can be helpful. One plausible interpretation of the idea that we want our students to be critical thinkers is that we want them to ask probing questions, think for themselves, avoid sloppiness, hastiness, and similar methods of reasoning, and to not give up until they reach an answer; in other words, we want them to develop curiosity, intellectual thoroughness, intellectual autonomy, intellectual carefulness, and intellectual tenacity (for related discussions, see Paul and Elder 2002: Ch. 3; Paul 1992: Ch. 10; Passmore 1967; and the discussion of the "critical spirit" in Siegel 1998: Ch. 2).

This suggests that the language and concepts of intellectual character and intellectual virtue are a helpful way of unpacking and adding "flesh" to important but elusive notions like a love of learning, lifelong learning, and critical thinking. As such, they provide a way of elaborating on and sharpening our grasp of these other educational goals. This is important because with a sharper and more concrete understanding of these things before us, we will be in a better position to actually pursue and achieve them.

By contrast, to the extent that they are left vague and unspecified, our odds of achieving these goals in any kind of systematic way would appear to be very poor (see Baehr 2013).

HARMONIZING AND STRUCTURING OTHER EDUCATIONAL PRIORITIES AND STANDARDS

The concepts of intellectual character and intellectual virtue also provide a useful framework within which to *situate* (rather than flesh out or thicken) other educational priorities and standards.

Consider two educational priorities that are often viewed as exhibiting mutual tension. It is very popular today to claim that education should be more *rigorous*. Like critical thinking and lifelong learning, academic rigor is quite a nebulous notion in ordinary educational thinking and discourse. But let's suppose that rigor is something like the quality of demanding complex and active thinking. On this definition, memorizing even a large number of definitions or math facts would not count as rigorous, while forming multiple hypotheses to explain some data and then comparing the relative merits of these hypotheses would. Rigorous approaches to education have great merit and are much needed in an educational milieu that has given too much attention to rote memorization and related forms of formulaic, low-rigor cognition.

However, one worry about such approaches is that they are not

sufficiently *student-centered*—that they lack an appropriate sensitivity to the developmental stages of students and come at the cost of depleting their natural curiosity, wonder, and motivation. Put another way, there is some concern that academic rigor comes at the cost of extinguishing students' love of learning.

How, then, to strike an appropriate balance between educational approaches that are rigorous and those that are student-centered? While there may be many good answers to this question, thinking of intellectual character growth as a central educational aim is among them (see Dewey 2007/1906 for a similar dilemma and

"What if we conceived of education partly as a matter imparting foundational knowledge and critical intellectual skills, but also, and ultimately, as a matter of helping students become certain types of people [...]?"

a roughly similar response to it). If one of my primary aims as an educator is to help my students become more open-minded, intellectually autonomous, intellectually courageous, and so on, then there is no escaping the importance of paying close attention to the developmental dimensions of their psychology, their intellectual motivation, and their inclination to wonder and ask questions. In other words, an approach to education that aims at intellectual character growth is necessarily highly student-centered.

However, it is not student-centered at the expense of being rigorous. On the contrary, an intellectual virtues approach is also necessarily rigorous. This is due largely to the fact that intellectual virtues themselves aim at deep understanding. Again, intellectual virtues are traits that flow from a desire to know or understand the way the world is and why it is the way it is. They do not flow from a love of rote memorization or a superficial grasp of trivial information. Accordingly, if I want my students to grow in intellectual virtues, I must also teach for deep understanding of the subject matter. Deep understanding is complex and demanding. It is hard to acquire. It demands high-level thinking and active intellectual engagement. It is a genuine cognitive achievement. For this reason, an intellectual virtues approach, while deeply student-centered, is also inherently rigorous. As such, it provides a way of respecting and harmonizing both of these important educational values.

A similar point can be made about the kind of cognitive skills that educators are expected to impart to their students. Consider, for example, some of the skills central to the new Common Core State Standards recently adopted by most states in the US: e.g. "Evaluate a speaker's point of view, reasoning, and use of evidence and rhetoric" and "Distinguish among fact, opinion, and reasoned judgment in a text." Taken by themselves, these may not seem like especially important abilities. Teachers may not see any great merit in teaching them and students may feel the same about having to master them. However, when executed well,

these skills require the practice of several intellectual virtues like curiosity, attentiveness, open-mindedness, intellectual autonomy, intellectual carefulness, and intellectual thoroughness. By contrast with the skills, these qualities are personally attractive and compelling. Most people want to be curious and attentive; and they don't want to be intellectually sloppy or narrow or unreasonable. They also want to see these qualities in their friends, children, parents, coworkers, etc. Thus treating growth in intellectual virtues as a central educational aim can serve as a way of situating and organizing other educational goals in such a way that these other goals make more sense and take on greater value.

MEANING AND PURPOSE IN TEACHING AND LEARNING

This leads to a related advantage of educating for intellectual character growth. Envision the public primary or secondary school you are most familiar with. Now suppose you were to try to extrapolate or identify the school's fundamental values and priorities from what you know about it. What is the school all about? What, realistically, does it aspire to? What are the teachers and administrators at the school trying to accomplish on a day-to-day basis? There is, of course, likely to be a wide range of answers to this question, even about a single school site. However, many of us would probably offer something like the following reply: "On a day-to-day basis, the primary objective of teachers at the school is to align their teaching with the current 'pacing plan' by covering the relevant content standards with their students. This is im-

portant so that the students are well prepared for the next benchmark assessment. And their performance on this benchmark is important because it provides an indication of their preparedness for the end-of-year state test, which in turn is important because of its potential to raise (or sink!) the school's overall academic achievement rating."

Now consider the fact that many (if not most) educators enter the profession because they think that education can and should be life changing—or at least *life giving*. They sense that there is

"Conceiving of growth in intellectual virtues as a central educational aim has the power to make the processes of teaching and learning more life giving."

something deeply intrinsically rewarding about learning and expanding one's mind and that getting a good education is a gateway to many other important goods and opportunities in life. Described in these terms, education is an invigorating and vital human activity. However, this stands in very stark contrast with the above focus on benchmarks, state tests, and school rankings. These are not life giving educational goals. They are not the reason that excellent teachers enter or remain in the teaching profession. Rather, they are impersonal and uninspiring. It should hardly surprise us, then, that students are so often bored with school and that teacher morale in the U.S. is at a 25-year low (Strauss 2013).

What if we conceived of education partly as a matter imparting foundational knowledge and critical intellectual skills, but also, and ultimately, as a matter of helping students become certain types of people—people who wonder, think, ask questions, pursue evidence, listen openly to others, probe for understanding, delight in discovery, embrace intellectual challenges, and stand up for what they believe in? This is a goal worth pursuing! It's the kind of goal that draws many of the best teachers into the profession. And it's the kind of goal that can help students see that indeed there is something deeply important, personal, and vital about what they're doing in school. My experience talking with public school teachers about intellectual virtues and education bears this out. On countless occasions, I have had heard teachers say that treating intellectual character growth as a central goal of their teaching brings new "meaning" and "purpose" to what they are doing in the classroom.

Conceiving of growth in intellectual virtues as a central educational aim has the power to make the processes of teaching and learning more life giving. This is partly because it's a matter of pursuing a worthy and compelling goal. But there are other intrinsically rewarding aspects of this pursuit as well. For instance, as I'll explain in later chapters, one way we grow in intellectual virtues is by practicing the activities characteristic of intellectual virtues (e.g. asking thoughtful questions, identifying critical details, seeking explanations, taking up alternative standpoints). Therefore, learning for intellectual character growth requires an

active and thoughtful engagement with the subject matter. It is emphatically not a matter of sitting back and passively absorbing large quantities of information; nor is it matter of rote memorization or mechanical problem solving. While sometimes challenging and demanding, this approach to learning is also fun, stimulating, and captivating. It isn't boring. A closely related point is that intellectual character growth involves the building up or "perfecting" of certain natural aptitudes and desires. Human beings are uniquely rational. Intellectual virtues are among the excellences or perfections of rational activity. Therefore, to grow in intellectual virtues is to become more deeply or excellently human. As with other forms of human growth and maturity, there is something deeply satisfying, natural, and pleasurable in such activity. In this way, educating for intellectual character growth can have a humanizing effect on the processes of teaching and learning.

MORAL AND CIVIC RESPONSIBILITY

Thus far we've focused on several intrinsic benefits of an intellectual virtues approach to education. But these do not exhaust what makes this approach so valuable. Intellectual character growth has other very important benefits that further underscore the importance of intellectual character education.

Moral virtues are the character traits of a good neighbor. They include qualities like kindness, compassion, and generosity.

While not the same thing as intellectual virtues, moral virtues are importantly related to the character traits of a good thinker or learner. For instance, engaging in morally virtuous or responsible behavior often requires an exercise of certain intellectual virtues. To know how much to give to a good cause, one must often be very careful and thorough in one's thinking and research about the cause. Similarly, knowing how best to respond to the suffering of another person often requires taking up the person's point of view and noting important details of the person's situation. Finally, consider the concept of *negligence*. Negligent behavior is a familiar form of morally irresponsible behavior. But being negli-

"Whether in major media outlets, blogs, social media, or family conversations, such discourse is frequently marked by bias, dogmatism, a lack of intellectual charity, rushing to conclusions, ignoring evidence, and caricaturing the other side."

gent isn't a matter of intending to do harm. The negligent father or husband doesn't intend to harm his family members. Rather, negligence is often a matter of failing to ask the right sorts of questions, pay attention to important details, be sufficiently careful or thorough in one's thinking, and so on. It is a failure to practice certain intellectual virtues.

The underlying point here is as follows. Being a morally virtuous or responsible person involves acting in certain responsible and virtuous ways toward others. However, we act on the basis of what we believe, think, or perceive. Intellectual virtues regulate and enhance the quality of our beliefs, thoughts, and perceptions. Therefore, they are foundational to moral virtue and responsibility. A similar point holds in connection with civic virtues. *Civic virtues* are the character traits of a good citizen, for example, tolerance, respect, and community-engagement. What else is required for a democracy to thrive? Among other things, the citizenry must be well informed and there must be ongoing opportunities for public debate and for the critical scrutiny of government actions. Importantly, citizens must also be equipped and motivated to seize these opportunities.

Alas, performing the duties of a responsible citizen can be very challenging. While there is an enormous amount of political information at our fingertips, we must sort through it, analyze it, ask good questions about it, and try to arrive at accurate conclusions. That is, we must engage in intellectually virtuous inquiry. Similarly, consider how rare productive public and political discourse are today. Whether in major media outlets, blogs, social media, or family conversations, such discourse is frequently marked by bias, dogmatism, a lack of intellectual charity, rushing to conclusions, ignoring evidence, and caricaturing the other side. It is a veritable hotbed of intellectual vices. Just think how refreshing and productive it might be if public and political discourse instead were

marked by qualities like open-mindedness, intellectual humility, intellectual carefulness, and intellectual honesty. This wouldn't require that such discourse suddenly become wishy-washy. One

"[I]f we want to prepare our students for success in the workplace, it isn't enough that we simply impart to them a certain body of knowledge or set of technical skills."

can be intellectually courageous, rigorous, and tenacious while also being willing to listen to the other side, evaluate evidence fairly and honestly, acknowledge the limitations of one's own position, and so on. Accordingly, as with moral responsibility, civic responsibility is partly based in intellectually virtuous activity, which means that by educating for growth in intellectual virtues, we are also educating for good citizenship (Paul 1990).

CAREER SUCCESS

One widely touted educational goal is preparation for a productive career or for making a contribution to the global economy. While I think it is a serious mistake to view this as the only or single most important reason for pursuing an education, it would be silly to deny that it is part of what education should aim to provide.

What sorts of knowledge, skills, or abilities are required for having a successful career or for participating in the global economy today? To a large extent, this depends on the specific career in question. However, in a wide range of careers, the ability to *think* and think *well* is critically important. This is especially true given the centrality of technology to the global and many local economies. Technology is constantly changing and evolving. For this reason, the knowledge and skills a person learns while in school may very well be obsolete by the time she graduates. One result of this is that employers today increasingly are placing a premium on the possession of so-called "soft skills" (Schulz 2008). Soft skills include many intellectual virtues like curiosity, open-mindedness, intellectual autonomy, and intellectual humility.

Consider, for example, an interview with the "senior vice president of people operations" at Google that appeared recently in the *New York Times* (Friedman 2014). When asked what Google looks for in prospective employees, Laszlo Bock identified "five hiring attributes we have across the company." He said that "for every job ... the No. 1 thing we look for is general cognitive ability, and it's not I.Q. It's learning ability. It's the ability to process on the fly. It's the ability to pull together disparate bits of information." It shouldn't be difficult to see that a person's ability to do these things will depend at least in part on the quality of her intellectual character—on the extent to which she is disposed to ask good questions, probe for understanding, consider multiple perspectives, embrace intellectual challenges, and so on. Even

more striking, however, is what Bock says about intellectual humility, another of the five key "hiring attributes":

And it is not just humility in creating space for others to contribute, says Bock, it's "intellectual humility. Without humility, you are unable to learn." It is why research shows that many graduates from hotshot business schools plateau. "Successful bright people rarely experience failure, and so they don't learn how to learn from that failure," said Bock.

This is but one piece of a mounting body of evidence suggesting that if we want to prepare our students for success in the work-place, it isn't enough that we simply impart to them a certain body of knowledge or set of technical skills. We must also address and attempt to shape who they are as thinkers and learners—we must attempt to have a positive and lasting impact on their intellectual character.

DISCUSSION QUESTIONS

- In your opinion, what are the most important things an education should provide? To what extent are these things a matter of (a) knowledge, (b) skills, or (c) intellectual character? If they are a matter of intellectual character, which specific intellectual virtues seem most important? Why?
- 2. What are some specific ways in which you think that a student-centered approach to education can be in tension with an approach that is "rigorous"? Have you seen these two values collide? If you are an educator, what are some ways in which you have managed to strike a balance between these values in your classroom? If you're not an

educator, how have your best teachers managed to strike this balance? Which intellectual virtues do you think are most important to striking this balance and why?

3. The chapter highlights the importance of intellectual virtues to moral and civic responsibility and to career success. What are some other "payoffs" or benefits of virtues like curiosity, attentiveness, intellectual humility, open-mindedness, intellectual courage, and intellectual tenacity? In what other areas of life do these qualities play an important role? And how do they do so?

Chapter 3.

Objections to Educating for Intellectual Virtues

CHAPTER 3

Objections to Educating for Intellectual Virtues

Ve've considered several reasons in support of educating for intellectual character growth. In the present chapter, we'll consider a few lingering questions or objections. Specifically, we'll look at the following three challenges to intellectual character education:

- Do educators have the time and resources to foster intellectual character growth?
- Is it even possible for teachers to have a significant impact on the intellectual character of their students?
- Is it appropriate for public schools to educate for intellectual virtues?

Unsurprisingly, I will defend "yes" answers to each of these questions. Doing so will provide us with a better sense of what intellectual character education does (and doesn't) involve. It will also shed further light on the importance of this approach.

DO EDUCATORS HAVE THE TIME AND RESOURCES TO FOSTER INTELLECTUAL CHARACTER GROWTH?

Most teachers—regardless of the level at which they teach—are already hard-pressed to do what is expected of them in a single semester or year, for example, to impart a large body of knowl-

edge and skills in a very limited amount of time. Similarly, most schools lack the resources they need to meet even the most basic needs and rights of their students, teachers, and staff. How, then, could teachers and schools realistically take on the additional, rather lofty and ambitious goal of promoting the intellectual character growth of their students?

This worry is understandable. However, it rests on a mistaken assumption, namely, that educating for intellectual character growth is something that educators do over and above their normal activities and that implementing a focus on intellectual character growth is likely to be a costly endeavor. There is a grain of truth to these thoughts: if a teacher or school is going to make

"Intellectual character education and academic instruction complement each other naturally and effectively."

a serious effort to foster intellectual virtues, it will be important that students understand what intellectual virtues are, why they matter, and so on, and this is bound to involve some direct instruction; depending on the educators in question, it may also require a significant amount of teacher education and training, wherein teachers are exposed to the basic principles and practices of intellectual character education and given a chance to think

about, discuss, and take ownership of them. Nevertheless, the amount of direct instruction required is minimal and can easily be incorporated into assemblies, advisory periods, and at the beginning or end of ordinary lessons. Similarly, while securing teacher buy-in and providing adequate training are essential, this is something that could easily become the basis or partial basis of a professional development program. Because it involves reflecting on "big questions" in education, and in light of its deeply personal focus, professional development sessions on intellectual virtues and education are likely to be a welcome change for many teachers.

As I will explain in much greater detail in later chapters, educating for intellectual character growth is primarily a matter of *how* one approaches traditional educational activities—e.g. of how a school leader goes about shaping the culture of a school or of how a teacher approaches math, science, English, or history with her students. It is less a matter of what one does than of how one does it—to what end, in what manner, and so on (Baehr 2013). For this reason, intellectual character education is ideally suited for integration with traditional academic instruction. While it may be challenging to know how to integrate a focus on *moral* virtues like generosity or compassion with academic content in math or science, say, it is not difficult to imagine how one might approach such content with an eye to fostering wonder, curiosity, intellectual autonomy, intellectual thoroughness, or intellectual perseverance. Intellectual character education and academic in-

struction complement each other naturally and effectively.

IS INTELLECTUAL CHARACTER DEVELOPMENT REALLY POSSIBLE?

Suppose you agree that promoting the intellectual character growth of students need not consume a lot of extra time or resources. You might still wonder whether it is possible: "Can teachers really hope to have a significant impact on the intellectual character of many of their students? Isn't the intellectual character of most students more or less fixed by the time they enter school? And, in any case, won't the influence of their families and peers swamp any influence a teacher can hope to have?"

The force of this objection depends in part on the kind of intellectual character growth one is envisioning. Suppose my hope as a middle school administrator is that every graduate from my school will emerge after three years as a paragon or exemplar of intellectual virtue. If that's the goal, then the objection is surely correct: this simply isn't a realistic goal. Context also matters. One teacher working by himself in fits and starts to integrate a focus on intellectual character growth into his teaching is much less likely to succeed compared with a cohort of teachers working together and supporting each other over a long period of time. And, of course, school culture matters too. If the mission, vision, values, policies, practices, and other cultural elements of a school are even implicitly opposed to fostering intellectual virtues, then

individual efforts that run counter to this grain may be difficult to sustain and unlikely to succeed.

In any case, the objection is a good reminder that any character-based goals we have for our students must be realistic. Instead

"[E]veryone has an intellectual character. We all have dispositions to act, think, and feel in certain ways when it comes to the activities of thinking and learning."

of aiming for intellectual perfection, we should seek to foster "meaningful growth" in intellectual virtues. And, to whatever extent possible, we should seek to team up with other teachers to learn about, practice, and support each other in our attempts to educate for such growth. If possible, we might even consider trying to shape the cultural forces of our school to make them more hospitable to intellectual character education (Ritchhart 2015).

When put in perspective like this, the enterprise of educating for intellectual character growth begins to look more realistic. For instance, it does not seem unreasonable to think that a team of middle school teachers passionate about intellectual character education and willing to learn, experiment, and support each other might foster something like "meaningful growth" in several intellectual virtues for a significant percentage of their students

over the course of their three years at the school. Indeed, there is mounting research that with the right sort of interventions, educators can foster habits of good thinking (see Seider 2012, Tough 2012, Perkins 1995, and Baehr 2016 forthcoming).

A final point to keep in mind here is that everyone has an intellectual character. We all have dispositions to act, think, and feel in certain ways when it comes to the activities of thinking and learning. Moreover, teachers and other influential figures in our lives have an effect on these dispositions. Sometimes this effect is negative—diminishing a student's curiosity, teaching a student simply to memorize and follow rules rather than think for herself, modeling a closed mind, and so. But, again, with the right kind of forethought, effort, and support, teachers can also have a positive impact on the intellectual character of their students, making them excited about learning, curious about the world, and open to new ideas and perspectives.

IS IT APPROPRIATE FOR PUBLIC SCHOOLS TO TEACH CHARACTER?

For some, the idea of "teaching character" is code for teaching moral values, often conservative moral values. Does intellectual character education involve an objectionable teaching of values? Is it an attempt to smuggle an illicit values-focus into classroom instruction?

Intellectual character education does involve the teaching of values. However, these values are "intellectual" in nature. They include things like knowledge, understanding, thinking, reasoning, wondering, being open to experience, acknowledging one's intellectual limitations, embracing intellectual challenge and struggle, and so on. It should be clear enough that such values are not at all out of place in an educational setting, whether public or private. Indeed, they are absolutely central to the kind of education that most of us want for our students, friends, and loved ones.

What exactly is the relationship between these values and moral values? For reasons discussed in Chapter 2, practicing intellectual virtues is importantly related to acting in morally responsible ways. To be morally responsible, I must often be thoughtful, attentive, careful in my thinking, willing to form my own judgments, to stand up for what I believe in, and so on. Thus, in some

"One 'cost' involved with educating for intellectual virtues is related to the fact that intellectual virtues aim at deep understanding—not at mere memorization or at rote problem-solving."

sense, educating for intellectual character growth *is* a way of indirectly fostering growth in moral character. But that isn't the focus or primary rationale. Nor does the connection with morality

strongly favor a conservative, liberal, or other political or moral outlook. (For a philosophical treatment of the difference between moral and intellectual virtues, see Baehr 2011: Appendix.)

THE REAL OBSTACLES

While intellectual character education is not susceptible to the objections discussed above, it does involve certain significant challenges that need to be addressed in an honest and open way. The first is a challenge for any teacher attempting to introduce a focus on intellectual character development into her teaching. The second is an obstacle to implementing a focus of this sort on a wide scale.

One "cost" involved with educating for intellectual virtues is related to the fact that intellectual virtues aim at deep understanding—not at mere memorization or at rote problem-solving. As discussed in Chapter 2, this means it is impossible to divorce educating for intellectual character growth from educating for deep understanding. While this secures a desirable commitment to academic rigor, it also presents a tension between *depth* and *breath*. If I am approaching my subject matter in a way that is aimed at giving my students ongoing opportunities to practice intellectual virtues, then I am likely to get through less material than I otherwise might be able to.

In some contexts, this may present a serious problem. For instance, if my performance as a teacher is evaluated in terms of my

students' scores on standardized exams, and if the standards in question are "a mile wide and an inch deep," such that teaching for deep understanding is all but prohibited, then I may indeed be forced to choose between an exemplary evaluation and educating for intellectual character growth.

Despite such possibilities, I quickly note two mitigating considerations. First, were I in the situation just described, I would take a close and comprehensive inventory of how exactly I use the instructional minutes I am allotted, eliminating all unnecessary work and inefficient activities to free up more time to teach for understanding. Second, most states in the U.S. have recently adopted the new Common Core State Standards. One of the impulses behind the development of these standards was the conviction that existing state standards were indeed "a mile wide and an inch deep." The CCSS, by contrast, focus more on cognitive abilities and skills (e.g. reasoning with evidence and writing about thought processes) than they do on large volumes of facts and figures. In fact, certain "key shifts" of the CCSS explicitly include "fewer topics" and a focus on "conceptual understanding" (www. corestandards.org). Accordingly, under the standards in place in most states, one is much less likely to have to make the forced choice illustrated above.

A second "real challenge" is derivative from the point that intellectual character education is most effectively pursued by educators who share the relevant vision and values and who are well

positioned to pursue this vision in the context of collaboration with colleagues and a supportive school culture. Many schools are filled with passionate and thoughtful educators who, if given the opportunity, would be enthusiastic about implementing an intellectual virtues approach in their schools and classrooms. Many schools also already embody a spirit of collaboration and a culture that values deep thinking and learning. At schools like this, intellectual character education is likely to be an easy sell; and its implementation is likely to be smooth and to consume rel-

"[A] deep and systematic focus on intellectual character growth will be more realistic in some educational settings than it is in others."

atively few resources. However, many other schools and educators are not like this at all. In places like this, the idea of educating for intellectual character growth may fall on deaf ears. Or, while there may be considerable initial support for it, it may, in the end, demand too much change in the thinking and behavior of teachers and other stakeholders to really be feasible. Alternatively, while the school as a whole may be on board with the idea and well suited to begin aligning their values and practices accordingly, the district at large may directly or indirectly limit the extent to which the school can follow through with this plan.

At this point, I think the right conclusion to draw is that a deep

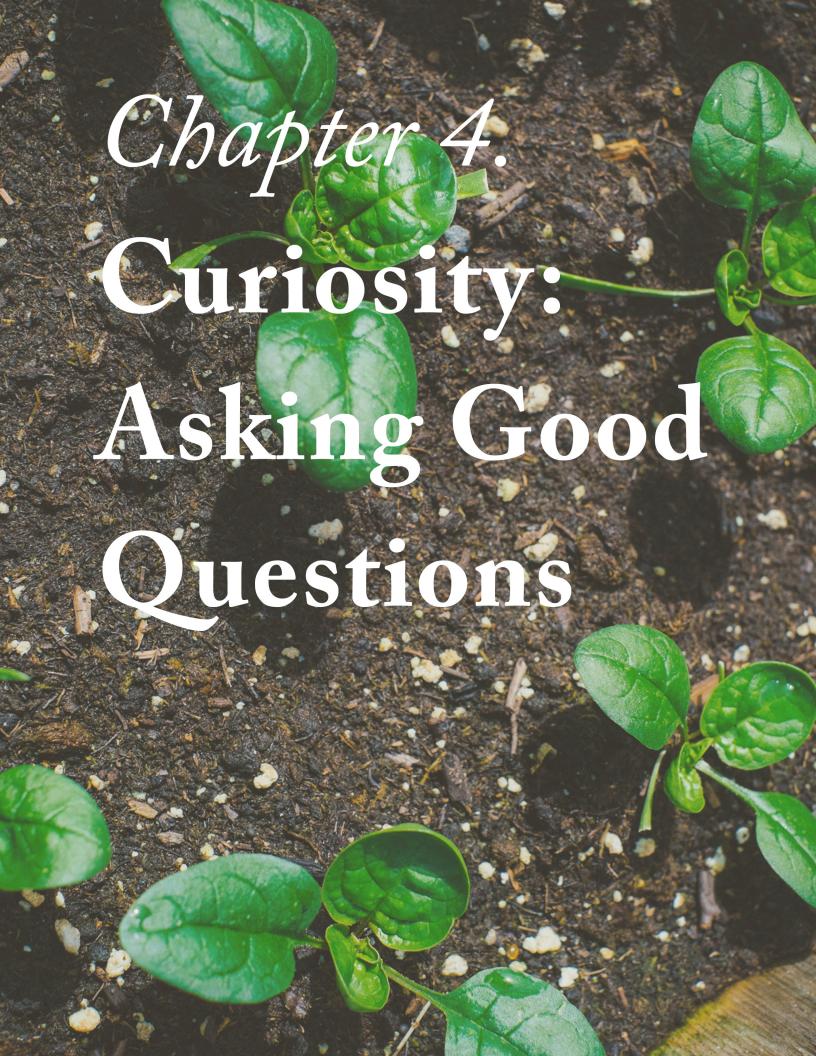
and systematic focus on intellectual character growth will be more realistic in some educational settings than it is in others. Still, if the value of such growth is even close to what was suggested in the previous chapter, then perhaps we should all do what we can to implement such a focus. Even if we aren't entirely successful, we can still make a difference for some students. And, again, the very process of trying, the process of trying to help our students become more curious, open-minded, and intellectually courageous, can add significant meaning and purpose to our work as educators.

DISCUSSION QUESTIONS

- I. What are some of the "cultural factors" at your school that go against the idea of trying to educate for intellectual character growth? What (if any) control do you have over these factors? What are some cultural factors at your school that might support your or others' attempts to practice intellectual character education?
- 2. Identify an intellectual virtue you'd like to emphasize with your students. Realistically, what might it look like for several of your students to experience "meaningful growth" in this virtue? What sorts of actions, attitudes, beliefs, or feelings would they display?
- 3. Beyond the two challenges noted at the end of the chapter, what other significant obstacles do you see to educating for intellectual character growth? What do you think can be done to overcome these obstacles?

Part 2.

A Closer Lookat Nine Key Virtues



CHAPTER 4

Curiosity: Asking Good Questions

Ve've considered what intellectual virtues are and why trying to educate for growth in intellectual virtues is a good idea. In Part II of the guide, I sketch "profiles" of nine core virtues. The purpose of these chapters is not to explain how to help students grow in virtues. Rather, it is to shed light on the virtues themselves. Once this has been accomplished, we'll be in a much better position to look closely at the practical or strategic aspects of intellectual character education.

To bring some organization to the virtues we'll be looking at, it will be helpful to think of them as falling into three main groups:

- 1. Virtues required for getting the learning process started and headed in the right direction:
 - Curiosity
 - Intellectual autonomy
 - Intellectual humility
- 2. Virtues required keeping the learning process on the right track:
 - Attentiveness

- Intellectual carefulness
- Intellectual thoroughness
- 3. Virtues for overcoming familiar obstacles to productive learning:
 - Open-mindedness
 - Intellectual courage
 - Intellectual tenacity

This classification is fairly straightforward. The first three virtues are critical to getting the learning process off the ground and moving it in the right direction: curiosity initiates learning, intellectual autonomy helps a person think for herself, and intellectual humility helps a person recognize the limitations of her thinking (and thus to depend on others where appropriate). The second set of virtues keeps learning on track: the attentive person is present and engaged, the careful learner avoids mistakes, and the thorough learner "goes deep," seeking and providing deep understanding vs. superficial knowledge. The final three virtues are useful for overcoming obstacles that tend to inhibit learning: open-mindedness helps overcome fixed or narrow-minded ways of thinking; intellectual courage counteracts fear of intellectual risk-taking; and intellectual tenacity combats the desire to give up before the learning process has come to fruition. In the present chapter, we examine the fundamental motivating virtue: curiosity.

CURIOSITY: THE MOTIVATING VIRTUE

Curiosity sometimes gets a bad rap. After all, it was curiosity that killed the cat. And, if Curious George is any indication, curiosity is highly correlated with mischief.

While there are ways of being curious that are less than good or admirable, curiosity often is an intellectual virtue. Think, for a moment, about someone whose *mind* you admire. What is this person's mind like? How does he or she tend to think? For many of us, the answer will include a tendency to wonder about things, to ask good questions, or to explore new ideas or points of view. These are good descriptions of curiosity. And they underscore the fact that curiosity can be an admirable trait of intellectual character. It can be an intellectual virtue.

Compared with other intellectual virtues, curiosity occupies a special role in the overall economy of learning. As noted above, it is the fundamental *motivating* virtue. People who are curious are driven to explore and expand their minds. Though people who aren't curious can also be motivated to acquire knowledge, their motivation is likely to be "external" or "extrinsic"—they seek knowledge, not because they are intrinsically interested in what's being learned, but for other reasons (e.g. to get a good grade, impress others, or for some other strictly practical reason). Because it is a source of *intrinsic intellectual motivation*, fostering curiosity is one of the most important things teachers and parents can do

in their attempts to help their students love and engage learning. (For a discussion of curiosity and its relationship to wonder, see Hadzigeorgiou 2014).

In this respect, fostering curiosity is akin to fostering a "love of the game" in sports. If I want my daughter to excel in soccer, one of the best things I can do is help her develop a genuine love of the sport. This is a somewhat indirect strategy. You might think that if I want my daughter to become a good soccer player, I should first and foremost require her to practice a lot—and maybe offer her incentives for doing so. While this might be an effective

"[A] curious person is disposed to wonder, ponder, and ask why. She wants to know how or why things are the way they are."

short-term solution, if she doesn't love the game, then as soon as I stop requiring her to practice or offering her external rewards for practicing, her motivation to play will diminish, as will her skill. By contrast, if I can help her enjoy—even love—playing the game, the problem of motivating her to practice and play will be significantly reduced. Her motivation to play the game will come from within. Similarly, in education, while a teacher's goal for his students may be for them to engage in certain forms of behavior or to master certain skills, one of the most effective ways of achieving this goal involves focusing, not on behavior or skills

themselves, but on the students' underlying motivation. To a large extent, this means working to inspire and nurture the virtue of curiosity (see Ch. 29 for what this might look like).

THE STRUCTURE OF CURIOSITY

How or why does curiosity supply an intrinsic motivation to learn? To arrive at an answer to this question, we need to pay special attention to the place of wondering and asking questions within the overall mindset of curiosity. Again, a curious person is disposed to wonder, ponder, and ask why. She wants to know how or why things are the way they are. The curious person's questions are like appetites. Each one looks beyond itself toward a certain object—in this case, answers to questions. Just as appetites for food and water drive or motivate us to find something to drink or eat, curiosity compels us to look for and find answers to questions. This is another way of saying that curiosity compels us to inquire and learn. (See Kashdan 2009 and Kashdan et al 2004 for some recent treatments of curiosity, including its relationship to happiness.)

To get a better feel for this virtue, it will be helpful to note two respects in which curiosity—in its virtuous or admirable forms—"aims high." First, curiosity aims high in the sense that it isn't concerned with a mere passing acquaintance or "taste" of the sought after knowledge; rather, it is motivated by genuine understanding. A curious person wants to understand how or why—

not merely "that" or "whether." This isn't to say that if a person is genuinely curious, she will necessarily have what it takes to acquire understanding. The latter may require the support of other virtues like intellectual tenacity or intellectual courage. But it is to say that she will desire and seek understanding.

Second, the virtue of curiosity aims at understanding "significant" rather than trivial or salacious subject matters. Thus a person who has a voracious appetite for celebrity gossip (even one who seeks to understand the personal details and lives of celebrities) is not a great example of the virtue of curiosity. Rather, curious people tend to wonder about issues, questions, and topics that are, in some sense, worthy of human inquiry and attention. Of course, you might reasonably wonder: who's to say what counts as a worthy or significant subject matter? This is a difficult and controversial matter. Fortunately, we can sidestep it here. For, in the context of education, there is broad agreement that certain subject matters are especially important—subjects like math, science, history, and literature. For our purposes, then, we can think of curiosity as seeking a genuine understanding of these and related subjects.

That said, we as educators must be very careful about how we apply this point. Many students don't have much of an interest in the "significant" subjects matters just noted. If we hope to nurture their curiosity, it can be a mistake to focus exclusively on trying to get them excited about these subjects. Instead, we might

also seek to identify what they are already curious about and to work from there.

An example of what this might look like comes from the Intellectual Virtues Academy of Long Beach (see the Preface). At IVA, there is a weekly advisory meeting in which students engage in thoughtful, structured conversations about questions and topics

"How, if at all, can one create an appetite for learning and knowledge if no such appetite already exists?"

they are naturally curious about. When designing the advisory program, we faced a choice: should we have students identify and explore only topics that are on the "significant" spectrum or should we allow them to select whatever topics they happen to be curious about? We decided to err in the more permissive direction, allowing them to select their own topics, provided that the topics are complex enough to be questioned, reflected on, and thoughtfully discussed. While this has led to some interesting advisory sessions (e.g. on the history of the swivel chair and the production of chocolate), the goal has been to nurture whatever seeds of curiosity are present in the students, with the hope that their interests will eventually extend to other areas as well. This hope seems well placed. For there is something deeply human about many of the subjects that we (as adults) tend to think of as significant and worthy of understanding. Thus it is reasonable to

think that as students continue to grow and mature intellectually, their interests will tend in this direction.

CAN CURIOSITY BE TAUGHT?

You might wonder whether curiosity is something that can be taught at all. Aren't people just born curious or not? How, if at all, can one create an appetite for learning and knowledge if no such appetite already exists?

I have two responses to this question. First, there is something extremely plausible about Aristotle's famous remark that all human beings "by nature desire to know" (*Metaphysics*, Book I). His suggestion is that all people are born curious. The natural cognitive behavior of infants and toddlers bears this out. While it clearly isn't the case that all human beings remain curious, Aristotle's point reminds us that our challenge as educators isn't so much to create new desires in our students as it is to tap into desires that are part and parcel to human nature. The latter task is considerably less daunting.

Second, as with other virtues, one way to help students become more curious is to provide them with regular opportunities to practice this virtue. That's the idea behind the advisory program at the IVA. It's also the idea behind a teaching routine employed by a professor of mine in graduate school that I've since adopted in some of my own courses. At the end of each class period, this

professor would require every student to submit an "end-of-class question." The goal of this exercise was to ensure that we were actively thinking and wondering about the subject mater he was teaching us. Though he didn't frame it this way, he was trying to get us to practice curiosity (see Ch. 26 for more on the idea of practicing intellectual virtues).

SOME ILLUSTRATIONS OF CURIOSITY

In this section, we'll consider two illustrations of curiosity drawn from novels. The first one comes from a book called *The Search* (1934) by C.P. Snow. *The Search* chronicles the highs and lows of the career of Arthur Miles, a scientist at the University of Cambridge in England. The book begins with a description of some of Arthur's first scientific thoughts and feelings (he is 11 at the time):

When I was a child of about eleven, a new excitement suddenly flared up in my life ...

This particular Sunday night was warm and twilit, and I fancy summer was nearly over. As we came to the end of the town, the sun had just gone down behind the river, and – I remember it as though it were yesterday – in the yellow sunset sky there was a sickle of new moon, and high over our heads a sprinkling of stars just coming dimly out. We stopped and looked.

My father said:

"I wonder if they're what we think they are? Stars! Stars like this!"

He waved vaguely. "People think we know about them. I wonder if we do."

I gazed up at him.

"I wonder if we can," he added.

I didn't know what he was thinking. All of a sudden I felt that all the things around me were toys to handle and control, that I had the power in a tiny, easy world.

"I wonder if they are what we think they are," my father was saying again.

"Let's find out," I said. And then: "I'm going to find out."

My father looked puzzled. "Well," he said.

The night had taken hold of me. I wanted to do something with those stars. I did not quite know what, but I was elated. Their beauty stirred me, but it was not only that. If I had been older, I should have said I wanted to know, to understand, to alter. I wanted to rush out and have them for my own. I laughed:

"I'm going to find out all about them." (11)

This passage nicely illustrates several aspects of curiosity. For instance, it illustrates the affective or feeling dimensions of the virtue. Arthur notes that he was "elated" and "stirred" by stars and the prospect of figuring out what they really are. He describes this interest as a "new excitement" that "suddenly flared up" in his life. It also illustrates the *active* nature of curiosity. Curiosity isn't passive. Arthur notes that he and his father "stopped and

looked," that they "wondered," and that he resolved to "find out" the answers to their questions. Finally, it's important to note that underlying these feelings and actions is something like a desire for knowledge. While he is also moved by the beauty of the stars, his primary interest is "to know, to understand, to alter."

A second example is from *The Wheel on the School* (1972) by Meindert DeJong. This is a novel about how thinking and wondering can lead to insights and observations that can transform people's lives. At the beginning of the book, the main character, Lina, wonders why there aren't any storks in Shora, the small fishing village in which she lives. Impressed by her curiosity, her teacher proposes to dismiss class early so that Lina and her classmates can have time to "think about storks." He says:

But now what do you think would happen if we all began to think a lot about storks? School's almost over for today, but if, from now until tomorrow morning when you come back to school, you thought and thought about storks, do you think things would begin to happen?

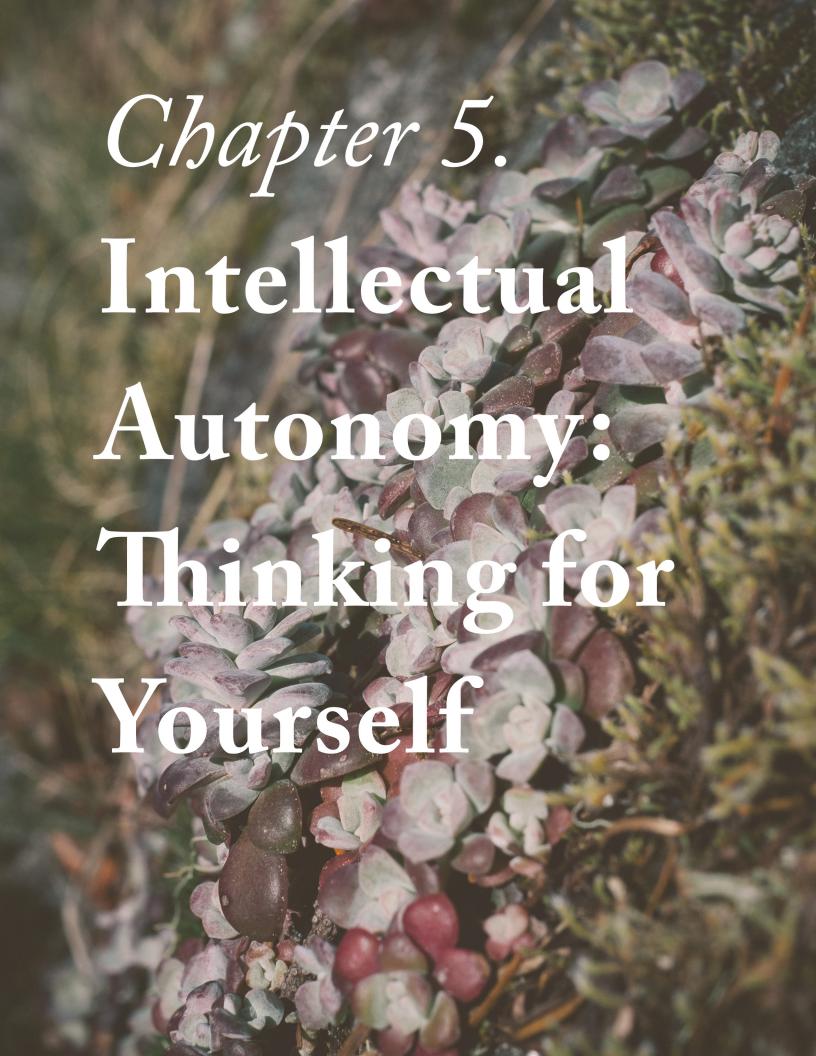
The students are skeptical. They feel unable to think about storks because they know very little about them. The teacher responds:

We can't think much when we don't know much. But we can wonder! From now until tomorrow morning when you come to school again, will you do that? Will you wonder why and wonder why? Will you wonder why storks don't come to Shora to build their nests on the roofs, the way they do in all the villages around? For sometimes when we wonder, we can make things begin to happen. (6)

The rest of the book is about what happens when they do begin to think and wonder about storks and why there aren't any storks in Shora. A great adventure ensues. The idea that "when we wonder, we can make things begin to happen" captures a critically important aspect of curiosity. Just imagine what the world would look like today if no one had ever wondered or asked why—if no one had ever been intellectually curious. Would there be any art, literature, science, or technology? As Lina's teacher suggests, curiosity leads to ideas, which in turn can lead to actions, which in turn can change peoples' lives. Curiosity, though one of the most "intellectual" of the intellectual virtues, often turns out to be extremely practical.

DISCUSSION QUESTIONS

- I. What are you curious about? Identify five topics you'd like to know more about (simply because you're curious about them). For each topic, formulate one or more specific questions you'd like to know the answer to (beware: this can be a challenging exercise!).
- 2. Bring to mind one of your favorite and most influential teachers. Did this person inspire you to be curious? If so, how did he or she do so? To what extent do you—or could you—do some of the same things or exhibit some of the same qualities for your own students?
- 3. What do you think prevents your students from being or becoming more curious? How can these obstacles be eliminated or worked around? What are some things you do that you think might help nurture curiosity in your students? Can you think of specific exercises or assignments that might have this effect?



CHAPTER 5

Intellectual Autonomy: Thinking for Yourself

What's your image of a model student? For many of us, it's likely to involve a student who pays attention, listens quietly, completes all of his work on time, scores well on exams, follows the rules, and so on. To be sure, these are some good intellectual behaviors. But they are consistent with a complete absence of one very important virtue: intellectual autonomy.

Intellectual autonomy is a willingness and ability to think for oneself. To get a feel for what exactly this amounts to it, it can be helpful to first consider what an absence of intellectual autonomy might look like.

PASSIVE PAM, CREDULOUS CHRIS

Intellectual autonomy is opposed to intellectual *passivity*. An intellectually passive person does not thoughtfully engage the world around her. Her beliefs and thinking are governed by outside forces. They are not really her own. Intellectually autonomy, by contrast, is *active*.

To get a better sense of this difference, consider the cases of "Passive Pam" and "Credulous Chris." Pam's mind operates almost

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entirely at a first-order level. She does not pause to question or scrutinize the countless messages, claims, and experiences that come her way every day. She fails to ask: are these things accurate or true? Why? What's the evidence? Pam is a remarkably unreflective and undiscriminating thinker. Credulous Chris, by contrast, is a kind of intellectual chameleon. He takes on the thinking and beliefs of whatever social group he finds himself in.

"[I]ntellectual autonomy is importantly related to intellectual courage, for it often takes courage to think and believe for oneself in the face of disagreement."

When he spends time with his politically conservative parents, he finds himself automatically thinking in conservative categories and convinced of conservative dogma. However, when hanging around his politically liberal friends, his sympathies and convictions move in the opposition direction. He adopts a liberal outlook and finds himself convinced of liberal stances on important political and moral issues. While Chris might try to think for himself, he is incapable of doing so. When it comes to the ways he actually thinks and the beliefs he actually forms, he is (at present) unable to regulate himself. Chris is intellectually "heteronomous" (governed by outside forces) rather than autonomous (self-governed).

The intellectually autonomous person is strikingly different from

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both Pam and Chris. First, this person has an active, thoughtful, and discriminating intellectual orientation to the world around her. Unlike Pam, she is disposed to ask why and how, to probe for evidence, and to demonstrate a healthy form of skepticism. Second, an intellectually autonomous person is not overly influenced in her thinking by the beliefs of others, even when others sharply disagree with her. This does not mean that she is oblivious to or unphased by disagreement. But it does mean that when she encounters disagreement, and when such disagreement gives her pause, she doesn't immediately capitulate by changing her mind. Instead, she scrutinizes the basis of the relevant beliefs; and if honest reflection reveals them to be well supported, she has the strength of mind to retain them. As this characterization suggests, intellectual autonomy is importantly related to intellectual courage, for it often takes courage to think and believe for oneself in the face of disagreement.

INTELLECTUAL AUTONOMY IN CONTEXT

It is important to note that intellectual autonomy, like all the other virtues, needs to be balanced and constrained by complementary virtues, in this case virtues like intellectual *humility* and intellectual *trust*. We need to be aware and accepting of our intellectual limitations and deficiencies. And we need to be able to recognize and give due respect to genuine intellectual experts and authorities. There are times when thinking for ourselves can set us back in our attempts to learn and expand our understanding.

Further, what intellectual autonomy looks like or the extent to which it is called for may vary considerably from person to person. The more cognitive limitations a person has the more the person may need to exercise intellectual humility or trust rather than autonomy. However, even young children, whose intellectual limitations are extensive, can and should be taught to think and reason for themselves. Asking them questions like "What do you really think about this? Why?" or "How might someone think about this differently?" can give them an opportunity to build and strengthen their own intellectual abilities. It can give them an opportunity to practice intellectual autonomy.

Indeed, there's a good case to be made for thinking that young people in particular need to have the kind of discriminating mindset characteristic intellectual autonomy. Given their pervasive exposure to digital media, children of all ages are regularly bombarded with messages and claims about what they should believe, care about, value, purchase, look like, and more. Unlike adults, they are especially vulnerable to these messages, many of which purport to be reliable and authoritative while in fact being the opposite. Therefore, children need the ability to ask challenging questions and to doubt what they are told under the appropriate circumstances. Think as well about the massive pressure that peer groups exert on the thinking and believing of adolescents. Such pressure can change the course of an adolescent's life. While as parents and teachers we may not like it when a child questions our authority, the same trait applied in the company

of their peers may be tremendously valuable. Thus even young people need intellectual autonomy in order to live well (Paul and Elder 2002: 32-33).

SOME ILLUSTRATIONS OF INTELLECTUAL AUTONOMY

The protagonist from Charlotte Bronte's famous 19th century novel *Jane Eyre* (1997/1847) is known for her strong will and sharp intellect. This is significant because Jane lives at a time when women were given very narrow roles in society: wife, mother, servant, governess, etc. Instead of remaining intellectually passive or limiting her intellectual activity to her work as a governess, Jane becomes a rigorous thinker and pursues a broad education. She is willing to think for herself even when society says she can't or shouldn't. In the passage that follows, Jane reveals the powerful character of her mind as she reflects on her lot as a woman:

Millions are condemned to a stiller doom than mine, and millions are in silent revolt against their lot. Nobody knows how many rebellions besides political rebellions ferment in the masses of life which people earth. Women are supposed to be very calm generally: but women feel just as men feel; they need exercise for their faculties, and a field for their efforts as much as their brothers do; they suffer from too rigid a restraint, too absolute a stagnation, precisely as men would suffer; and it is narrow-minded in their more privileged fellow-creatures to say that they ought to confine themselves to making puddings and knitting stockings, to playing on the piano and embroidering bags. It is thoughtless to condemn them, or laugh at them, if they seek to do more or learn more than custom has pronounced necessary for their sex. (95)

Jane exemplifies intellectual autonomy by learning to think for herself and to develop her mind in a society that largely expects women to be "seen and not heard."

This quality also shows itself in how Jane manages her emotions. Jane is a very emotional person. In some ways this is very good. For instance, her intellectual passion is part of what fuels her intellectual autonomy. However, she also shows intellectual autonomy by trying hard to prevent *irrational* emotions from clouding her perspective and judgment. As such, she illustrates the point that emotion is both important to but can also override one's ability to think for oneself.

A related expression of intellectual autonomy comes from the character of Nora in Henrik Ibsen's (1992/1879) play *A Doll's House*. Breaking free from certain traditional roles and beliefs, Nora proclaims to her husband: "I don't believe that any longer. I believe that before all else I am a reasonable human being, just as you are—or, at all events, that I must try and become one. I know

"... I can no longer content myself with what most people say, or with what is found in books. I must think over things for myself and get to understand them."

quite well, Torvald, that most people would think you right, and that views of that kind are to be found in books; but I can no

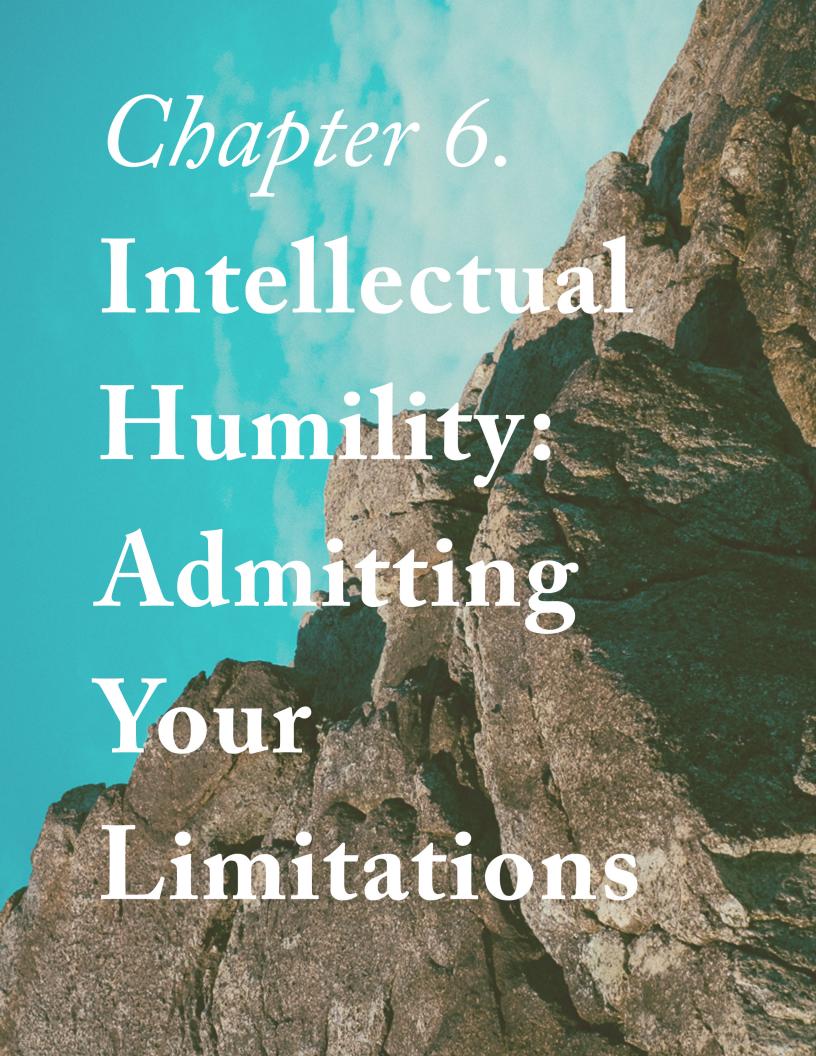
longer content myself with what most people say, or with what is found in books. I must think over things for myself and get to understand them." Nora's resolve to think for herself, and to do so for the sake of achieving understanding, is an excellent example of intellectual autonomy.

A final example of intellectual autonomy is the case of Nicolaus Copernicus, the famous Polish mathematician and astronomer who lived from 1473-1543. Copernicus is most famous for offering the first comprehensive and compelling defense of a "heliocentric" model of the universe. While Copernicus was not the first to propose a heliocentric model, his explanation and defense of it required a great deal of intellectual autonomy. They required him to imagine and think in ways that represented a radical departure from prevailing theories of the cosmos. Copernicus's intellectual autonomy was also evident in how he *synthesized* major bodies of scientific knowledge. His theory was the first to combine mathematics, physics, and cosmology.

By thinking through and explaining a radically different understanding of the universe and our place in it, Copernicus demonstrated an extraordinary degree of intellectual autonomy. His heliocentric theory was so revolutionary that it inspired the term "Copernican Revolution," which today is used to describe any profound and (previously) counterintuitive shift in understanding.

DISCUSSION QUESTIONS

- I. The chapter makes clear that intellectual autonomy needs to be balanced by virtues like intellectual trust and intellectual humility. Thinking about the students you teach or have been around, what are some specific ways in which they need to demonstrate more autonomy? What are some specific ways in which they need to demonstrate more trust or humility (and perhaps less autonomy)?
- 2. Of the various assignments (e.g. in-class exercises, homework, tests, quizzes, etc.) you have given as a teacher (or been given as a student), can you think of one in particular that you think strongly encouraged students to practice intellectual autonomy? How did it do so? Can you can you think of an assignment (or type of assignment) that had the opposite effect—that you think prevented students from learning to think for themselves? Was this an (otherwise) effective assignment? Why or why not?
- 3. What are some additional examples of intellectual autonomy from contemporary fiction, TV, or movies? How exactly do the characters in question manifest intellectual autonomy? What is the outcome?



CHAPTER 6

Intellectual Humility: Admitting Your Limitations

The very idea of humility tends to elicit mixed reactions. Some people equate it with spinelessness, servility, diffidence, and other undesirable traits. They think, for instance, of Winnie the Pooh's Eeyore, or of the famous Dickens character Uriah Heep, who says of "umbleness":

They taught us all a deal of umbleness—not much else that I know of, from morning to night. We was to be umble to this person, and umble to that; and to pull off our caps here, and to make bows there; and always to know our place, and abase ourselves before our betters. (1983/1850: 639)

This is a far cry from genuine humility. Consider, by contrast, a person who is so comfortable in her own skin or has such a strong sense of self-worth that she can freely acknowledge her limitations or mistakes. She is not afraid of what other people think. She doesn't try to micro-manage others' impressions of her. Nor is she very concerned with status, prestige, or similar values. She is free to be herself—so free that she can comfortably reveal her imperfections. This is real humility.

"OWNING" ONE'S LIMITATIONS

Intellectual humility involves an alertness to and willingness to "own" one's intellectual limitations, weaknesses, and mistakes (for a recent philosophical treatment of intellectual humility understood in this way, see Whitcomb et al forthcoming). Thus an intellectually humble person isn't oblivious to or ignorant of her intellectual limitations. She's aware of what she doesn't know, of areas in which her thinking needs improvement, and of the kinds of intellectual mistakes to which she is prone. When she enters a new situation, she's alert to ways in which her thinking might go awry. She isn't preoccupied by this awareness; but it is there in the back of her mind.

However, one can be alert to one's intellectual limitations while nevertheless failing to be intellectually humble. For, an awareness of one's limitations can lead to a variety of behaviors that are inconsistent with humility. For instance, being aware of a large gap in my knowledge about a particular topic, I might try to steer a conversation away from this topic in order to avoid being "found out." Similarly, my awareness of my cognitive limitations might be a source of considerable anxiety or shame. I might obsess about these limitations. They might lead me to begin comparing myself to others or to develop an acute concern with status or other kinds of rank ordering all in an effort to reassure myself that others' limitations are as bad or worse than my own.

All of these activities are opposite of intellectual humility. An intellectually humble person, instead of trying to steer the conversation away from his ignorance, will seek to replace it with knowledge or understanding, possibly by noting his ignorance and asking others to fill in the gap: "That's actually something I've never understood very well. Can you give me a quick explanation?" Moreover, the intellectual humble person's awareness

"To the extent that an intellectually humble person can do something to improve or rectify her intellectual limitations, weaknesses, or mistakes, she'll be inclined to do so; but to the extent that these things are fixed or unavoidable, she'll simply do her best to come to terms with or accept them. She won't become preoccupied with or be overly self-conscious about them."

of her cognitive limitations isn't a source of extreme anxiety or shame; and, partly for this reason, it doesn't compel him to make comparisons with others. Rather, he can accept and feel comfortable with these limitations. (For an engaging and high readable account of this kind of attitude toward one's intellectual limitations, see Cohen 2013. See also Paul and Elder 2002: 22-23.)

This leads to the second main element of intellectual humility—a

willingness to "own" one's intellectual limitations, weaknesses, and mistakes. This is a critical aspect of intellectual humility in light of the possibilities noted above (i.e. in light of the fact that a person can be aware of but anxious, ashamed of, or competitive about his intellectual limitations). The idea of "ownership" needs careful explanation. Owning one's intellectual limitations isn't a matter of being complacent about them. Indeed, if the limitations in question can be changed or eradicated, then "owning" them is likely to require doing something to get rid of them or at least to minimize their impact on one's thinking.

But sometimes the intellectual limitations we need to own are more or less fixed and can't be changed to any very significant extent. In cases like this, ownership may involve simply coming to terms with the fact that this is one's lot—that one has certain limitations and that's that. Suppose, for example, that I am innately challenged by a certain form of abstract or quantitative reasoning. By comparison with others, I have a really hard time with this way of thinking. While I probably should do what I can to become as proficient as possible in this area, owning this limitation may primarily be a matter of accepting it and trying to move on. I might say to myself: "This is a natural weakness of mine. There's no sense in denying that. While I can and should do my best to improve at this kind of reasoning, I need to avoid getting hung up about it. I'm good at other kinds of thinking. I can't and shouldn't expect to be perfect. I need to just accept that this is a limitation of mine, feel okay with it, and move on."

To summarize: to the extent that an intellectually humble person can do something to improve or rectify her intellectual limitations, weaknesses, or mistakes, she'll be inclined to do so; but to the extent that these things are fixed or unavoidable, she'll simply do her best to come to terms with or accept them. She won't become preoccupied with or be overly self-conscious about them. This is the kind of "owning" of one's limitations that is central to intellectual humility.

It's important to be clear about why an intellectually humble person is disposed to be mindful of and own his intellectual limitations. At least from an ideal standpoint, when we're thinking about intellectual humility as an intellectual virtue, that is, as a trait that flows from a desire to learn or understand, an intellectually humble person operates in the suggested way because he realizes that doing so will make him a more productive thinker and learner. If he ignores his intellectual weaknesses or mistakes, this will stunt his intellectual growth (more on this below). Similarly, if he's overly self-conscious about his intellectual limitations or weaknesses, or if this leads him to play the "comparison game" or to become preoccupied with things like rank or status, this will only get in the way of his quest for knowledge and understanding. The intellectually humble person gets this and so is inclined to think things like, "It's pointless for me to be preoccupied with who's smarter than I am or who's better at certain ways of thinking or learning. That's just going to distract me from being the best thinker or learner I can be. And the latter should be my real

focus." (See Roberts and Wood 2007: Ch. 9 for philosophical discussion of the relationship between intellectual humility and concerns with status, rank, power, etc.)

To see how intellectual humility (or an absence of it) is prefigured even in the words and actions of young children, note first that in many respects young children often exemplify an important part of the essence of intellectual humility. They're interested in learning and exploring. They don't claim to have it all figured out. And they aren't embarrassed or defensive about their intellectual limitations. They embody the compelling motto of the John Templeton Foundation: "How little we know, how eager to learn."

On the other hand, when they get just a little bit older, and grow more aware of the discrepancy between what they know and are capable of and what others (e.g. older siblings) know and are capable of, a different spirit often sets in. When one of our children was five years old, he developed the habit of saying "I know, I know" or "I already know how to do this" whenever we attempted to instruct him about something—e.g. how to play a game, how to put on an article of clothing, how to write a letter, etc. Of course, his behavior was quite normal from a developmental standpoint. It's not as if he was exhibiting real intellectual arrogance. Nevertheless, his attitude mirrored an adult attitude that it is clearly opposed to intellectual humility—e.g. the attitude of the obnoxious know-it-all or of the overly defensive individual who can't bear to be proven wrong. Suppose instead that when

children were confronted with cognitive obstacles or limitations, they were disposed to think and say things like, "I need to learn" or "I'm eager to understand" or "I *want* to know." What a better path they'd be on when it came to developing intellectual humility as adults! (For a recent article on how intellectual humility is prized in the professional world, see Friedman 2014).

INTELLECTUAL HUMILITY IN EDUCATION

Regrettably, the culture and atmosphere of schools and classrooms aren't often very conducive to the development of intellectual humility. Think about some of the values that tend to be upheld in these settings. One such value is *competition*. Schools and classrooms often are very competitive places. There's a strong concern with who's smartest, who has the highest grade, which school has the highest test scores, and so on. This kind of concern can easily disincentivize an ongoing alertness to and willingness to admit one's intellectual limitations. For, being honest about one's intellectual mistakes or deficiencies can threaten one's standing or place in the relevant pecking order. Likewise for being upfront about the weaknesses or deficiencies of an academic program that one has designed or of an entire school that one has been tasked with leading.

Think as well about the way that *speed and accuracy* are praised and rewarded in the classroom (Ritchhart 2002: 12-13). It's typically the student who can raise his hand fastest who gets to speak

or the child who gets the right answer (and gets it first!) who is asked to go to the front of the class to display her work. Of course, there's nothing bad about speed and accuracy. Indeed, these are good things; accuracy in particular is critical in most areas of life. However, think about the messages that we're sending to our students when we value speed and right answers over thoughtfulness and effort. Instead of asking the student who got the right answer to display her work for the rest of the class, we might, at least on

"As many others in education have begun to say, we need to place a much greater premium on struggle in an educational context—encouraging it, supporting students in it, and praising them for their efforts to fight through it."

some occasions, consider calling upon a different student who, while failing to get the best or right answer, nevertheless showed depth, creativity, or thoughtfulness in his efforts.

As many others in education have begun to say, we need to place a much greater premium on *struggle* in an educational context—encouraging it, supporting students in it, and praising them for their efforts to fight through it. If we were to do this, we'd be creating classroom and school cultures in which it is safe—even valued—to honestly confront and own one's intellectual limitations, weaknesses, and mistakes, especially as a way of making further

intellectual progress. (For a recent news story on this topic, see here. Also see Dweck 2010).

INTELLECTUAL HUMILITY AND A "GROWTH MINDSET"

This leads to a final point about intellectual humility. Throughout this guide I'll have occasion to talk about a "growth mindset" (Dweck 2006). Briefly, a person with a growth mindset is one who views success in a given area as something that is, to a considerable extent, under his control. By contrast, a person with a "fixed mindset" is one who believes that success is a function of abilities that one is either born with or not. When a person with a growth mindset encounters struggle or failure, he sees this an opportunity to learn something, to make adjustments, and to improve his performance. When a person with a fixed mindset experiences struggle or failure, he sees this as evidence that he doesn't have what it takes to succeed (and never will). Considerable research has been done showing that students (and others) can be taught a growth mindset. They can be taught to believe that, for example, success in school is something that is to a large extent under their control—that's it not primarily a matter of inborn "smarts" or IQ (Blackwell, Trzesniewski, and Dweck 2007).

Helping students develop a growth mindset is critical to helping them develop intellectual humility. To see why, suppose a fixed mindset were correct, that is, suppose that success in academics and beyond were a function of factors we can't control—of abili-

ties we either have or don't have. If this were true, what incentive would students have to be honest about or to "own" their intellectual limitations or weaknesses? Why shouldn't they conceal and deny these as best they can? However, if a growth mindset is correct, if success depends on qualities that can be cultivated over time, then students have something to gain by being mindful of and owning their intellectual limitations. For, in order to grow in any area, we must first be honest about and attempt to improve our limitations and weaknesses in that area. As this suggests, intellectual humility and a growth mindset go hand in hand.

SOME ILLUSTRATIONS OF INTELLECTUAL HUMILITY

Doris Kearns Goodwin is a prominent American historian and Pulitzer Prize winning author. In 1987 she published a book on the family of former U.S. President John F. Kennedy. After the book was released, it was discovered that several passages had apparently been taken from another source without proper attribution. In an article in *Time* magazine titled "How I Caused that Story," she said the following:

I am a historian. With the exception of being a wife and mother, it is who I am. And there is nothing I take more seriously ... [N]ot long after the publication of my book *The Fitzgeralds and the Kennedys*, I received a communication from author Lynne McTaggart pointing out that material from her book on Kathleen Kennedy had not been properly attributed. I realized she was right. Though my footnotes repeatedly cited Ms. McTaggart's work, I failed to provide quotation marks for phrases that I had taken verbatim, having assumed that

these phrases, drawn from my notes, were my words, not hers. I made the corrected changes ... What made the incident particularly hard for me was the fact that I take great pride in the depth of my research and the extensiveness of my citations. The writing of history is a rich process of building on the work of the past with the hope that others will build on what you have done. Through footnotes you point the way to the future historians. The only protection as a historian is to institute a process of research and writing that minimizes the possibility of error. And that I have tried to do, aided by modern technology, which enables me, having long since moved beyond longhand, to use a computer for both organizing and taking notes. I now rely on a scanner, which reproduces the passages I want to cite, and then I keep my own comments on those books in a separate file so that I will never confuse the two again ... Still, there is no guarantee against error. Should one occur, all I can do, as I did 14 years ago, is to correct it as soon as I possibly can, for my own sake and the sake of history.

This is a nice expression of intellectual humility. First, notice the title of the article, "How I Caused that Story." Assuming that Goodwin played a role in writing—or at least endorsed—this title, it illustrates the idea of taking ownership of one's intellectual mistakes. Goodwin identifies herself (not her editors, research assistants, etc.) as the root of the problem. Goodwin's willingness to own her mistake is especially impressive given how deeply she identifies with her role as an historian and the "great pride" she takes in the "depth" of her research and the "extensiveness of [her] citations." These factors must have made it even more difficult for her to go public with her gaffe. However, as someone capable of intellectual humility, Goodwin did not allow her ego to get in the way of acknowledging and expressing regret over her intellectual error.

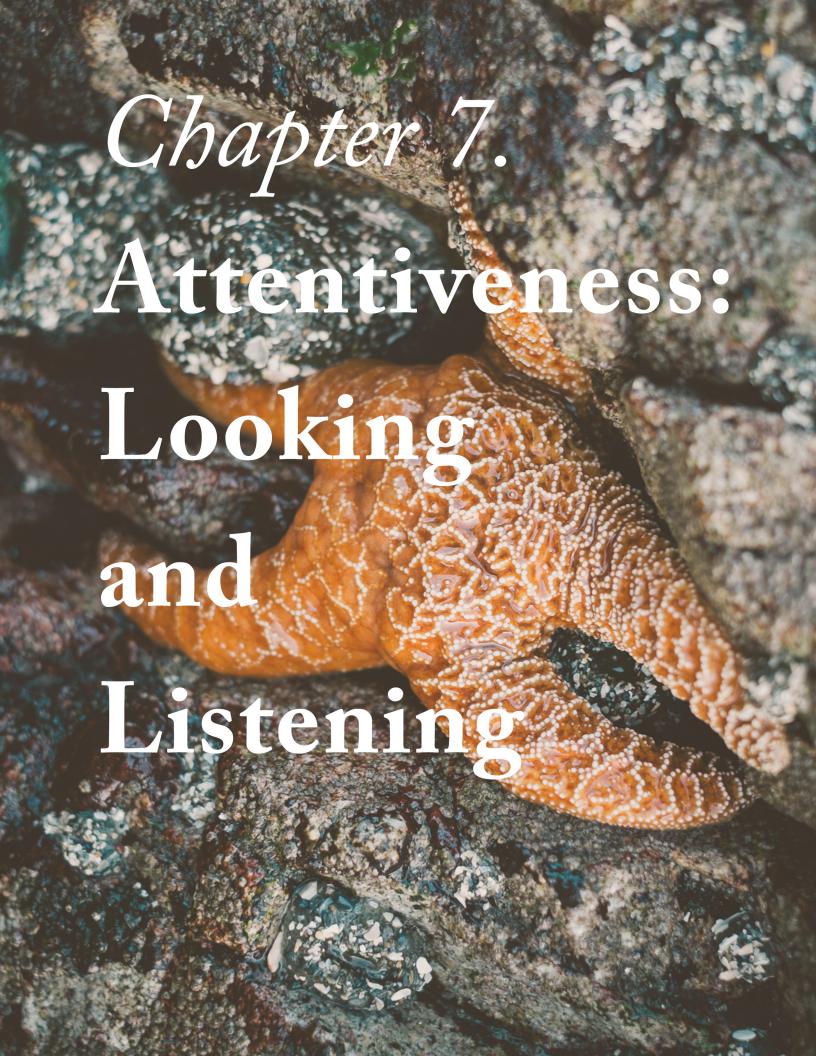
Socrates is a famous ancient Greek philosopher (470-399 BC). While he was an actual historical figure, he is also the leading character in the dialogues of another famous ancient Greek philosopher, Plato. (Plato wrote philosophy in the form of dialogues or philosophical conversations that usually feature Socrates as the main character.) In a dialogue called The Apology, Socrates visits the Oracle at Delphi. He asks the oracle to identify the wisest person. She responds by identifying Socrates. He doesn't get it. Socrates is sure he knows a lot of people who are much wiser than he is. So he sets out to prove the oracle wrong. However, what he finds, after talking with many different types of people (politicians, poets, craftsmen, etc.), is that they all claim to know things they don't or know much less than they think they know. Socrates, on the other hand, is keenly aware of his intellectual limitations. He's very quick to admit his own ignorance about things. In fact, he asserts famously that true wisdom is a matter of recognizing and acknowledging what you don't know. As such, Socrates is another prime example of intellectual humility.

DISCUSSION QUESTIONS

- I. How would you define "perfectionism"? How is perfectionism opposed to intellectual humility? In what ways is your classroom (or home) designed to support perfectionism and to thwart intellectual humility? What changes—small or large—could you make in order to change the culture of your classroom (or home) to make it more supportive of intellectual humility?
- 2. Identify three of your intellectual limitations or weaknesses. To what

extent are these under your (direct or indirect) control? For each one, what might it look like for you to "own" it in a deeper or more public way (e.g. among friends, family members, or colleagues)?

3. In what ways is intellectual humility a risky affair? What might you stand to lose if you were more intellectually humble? Is this a price worth paying? On the other hand, what might you stand to *gain* by practicing more intellectual humility?



CHAPTER 7

Attentiveness: Looking and Listening

In the previous three chapters, we examined intellectual virtues that are critical to getting the learning process started and headed in the right direction: curiosity provides a fundamental motivation to learn, intellectual autonomy ensures that one is thinking for oneself, and intellectual humility ensures that one is attentive to and prepared to "own" one's intellectual limitations.

In this chapter and the two that follow, the focus shifts to virtues that keep the learning process on track. These virtues are useful at almost any point in the learning process and within almost any domain that requires good thinking. By contrast with the virtues already discussed, they are virtues that many teachers already seek to foster, albeit in ways that aren't always very intentional or systematic. They are attentiveness, intellectual carefulness, and intellectual thoroughness. We begin with attentiveness.

It's tempting to equate attentiveness with behaviors like sitting up straight in class, looking directly at the teacher, quickly following instructions, eagerly answering questions, and so on. While these are good qualities, any educator knows that they are no substitute for thoughtful engagement with what's being said or taught. A student can give off precisely the appearance just described even

if there is "little going on upstairs." This might be evident when you call on the student only to learn that she wasn't really listening. Or it might become clear when you give the eager participant an opportunity to share his thinking and his answer reveals only shallow or hasty reflection on the topic. While things like sitting up straight and looking directly at the teacher may be associated with the virtue of attentiveness, they aren't the thing itself.

THREE INGREDIENTS OF ATTENTIVENESS

What, then, distinguishes the actual virtue of attentiveness from related qualities? In response to this question, I briefly note three critical ingredients of attentiveness. First, the attentive person is *present* when learning. This is a slippery but critical point. By "present" I don't primarily mean physically present. For a student can be present in class but entirely checked out or distracted. These states of mind are the opposite of attentiveness. An attentive student is present in the sense that he's personally engaged and invested in what's being said or learned. He is present, not just in body, but in heart and mind as well.

This leads to a second key ingredient. An attentive person is one who *listens*. Because he is there and personally engaged and invested in what is being taught or learned, he listens carefully and openly. He is eager to understand and even to appreciate what is being said. Therefore, if you call on the attentive student to answer a question, you can expect a thoughtful response—one that

shows that he's been paying attention.

Third, an attentive person is quick to notice and is capable of giving sustained attention to *important details*. Because of his alert and focused frame of mind, and because he is a good listener, the attentive person is well situated to notice details that others would be likely to miss. These qualities also enable him to remain focused on details and to probe for further meaning and significance. (As this brief characterization suggests, attentiveness has much in common with what some psychologists and educational theorists refer to as "mindfulness." See Langer 1989 and especially 1997: Ch. 2.)

ATTENTIVENESS AND OTHER VIRTUES

As this description suggests, attentiveness plays a critical supporting role in connection with other intellectual virtues. For instance, attentiveness is one way in which curiosity is sustained and applied. If I am passionately curious about some subject matter, I will give it my full attention—I will invest myself in thinking and learning about the subject. I will listen carefully to sources that can inform me about it.

Or, consider the relationship between attentiveness, on the one hand, and the virtues we'll consider in the two chapters that follow: namely, intellectual carefulness and intellectual thoroughness. An intellectually careful person is one who is quick to avoid

errors and pitfalls in the context of thinking. If I am not attentive, I will be especially vulnerable to errors—to intellectual carelessness. Conversely, one of the best ways to avoid mistakes is to be fully aware of and attentive to what one is doing. In this way, attentiveness facilitates carefulness. We noted above that an attentive person is well positioned to notice and probe important details. This is another way of saying that attentiveness facilitates

"[T]he psychology and cognitive hardwiring of students should inform our goals and expectations for the development of their intellectual character and the ways we go about teaching and trying to support them."

intellectual thoroughness. An intellectually thorough person desires and conveys deep understanding. She desires an explanation of what she is curious about—not simply a series of isolated facts. And when she conveys what she knows, she also tends to explain rather than merely regurgitate information. Here as well attentiveness supplies a conducive frame of mind. If a person is distracted or only "half present" in her reading about some topic, then she is unlikely to pursue, let alone to acquire, a deep understanding of it. A similar point applies to her attempts to communicate about or teach on that topic. Thus attentiveness is also importantly supportive of intellectual thoroughness.

A LACK OF ATTENTIVENESS?

It's important to dwell for a moment on the opposite of attentiveness. Again this includes qualities like being intellectually distracted, impatient, dull, unengaged, checked out, and so on. These qualities are all too familiar to most educators. In some cases, they are an immediate expression of a student's lack of interest in what is being said or taught—a lack of curiosity. This underscores the important point that if we hope to educate for attentiveness we also need to think about what we can do to spark student interest in or curiosity about our subject matter. While inattentiveness in its various forms is sometimes the result of intellectual habits that can be reshaped over time, its source can be deeper and more resistant to the usual methods of reshaping. In particular, it can have its basis in factors ranging from differences between male and female learning styles (DiPrete and Jennings 2012) to learning disabilities like ADHD.

Where the basis of "inattentiveness" is *hardwired*—where it isn't a matter of choice or intellectual character—we must adjust our expectations and pedagogical practices in at least a couple of ways. First, we should revise our understanding of what attentiveness might look like or amount to for the students in question. What it looks like for an 11-year-old male student may be different than what it looks like for a female student of the same age (of course, neither all boys nor all girls fit neatly into these categories). Second, we need to try to identify strategies that will be

useful to students who struggle with attentiveness. For example, suppose it is true, not just that attentiveness "looks different" for many adolescent boys or for students with ADHD, but also that some students simply have a harder time practicing and developing this attentiveness, even in ways that are developmentally relevant. To support these students, we need to try to identify interventions appropriate to their psychology that will help them regulate their attention and thereby become more present and personally engaged in the learning process. We should also take their needs into consideration when deciding how we will teach our lessons—e.g. the kinds of assignments we give or exercises we have students do in class (see Ch. 30 for the kind of mindset and approach this might involve).

The general lesson here is that the psychology and cognitive hard-wiring of students should inform our goals and expectations for the development of their intellectual character and the ways we go about teaching and trying to support them. While this applies with special relevance to a virtue like attentiveness, it applies to all the other virtues as well.

SOME ILLUSTRATIONS OF ATTENTIVENESS

In the short story "A Scandal in Bohemia," the famous detective Sherlock Holmes draws a distinction for Watson between *seeing* and *observing*. He begins by asking Watson how many steps there are to the entrance of his residence at 221B Baker Street. Watson doesn't

have a clue. Holmes responds:

"You see, but you do not observe. The distinction is clear. For example, you have frequently seen the steps which lead up from the hall to this room."

"Frequently."

"How often?"

"Well, some hundreds of times."

"Then how many are there?"

"How many? I don't know."

"Quite so! You have not observed. And yet you have seen. That is just my point. Now, I know that there are seventeen steps, because I have both seen and observed." (Konnikova 2013: 2)

Discussing Holmes's distinction between observing and seeing, Maria Konnikova, author of *Mastermind: How to Think Like Sherlock Holmes* (2013), says:

What Holmes is really telling Watson when he contrasts seeing and observing is to never mistake mindlessness for mindfulness, a passive approach with an active involvement. We see automatically: a stream of sensory inputs that requires no effort on our part, save that of opening our eyes. And we see unthinkingly, absorbing countless elements from the world without necessarily processing what those elements might be. We may not even realize we've seen something that was right before our eyes. But when we observe, we are forced to pay attention. We have to move from passive absorption to active awareness. We have to engage. It's true for everything—not just

sight, but each sense, each input, each thought. (4)

This distinction between seeing and observing gets to the very heart of attentiveness. Again, an attentive person is one who is present and engaged when it comes to thinking and observing. As a result, attentive people *see* and *notice* things that other people miss. They also tend to focus on and ponder these details.

Barbara McClintock (1902-1992) was a Nobel prize-winning geneticist who studied the role of chromosomes (which contain DNA and other genetic materials) in the reproduction of corn. As mundane as corn chromosomes might seem, McClintock was amazingly passionate about her work: "I was just so interested in what I was doing I could hardly wait to get up in the morning and get at it. One of my friends, a geneticist, said I was a child, because only children can't wait to get up in the morning to get at what they want to do" (Roberts and Wood 2007: 299). McClintock's research required her to pay extremely close attention to incredibly miniscule physical details. She excelled at this. She described her experience observing corn chromosomes as follows:

I found that the more I worked with them the bigger and bigger [they] got, and when I was really working with them I wasn't outside, I was down there. I was part of the system. I was right down there with them, and everything got big. I even was able to see the internal parts of the chromosomes—actually everything was there. It surprised me because I actually felt as if I were right down there and these were my friends. (300)

McClintock's attentiveness was so strong and powerful that as she focused intently on the microscopic details of the chromosomes, it was if they grew up all around her and she inhabited their world. In fact, it was precisely her extraordinary attentiveness to detail that made much of her work in genetics so innovative and groundbreaking. McClintock is an excellent example of what it looks like to be personally present and invested in what one is learning and of the kind of achievement and related goods that can come about as a result.

A final example comes from Charlotte Bronte's Jane Eyre (1997/1847). In a previous chapter, we looked at how Jane exemplifies intellectual autonomy, an ability to think for oneself. But underlying this ability is an overall intellectual orientation that closely resembles attentiveness. Jane comments:

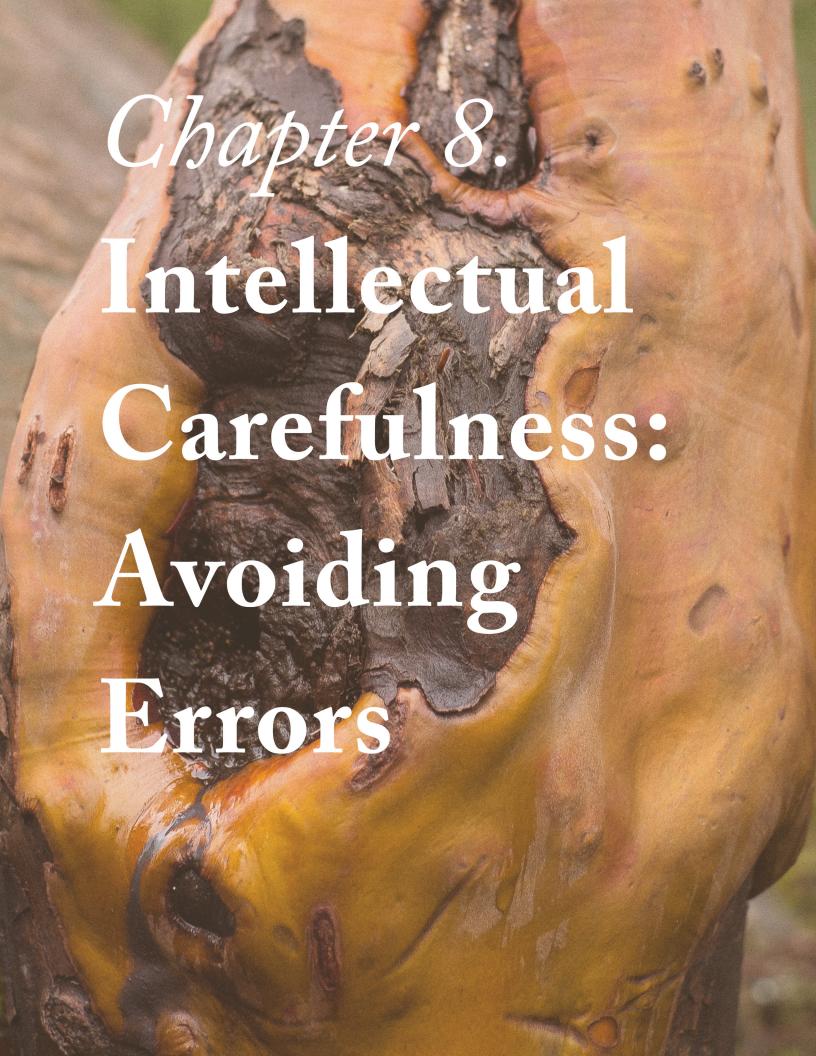
I could not help it; the restlessness was in my nature; it agitated me to pain sometimes. Then my sole relief was to walk along the corridor of the third story, backwards and forwards, safe in the silence and solitude of the spot, and allow my mind's eye to dwell on whatever bright visions rose before it—and, certainly, they were many and glowing; to let my heart be heaved by the exultant movement . . . and, best of all, to open my inward ear to a tale that was never ended—a tale my imagination created, and narrated continuously; quickened with all of incident, life, fire, feeling, that I desired and had not in my actual existence. It is in vain to say human beings ought to be satisfied with tranquility: they must have action; and they will make it if they cannot find it. (95)

There's a lot going on in this passage. But one striking feature of

it is the alertness and vitality of Jane's mind. As she allows her "mind's eye to dwell on whatever bright visions [rise] before it" and as she opens her "inward ear to a tale that [is] never ended," Jane is fully intellectually present. She exemplifies attentiveness.

DISCUSSION QUESTIONS

- I. Think of a subject, lesson, or teacher that inspired attentiveness on your part—that inspired you to really "look and listen." How or why did the subject, lesson, or teacher have this effect? What kind of impact did your attentiveness have on your intellectual performance and enjoyment of the class?
- 2. To what extent do you think your students' lack of attentiveness is due to hardwired factors vs. factors that are at least partially under their (direct or indirect) control? What's your evidence for this?
- 3. Have you ever had a student who regularly appeared *not* to be paying very close attention but who consistently showed in other ways that in fact he or she was thoughtfully engaged with the subject matter? What was this student like? How was he or she able to remain engaged without the standard appearances of attentiveness? If you haven't had a student like this, do you think such a student is possible? Why or why not?



CHAPTER 8

Intellectual Carefulness: Avoiding Errors

Several intellectual virtues are geared toward trying to reach the truth or to acquire a deep understanding of important topic. Intellectual carefulness is a little different. It's geared toward *avoiding* intellectual errors or mistakes, including false beliefs and ignorance.

To see why the goal of avoiding false or mistaken beliefs is different from the goal of forming true beliefs, ask yourself: what's the easiest and surest way of acquiring true beliefs? A plausible answer is: believe everything you can! If you believe everything you can, you're bound to increase your stock of true beliefs. The problem, of course, is that in addition to forming beliefs that are true, you're also likely to form a lot of beliefs that are false.

Alternatively, suppose your goal is to avoid having any false beliefs. What should you do? One surefire strategy: believe nothing! If you don't believe anything, then you won't form any false beliefs. Here the problem is that, if you believe nothing, you'll also rob yourself of the opportunity to acquire any true beliefs. Forming true beliefs and avoiding false beliefs are two important but distinct intellectual goals.

AVOIDING ERRORS

An intellectually careful person takes pains to avoid making intellectual mistakes. However, to do this effectively, she needs to know what counts as a mistake and to be mindful of situations in which she is susceptible to making them. Thus an intellectually careful person also has a grasp of the rules of good thinking and related intellectual activities; and this awareness comes to mind when she finds herself in danger of violating these rules.

By "the rules of good thinking and related intellectual activities" I am referring to rules that are at once very broad and very specific. First, while these include things like the laws of logic, they are not limited to such rules. There are also rules involved with knowing how to solve certain sorts of math problems, how to approach an issue using the scientific method, how to construct a grammatical

"Intellectual carefulness isn't important merely because of how it can facilitate the avoidance of intellectual errors.

Because we act and live on the basis of what we think and believe, a lack of intellectual carefulness can also have devastating practical effects."

sentence, how to spell a word correctly, and much more. Second, as these examples suggest, the rules that an intellectually careful

person is mindful of and adheres to are specific to whatever issue or subject matter she is dealing with. So, for instance, suppose a student is trying to evaluate a complex mathematical expression and that to do so he must perform a number of different arithmetic operations (e.g. addition, subtraction, multiplication, and division). An intellectually sloppy student might rush through the problem, making his best guess as to the sequence in which to perform the operations. An intellectually careful student, by contrast, will know and be mindful of the "order of operations" (PEMDAS or parenthesis, exponents, multiplication, division, addition, and subjection) and will meticulously follow this principle in order to solve the problem. Alternatively, imagine a student working on an important term paper for his English class. As he puts his thoughts on paper, he is mindful of the rules of grammar, mechanics, and spelling. And his writing adheres to these rules: he uses proper sentence construction, his subjects and verbs agree, he makes appropriate use of commas and apostrophes, doesn't make any spelling errors, and so on. Here intellectual carefulness looks like a sensitivity and adherence, not to logical or mathematical rules, but to the basic principles of good writing.

THE PRACTICAL IMPORTANCE OF INTELLECTUAL CAREFULNESS

Intellectual carefulness isn't important merely because of how it can facilitate the avoidance of intellectual errors. Because we act and live on the basis of what we think and believe, a lack of in-

tellectual carefulness can also have devastating practical effects. Think, for example, of the journalist who fails to inquire about the reliability of one of her sources. As a result she ends up publishing libelous remarks about a third party, ruining her own career and severely damaging the reputation of the other person. Or imagine a pharmacist who hastily disregards certain well-known rules for calculating proper dosages and in doing so compounds the suffering of a hapless patient. Finally, consider an intellectually hasty homebuyer who fails to read the fine print in his subprime mortgage documents. He fails to notice that after three years his payments will balloon beyond the point of affordability and that he and his family will end up losing their home. These are hardly far-fetched cases. They illustrate that intellectual carefulness is also critical to avoiding practical disasters (see Dow 2013: Ch. 2 for a compelling exploration of this point).

The examples just provided underscore the close connection and potential overlap of intellectual carefulness with other virtues like attentiveness and intellectual thoroughness. The homebuyer's failure to read the fine print, for instance, could also betray a lack of either of these other virtues. However, failures of intellectual carefulness aren't always failures of attentiveness or thoroughness. Imagine a pathologist examining a collection of cells under a microscope. The pathologist might be paying close attention to the details of what she sees and working hard to arrive at an understanding or explanation of why the cells are organizing in a particular way. Thus she might exercise both attentiveness and

intellectual thoroughness. However, she might nevertheless neglect to follow certain rules or principles relevant to what she is doing. She might, for example, forget to use certain important functions of the microscope that would make her observations more accurate and illuminating. Or she might hastily draw a conclusion about the cause of the cellular behavior she is observing, failing to recall that this behavior is consistent with a range of underlying causes. In either case, while exercising attentiveness and intellectual thoroughness, she might fail to demonstrate intellectual carefulness.

CAREFULNESS AND PERFECTIONISM

As Aristotle famously pointed out in Book II of the *Nichomachean Ethics*, every virtue has two corresponding vices or defects: a vice of deficiency and a vice of excess. For instance, an excess of courage looks like rashness or recklessness and a deficiency of courage looks like cowardice. With many virtues, people tend toward the vice of deficiency rather than the vice of excess. This includes intellectual virtues. For instance, most people don't struggle with being too attentive, too intellectually thorough, or too intellectually tenacious. Instead, they struggle with a lack or deficiency of these things.

Many people also exhibit a lack of intellectual carefulness (think about the prevalence of intellectual sloppiness or carelessness). Within an educational context, however, an excess of intellectual

carefulness is also quite common. It is tied, in fact, to the problem of *perfectionism* familiar to many teachers. Think of the student who is obsessed with not making mistakes or with getting anything less than an A on an assignment. This student's concern with avoiding errors is rooted in *fear*—a fear that seems tied to the student's self-image or self-esteem. It is also likely tied to feelings of shame: were the student to fail, he would experience this as a condemnation of himself and his abilities (Adderholdt-Elliot 1989). While fear or shame associated with failure can lead to intellectually careful behavior, it should be clear that such behavior is not expressive of a genuine character virtue and that it is likely to be excessive. This is important to keep in mind. While we may be tempted to praise the intellectually careful conduct of our per-

"[O]ne way to help the excessively careful perfectionist student to develop a healthier, more virtuous form of intellectual carefulness is to help her become more intellectually humble."

fectionist students, we might want to think twice before doing so; or, at any rate, we should emphasize that intellectual carefulness rooted in perfectionism and its underlying causes must not be confused with the actual virtue of intellectual carefulness.

This leads to two additional observations. First, it illustrates the

need for us to care both about avoiding errors but also about learning or expanding our stock of true beliefs or knowledge. Just as forming true beliefs isn't by itself an adequate intellectual goal, neither is the avoidance of error. For, again, just as the former could be achieved by believing everything, the latter could be achieved by believing nothing at all (nothing wagered, nothing lost). From an educational standpoint, this means that we need to help foster in our students both an appreciation or love of truth and a resistance or aversion to cognitive error or false belief. Second, the potential interplay between intellectual carefulness and an unhealthy perfectionism also illustrates the fact that an emphasis on intellectual carefulness should be complemented by a concern with intellectual humility. As we saw in a previous chapter, an intellectually humble person is alert to and is prepared to "own" or accept or take responsibility for her intellectual weaknesses, limitations, and mistakes. The perfectionist, by contrast, is appalled by these things. For her, they signify condemnation of her self or her abilities. Therefore, one way to help the excessively careful perfectionist student to develop a healthier, more virtuous form of intellectual carefulness is to help her become more intellectually humble—e.g. by helping her to see her failures or mistakes as opportunities for growth rather than as a negative reflection on her fundamental abilities or self-worth.

SOME ILLUSTRATIONS OF INTELLECTUAL CAREFULNESS

Author Philip Dow (2013) tells an interesting story about the

importance of intellectual carefulness. It concerns an event that occurred at NASA (National Aeronautics and Space Administration).

Before considering the story, note that in general the culture at NASA is marked extreme intellectual carefulness. As Dow comments, in the absence of such a culture, "[t]he space program that eventually put people on the moon would never have gotten to square one because in this field accuracy and precision are essential to every detail, of every step, of every project" (33). However, even at NASA, mistakes sometimes get made:

When John F. Kennedy announced that America would put a man on the moon by the end of the 1960s most people chalked it up to political grandstanding or arrogance. However, the time, energy, and money (vast amounts of money) that soon began pouring into the American space program made the skeptics sit up and take note. Within months NASA announced a series of ambitious plans culminating in a manned trip to the moon. A key component of this program was the exploration of the atmosphere of Venus through the use of Mariner I. Using state-of-the-art technology this craft was expected to reach speeds of up to 25,820 miles per hour on its trip to Venus before unveiling 9,800 solar cells that would power the vessel while its computers investigated the unknown composition of the Venetian atmosphere. It was to be a five million dollar leap forward for NASA and a signal to the Russians that the Americans were gaining the upper hand in the space race. Unfortunately, four minutes after take off Mariner I, America's national pride, and its five million dollar price tag crashed into the Atlantic Ocean. The cause? A NASA scientist had left out a minus sign from the instructions fed into the craft's computer. Not a great day at the office for that particular rocket-scientist. (32-33)

Dow's story further illustrates the point that a momentary lapse of intellectual carefulness can have devastating consequences, even within a community in which intellectual carefulness is the norm.

"Fact checkers" are people tasked with verifying the accuracy of other people's written or spoken comments. They are typically employed by newspapers, magazines, and other organizations responsible for communicating important information to the public. Fact checkers do careful background research, make phone calls to verify sources, and take other steps to ensure that published material is accurate and otherwise (legally, ethically, etc.) up to snuff.

Sarah Harrison Smith is a former fact checker for the *New York-er* and the *New York Times Magazine*. She believes, very plausibly, that in a world in which we are bombarded with a constant stream of information, images, and messages (on Wikipedia, Twitter, YouTube, not to mention countless other online sites and services), we need to be our *own* fact checkers. We need to exercise intellectual carefulness in how we process and respond to information that is communicated to us. This belief led Smith to write a book called *The Fact Checker's Bible* (2004). In it she shares a number of principles that capture nicely an important part of what intellectual carefulness looks like in action:

- Reading for accuracy
- Determining what needs checking

- Researching facts
- Assessing sources
- Understanding legal liabilities
- · Looking out for and avoiding the dangers of plagiarism

What might this look like in an educational context? Here are some principles that apply to learners of all ages:

- If you're looking for information online, think twice about the sources you're relying on. Is your source reliable? Does it have any "indicators" of unreliability? For example, is it a personal website (in which case the information might be more opinion than fact)? Is the information clearly and consistently presented? Or is it sloppy and filled with mistakes or contradictions? Does it cite evidence, reasons, and other sources? Or does it just make assertions?
- Ask questions while you read. If you passively accept everything you read on the internet, your mind will be filled with many confusions and falsehoods. To avoid getting duped, we must read and reflect in a critical fashion. This means asking questions while we read, questions like: Is this true? Does this make sense? Is there anything suspicious about what's being said? Does it jibe with other things I know or have heard?
- Follow up on your questions. If you've gone to the trouble of asking critical, probing questions, but you never bother to get answers to these questions, then you've probably wasted your time. Therefore, it's also critical to follow through with your questions—to do what's necessary in order to get some answers. Typically, this will involve checking additional sources and comparing them with the original source. This is an obvious point. But if your experience is anything like mine, when it comes to evaluating the kinds of information we are confronted with on a daily basis, it's all too easy to give up

before getting our questions answered.

So, we need to operate like fact checkers when we process information. But we also need to operate like fact checkers in our own written and spoken communication. Smith says:

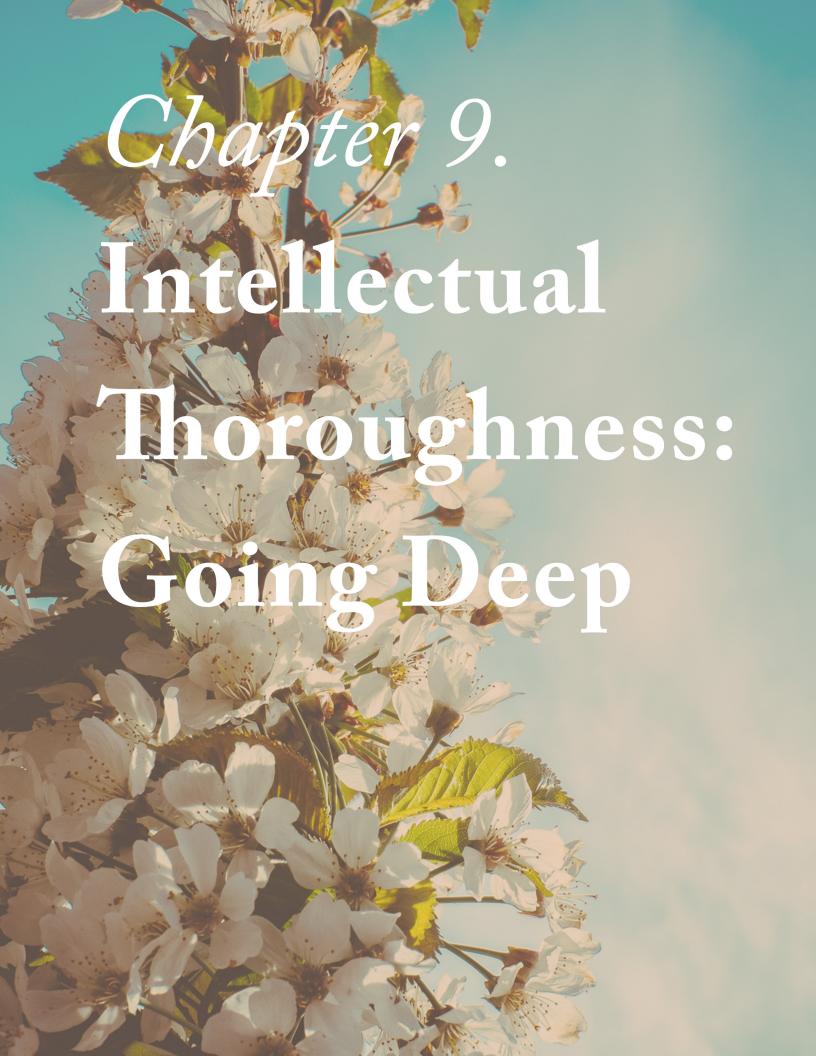
There are now fact-checking departments all over the country. While fear of lawsuits certainly motivates publishers to maintain these departments, most realize that they need checkers to keep their readers' good faith. Big errors may occasionally end up in court: small errors, such as wrong dates or incorrect name spellings, will be remarked on by thousands of people. If each reader begins to trust the publication a little less with every error, the eventual cost will be its reputation. (11)

Similarly if we aren't intellectually careful in our thinking, reading, schoolwork, and conversations, our very trustworthiness and reputation may suffer.

DISCUSSION QUESTIONS

- I. Where do you most often see a lack of intellectual carefulness in the thinking or work of your students? What do you think the cause of this carelessness tends to be?
- 2. The chapter claims that there can be a connection between intellectual carefulness and perfectionism. Have you seen any such connection in your students? If so, what do you think motivates the carefulness of these students? What other qualities do these students tend to possess?

3. What additional rules of thumb can students follow in order to avoid being duped or misled by the barrage of messages they are confronted with on a daily basis? Alternatively, what might be some "best intellectual practices" for students to follow when they're researching something on the internet?



CHAPTER 9

Intellectual Thoroughness: Going Deep

Intellectual thoroughness is not the most "sexy" of the intellectual virtues. While it's not difficult to imagine that being intellectually thorough is important in various contexts, "thoroughness" has a dull ring to it—it connotes things like due diligence, going above and beyond what's required, exhausting all the possibilities, and so on. While thoroughness in some domains is likely to strike many as pretty bland, it has much broader appeal in the context of learning. Or so I'll argue in this chapter.

GOING DEEP

An intellectually thorough person is disposed to probe for deeper meaning and understanding. She is unsatisfied with mere appearances or easy answers. Similarly, when she communicates what she knows, she explains herself. She refrains from giving superficial or cursory accounts of things.

As this very brief description suggests, intellectual thoroughness has important and frequent application to two main dimensions of thinking and learning. First, it bears on the process of *acquiring* knowledge. An intellectually thorough student insists on understanding what she is learning about. She feels uncomfortable

and discontent when she isn't quite getting it. She is motivated to dig deeper—to keep thinking until she has a firm, illuminating grasp of the subject matter. Second, intellectual thoroughness bears on the *communication* of knowledge. Just as she will not be content until she genuinely understands what she is learning, when it comes to explaining what she knows (e.g. on an exam or in a paper), an intellectually thorough student is resistant to providing superficial answers. She does not simply regurgitate what she has learned in class. Rather, she demonstrates or shows that she understands.

EXPLAINING AND MAKING CONNECTIONS

A concept that draws together both of these aspects of intellectual thoroughness together is that of *explanation*. The opposite of an explanation is a simple assertion or statement of information. Again, while an intellectually thorough person may begin with a basic statement of the facts, she doesn't stop there. She wants explanations and is disposed to provide them in turn.

Another closely related concept is that of *making connections* between the different things one knows. This is also something that an intellectually thorough person is disposed to do. For, we deepen and expand our knowledge—our understanding of things becomes more thorough—when we are able to see or make connections between its various parts or components, for example, between what we're learning about ancient history and the dra-

mas we're reading in English class or between the theories we're learning about in a computer science course and the principles or formulas we're working with in algebra. (For helpful discussions of the educational importance of understanding, explanation, connection-making, and related concepts, and of how to educate in light of this goal, see Perkins 1993, Leithwood et al 2006, and Blythe et al 1998.)

The cultures of many schools and classrooms today are antithetical to the cultivation of intellectual thoroughness. Schools often feel like factories, where the "product" is students who can engage in rote problem-solving or retain information just long enough to "regurgitate" it on a standardized test. Particular classrooms often

"An intellectually thorough person is disposed to probe for deeper meaning and understanding. She is unsatisfied with mere appearances or easy answers."

have a similar feel, with a dominant focus on memorizing information and learning to get the right answer. While abilities like retaining information or applying a rule or formula to generate a right answer are important, they are hardly the *summum bonum* or "end all be all" in an educational context. They are, at best, a starting point for something deeper, more challenging, and more invigorating. In any case, because of the kind of focus just noted, many schools and classrooms favor speed, accuracy, and breadth

at the expense of things like thoughtfulness, depth, and rigor (Ritchhart 2002: 12-13). In doing so, they are designed to foster intellectual hastiness, superficiality, and first-order thinking. They are not designed to foster intellectual thoroughness.

THE VALUE OF INTELLECTUAL THOROUGHNESS

Why or in what way is intellectual thoroughness a compelling or attractive intellectual virtue? One reason intellectual thoroughness is satisfying has to do with the idea of *cognitive mastery*. To have a thorough grasp of something is to have a firm command of it. As in other areas of life, mastery of a concept or body of knowledge is intrinsically rewarding. It is an admirable and pleasurable excellence. When a student actually understands and can explain a concept, this can be a source of felt competence and pride.

But this does not exhaust the value or attractiveness of intellectual thoroughness. We live in a marvelous world. There is so much to wonder about, learn, experience, and comprehend. However, grasping the wonders of the world—whether in history, science, literature, or elsewhere—isn't an automatic experience for human beings. To the extent that we are content with easy answers or superficial explanations, a thoughtful and informed grasp of the marvels of the world will elude us. Nor is it enough that we simply desire deep understanding. We must be willing and able to probe and fight for it. In short, thoughtful engagement with a world like ours (even if it doesn't—or can't—end in cognitive "mastery")

is a profoundly invigorating and rewarding experience. And it is possible only to the extent that we are prepared to practice intellectual thoroughness and related virtues.

To see how these rather lofty ideas might be brought to bear on real life, I share the following anecdote. Recently our 11-year-old son asked me to review some material with him for an upcoming test on climate science. His objective was to review a sheet of definitions. As we began working our way through the definitions, I asked him: "Do you think this is really helping you understand the material?" "No," he replied. So I asked, "Wouldn't it be more interesting if you really did understand what you're learning about?" He quickly acknowledged that it would. For the next several minutes we began to reflect on the definitions a bit more closely and rigorously. We compared and contrasted some related concepts (hurricanes vs. cyclones). We puzzled over some ill-defined terms ("convection"). And we delighted in some fascinating natural phenomena. For instance, we observed that air pressure allows us to move things—like the marshmallows in his PVC blowgun—without actually touching those things. This reminded my son of (read: he made a connection with) a conversation we'd had previously about magnets—about how two things can push and pull each other without actually touching. The wonders of magnetic fields! By moving beyond the surface and probing for deeper understanding, we experienced the pleasure of thinking and wondering, we made connections between different things we'd learned, and experienced awe at the workings of our world.

SOME ILLUSTRATIONS OF INTELLECTUAL THOROUGHNESS

Hermione Granger from the *Harry Potter* series is a good example of intellectual thoroughness. She displays this virtue in many ways and on many occasions. The two selections that follow are from *The Chamber of Secrets* (2000). After a cat belonging to another character mysteriously gets petrified, Hermione digs deep for an explanation: "The attack had also had an effect on Hermione. It was quite usual for Hermione to spend a lot of time reading, but she was now doing almost nothing else" (146). Hermione is unsatisfied with knowledge *that* the cat has been transformed. She wants to understand *how* it occurred.

At another point in the story, Ron, commenting on the length of Hermione's class essay, says: "I don't believe it! I'm still eight inches short ... and Hermione's done four feet seven inches and her writing's tiny!" (147). The length of Hermione's paper isn't necessarily an indication of intellectual thoroughness, since she could be giving a longwinded but superficial treatment of the subject. However, assuming that the length of her paper is an indication of her propensity to explain what she is discussing or to make connections between it and other things she knows, it suggests that she is indeed a thorough communicator. Taken together, these examples suggest that Hermione is intellectually thorough both in her pursuit of understanding and in her communication of what she understands.

Thomas Aquinas (1225-1274) was a medieval philosopher and theologian. While some of the things he wrote about seem archaic by today's standards, his methods of thinking and writing are just as relevant in the 21st century as they were in the 13th century—and they're a great example of intellectual thoroughness.

In his writings, Aquinas always begins with (a) a clearly and carefully formulated *question*. For example: Is prudence always a virtue? Can a person who is charitable become uncharitable? Is justice the most important virtue? Then, if he plans ultimately to defend an affirmative answer to the question (to argue "yes" in response), he (b) proceeds to list several possible *objections* to an affirmative answer. That is, he lays out all the possible rea-

"Hermione Granger from the Harry Potter series is a good example of intellectual thoroughness. She displays this virtue in many ways and on many occasions."

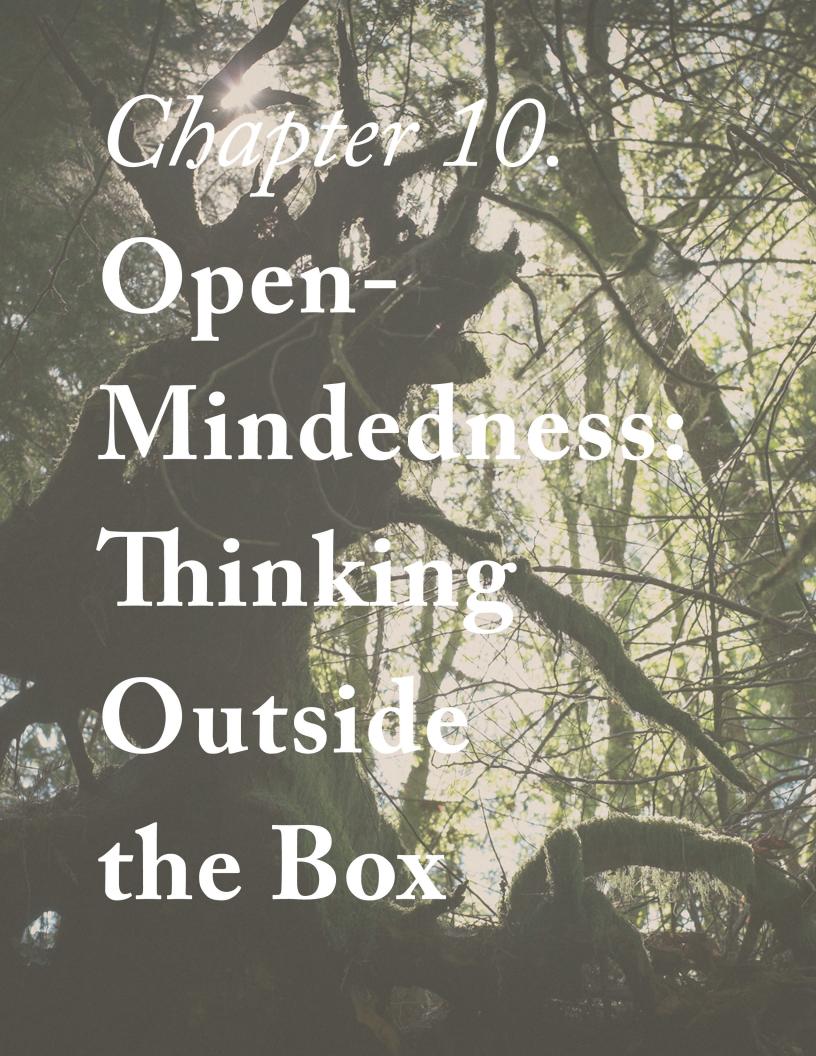
sons against his own view. Very importantly, he does his best to make these objections as forceful or strong as possible. Next, he (c) states his own opinion and supports it with concrete reasons and evidence. Finally, he proceeds to (d) carefully *respond* to each of the objections he has listed, explaining what he thinks is mistaken about each objection.

While a bit overwhelming, perhaps, this is an excellent example

of intellectual thoroughness. Aquinas's method involves examining whatever issue he is addressing from multiple angles and drawing out the strengths and weaknesses of each angle. What better way to achieve a deep understanding of what one is thinking about?

DISCUSSION QUESTIONS

- I. How would you describe the relationship between intellectual thoroughness, explanation, connection-making, and cognitive mastery? Can you come up with your own definition of thoroughness that includes these other concepts?
- 2. Beyond a sense of intellectual satisfaction, what are some of the other benefits of intellectual thoroughness? Can you think of a time when you or someone else practiced intellectual thoroughness and thereby averted a disastrous outcome?
- 3. In schools and classrooms, what factors, influences, or practices do you think tend to discourage the practice of intellectual thoroughness?



CHAPTER 10

Open-Mindedness: Thinking Outside of the Box

There may be environments in which a need for open-mind-edness isn't that apparent. For example, imagine a community in which there are no alternative perspectives or sources of information—nor would any be available if only the members of the community were to seek them out. While this is a "possible world," it is a far cry from the world we live in. In our world, multiple perspectives abound. Therefore, unless we can be certain from the outset that our own beliefs are entirely correct, that they are without even the possibility of any kind of error, we need open-mindedness.

Indeed, open-mindedness is a way of benefiting from the multiplicity of standpoints and sources that proliferate around us. It is crucial to forming the best, most reasonable, and most accurate beliefs we can.

OPEN TO ALTERNATIVE STANDPOINTS

As this brief description suggests, an open-minded person is one who is willing and able to consider alternative standpoints, to give them a fair and honest hearing, and to revise her own standpoint or beliefs accordingly. Such a person is willing to consider

counter-evidence to her views. She is a good listener. And she is regularly on the lookout for new and different ways of thinking about things. An open-minded person does not get defensive or irritated when her beliefs are challenged. She is generally not afraid or resistant to having her beliefs scrutinized. She is neither narrow-minded nor dogmatic.

It is important to note that open-mindedness doesn't rule out *firm belief*. I might be extremely confident that a particular belief of mine is true while still being able to acknowledge that it *could* be mistaken. Thus I might still see fit to consider alternative points of view, to look for counterevidence, entertain objections, and so on. In short, if I can't be certain that I'm infallible about some topic, then I am likely to have good reason to demonstrate open-mindedness in my thinking about it. But this doesn't preclude me from

"Firm conviction and open-mindedness can coexist."

having a very high degree of confidence in my beliefs about this topic. Firm conviction and open-mindedness can coexist. (For a recent philosophical treatment of open-mindedness, see Baehr 2011. For an understanding of open-mindedness and its importance to teaching and learning, see the excellent work of philosopher of education William Hare: e.g. 1979, 1985, 2003.)

One reason open-mindedness is so important is that it serves to

combat or mitigate a deeply felt and widely shared *need to be right*. The problem with such a need is that most of us make a lot of mistakes—mistakes in how we act but also in what we believe. For many of us, a desire to be right has such a strong grip on our psychology that we interpret disagreement or challenges to our beliefs as a personal threat. One way of coping with this dynamic, that is, of insulating ourselves against the kind of threat just noted, is what psychologists refer to as "confirmation bias," which is a pervasive human tendency to unconsciously seek out evidence that supports our beliefs and to ignore or distort evidence that doesn't (Nickerson 1998; Van Swol 2007). Open-mindedness is a powerful antidote to this inimical tendency (Baron 2008: Ch. 9; Stanovich et al 2013).

BEYOND DISAGREEMENT

This initial characterization of open-mindedness can leave the impression that it is relevant only to situations in which one's beliefs have been or might get called into question. This isn't quite right. Consider, for instance, a judge listening to both sides of a particular case. The judge hasn't yet formed a belief about whether the defendant is guilty. Rather, she is keeping an open mind, reserving judgment on the matter until all the evidence is in. As this suggests, open-mindedness is sometimes a matter, not so much of opening one's mind, but of keeping it open or of refraining from closing it. Alternatively, imagine two people who have been called upon to generate as many different explanations of a

phenomenon as possible (or, slightly differently, as many different solutions to a particular problem). The first person is notoriously closed-minded. The second person is known to be open-minded. It stands to reason that the open-minded person is likely to perform the task more effectively. This is because open-mindedness includes an element of intellectual suppleness—an open mind is flexible and adaptable; it is quick to conceive of alternative possibilities. For this reason, there is an important connection between open-mindedness and creativity. Open-mindedness lends itself to creative thinking, to generating possibilities or to "thinking outside the box."

OPEN-MINDEDNESS AS A PEDAGOGICAL VIRTUE

It isn't hard to see how or why open-mindedness is an important virtue to try to foster in students, many of whom are provincial or stuck in certain narrow or naïve ways of thinking. However, open-mindedness is also a crucial quality for *teachers* to exhibit (Hare 2002). As relative experts in what we teach, it can be tempting to be oriented toward our students in such a way that we struggle to see or recognize the very best in what they have to say. Yet expertise is no guarantee of infallibility. Even on topics that we know a great deal about, there's also typically a great deal that we don't know; and it's almost certain that at least some of what we *think* we know is mistaken. Thus the sort of posture just noted can have seriously detrimental effects. It can leave our students feeling unrecognized, unheard, misunderstood, or dis-

respected. This in turn can lead to a further withdrawing and disengagement from what's being taught. By contrast, suppose that knowing my own tendency to underestimate my intellectual limitations when interacting with my students, I decide to err on the side of caution by consistently making attempts to dignify their perspectives and opinions. I make a special effort to look for what's insightful or accurate in their comments, I do my best to get inside their heads, and to see things as they see them. The likely result is that my students will feel appreciated and understood. And this in turn is likely to make them more open to thinking and learning about the topic at hand.

OPEN-MINDEDNESS AND INTELLECTUAL HUMILITY

The foregoing discussion underscores an important connection between open-mindedness and intellectual humility. We saw in an earlier chapter that intellectual humility involves being alert to and a readiness to "own" one's intellectual limitations and mistakes. It involves a willingness to admit when one doesn't know or when the support for a belief isn't quite what one thought it was. We have seen that acknowledging our intellectual fallibility often opens up possibilities for us to learn from others—to consider different points of view or different ways of thinking. In this way, intellectual humility is a kind of precondition for open-mindedness. If I think I'm right about everything or couldn't be mistaken about anything I believe, then what point is there in consulting alternative points of view, giving a serious hearing to counterar-

guments, and so on? (For a helpful philosophical discussion of the relationship between open-mindedness and intellectual humility, see Spiegel 2012.)

THE LIMITS OF OPEN-MINDEDNESS

As with any virtue, it is possible to take open-mindedness too far. One way of doing so looks like a kind of intellectual wishy-washiness. Imagine a person who is always exploring new claims and arguments about a particular topic but who never develops any kind of conviction about the topic. Instead he finds himself carried from one perspective to another. As soon as he begins to lean in one direction, he hears an argument from the other side, and immediately is pulled in the opposite direction. Such a person is passive in his thinking. He is unconcerned with getting to the truth of the matter. In this way, he lacks the virtue of open-mindedness, which is active and motivated by a desire to know or understand.

Cases like this also illustrate the important point that open-mindedness needs to be balanced by other virtues like intellectual *te*nacity or intellectual courage, both of which involve holding fast to or persisting in a belief or line of reasoning. Depending on the situation, one of these other virtues may be called for *instead* of open-mindedness. For instance, suppose you have overwhelming evidence in support of a particular belief, that you have good reason to think that the sources of this evidence are highly cred-

ible, and that your handling of the evidence has been intellectual honest, careful, and the like. Then suppose that some unknown person claims to have decisive objections to your belief. She gives you a brief overview of these objections. They seem to have sev-

"As with any virtue, it is possible to take openmindedness too far. One way of doing so looks like a kind of intellectual wishy-washiness."

eral obvious flaws. And the person herself seems a bit intellectually shifty or confused. If for no other reason than the practical limits on your time, you might plausibly decide not to give an open-minded hearing to this person—to persist in your belief despite the fact that this person thinks she has a decisive objection to it.

Or imagine a case in which you are teaching on a particular topic and a student raises his hand to offer an objection or theory that seems to be coming out of left field. As you probe just a bit, it seems to you that the student is just trying to get the attention of his peers or to derail the lesson. At this point you face a choice: do you continue to take up and consider the objection, trying your best to make sense of it, or do you politely terminate the discussion and move on? I see no reason to think that an intellectually virtuous person would feel compelled to do the former. Indeed, this strikes me as a clear case in which an exercise of open-mind-

edness would likely be inappropriate.

So when should we exercise open-mindedness vs. intellectual tenacity or intellectual courage? This is a difficult question to answer in a precise way. Fortunately, while there are hard cases, it's often clear enough which virtue is called for. A couple rules of thumb may be helpful here.

First, if you are deliberating between exercising open-mindedness or holding fast to one of your beliefs, you might ask yourself: If I were to refrain from listening openly in this situation, would I be running the risk of being *narrow-minded* or *dogmatic*? Or would this simply be the sensible and reasonable thing to do given the circumstances?

Second, if on honest reflection and given your best evidence it appears that practicing open-mindedness might help you acquire further knowledge or increase the accuracy of your beliefs, then chances are that you should proceed in an open-minded way. On the other hand, if on honest reflection your best evidence suggests that taking up an alternative standpoint would be an intellectual dead end, that it might impede your attempts to reach the truth or acquire knowledge, then it likely will be advisable to practice intellectual tenacity or courage instead.

This isn't perfect advice. There may be situations in which these rules of thumb don't apply. Further, it's important to keep in mind

that most of us tend to *overestimate* our own intellectual abilities and the support for what we believe and to *underestimate* the abilities and beliefs of others. For this reason, we must exercise caution, engaging in genuinely honest reflection before deciding whether to exercise open-mindedness in a particular situation.

SOME ILLUSTRATIONS OF OPEN-MINDEDNESS

As we have seen, an open-minded person seeks to learn from other perspectives and is willing to change her beliefs when the evidence calls for it. Author Phil Dow (2013) tells a story about the 16th President of the United States that illustrates this point nicely:

At the height of the American Civil War, President Abraham Lincoln was doing everything in his power to preserve the unity of his crumbling country. As both the nation's elected president and as one of the most intelligent men of his generation, Lincoln had every right to expect deferential respect from his subordinates. And yet, as the war waged he found himself being criticized and ridiculed by friends and foes alike. One man Lincoln was supposed to count as a friend was his Secretary of War, Edwin Stanton. However, both publicly and privately Stanton had made no secret of his disrespect for Lincoln. Even though Lincoln was aware of Stanton's insubordination, Lincoln kept his Secretary of War, believing Stanton's sharp mind and independent perspective would be a valuable balance to his own.

At one of the war's most critical points Lincoln sent a direct order to Stanton. Not only did Stanton refuse to carry it out, but he again publicly mocked Lincoln, calling him a fool. Instead of reacting out

of anger or spite, Lincoln is said to have replied, 'If Stanton said I'm a fool, than I must be, for he is nearly always right. I'll see for my-self.' Lincoln was no wimp. He had demonstrated many times over that he was more than willing to buck the opinions of others if he believed they were wrong. Still, as the story goes, the two men had a meeting in which Lincoln listened carefully to his subordinate, concluded that Stanton was right, and withdrew his order. Lincoln ignored the demands of pride in order to pursue the wisest course. Ultimately, this intellectual humility helped save his crumbling nation and ensured that he would go down as one of the greatest statesmen in his nation's history. (72-73)

Lincoln was the President of the United States. But this did not prevent him from thinking he might be able to learn a thing or two from one of his subordinates. And not just any subordinate; indeed, as Dow says, Stanton was *insubordinate*. Note, too, that Lincoln wasn't just willing to hear what Stanton had to say. He sought Stanton out himself. And when he determined that Stanton had the better argument, he changed his mind.

Sara Crewe is the young female protagonist of the book *A Little Princess* by Frances Hodgson Burnett (2014/1905). While Sara is not actually a princess, she is the daughter of a very wealthy man, and she has the grace and poise of a real princess. One of the remarkable things about Sara is that her wealth and superior social status appear not to have any impact on how she views or relates to others: she is caring, thoughtful, and welcoming to all. But Sara also has a remarkable mind that illustrates the *creative* or *imaginative* dimension of open-mindedness. Again, open-mind-

edness isn't just a matter of being willing to listen to people who disagree with you. It's also a matter of being able to open your thinking to remote or far away possibilities or perspectives.

Sara is a master at this. Her mind is constantly engaged by one imagined scenario or another: "She liked books more than anything else, and was, in fact, always inventing stories of beautiful things and telling them to herself" (5); "When I am telling [stories],' she would say, 'it doesn't seem as if it was only made up. It seems more real than you are—more real than the schoolroom. I feel as if I were all the people in the story—one after the other. It is queer" (34); "I've often thought,' said Sara, in her reflecting voice, 'that I should like to be a princess; I wonder what it feels like. I believe I will begin pretending I am one" (41). This last comment prompts one of her classmates to observe: "One of her 'pretends' is that she is a princess. She plays it all the time—even in school. She says it makes her learn her lessons better" (44). If Sara weren't open-minded, she wouldn't be able to exercise her imagination in such powerful ways. And note the connection between her open-minded imagination and "learning her lessons better": her ability to "transport" her own thinking into different times and places makes her a better learner. It enables her to wrap her mind around new concepts and ideas.

Sara's open-mindedness becomes even more apparent—and impressive—when, by a tragic series of events, she is left orphaned and penniless and forced to be the house servant of a cruel head-

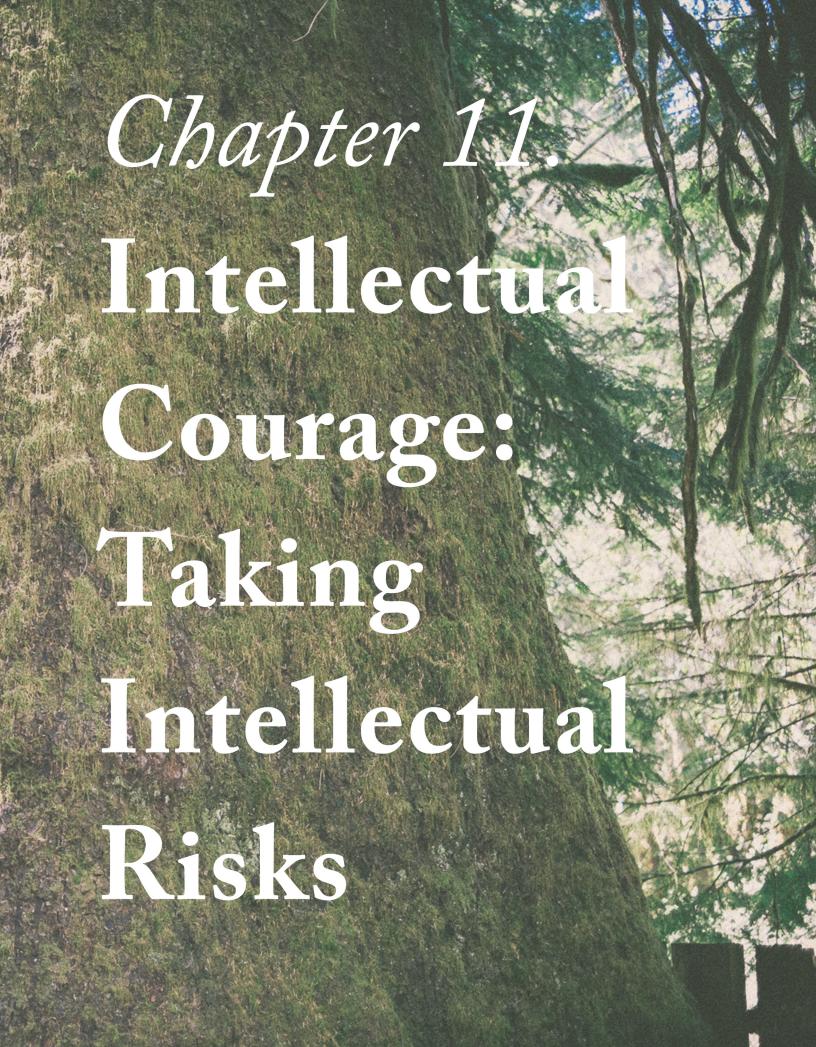
master, Miss Minchin. Ermengarde, one of Sara's friends, says of Sara's tragic circumstances: "I don't see any good in them." To this, Sara responds, honestly but impressively:

'Neither do I—to speak the truth,' admitted Sara, frankly. 'But I suppose there *might* be good in things, even if we don't see it. There *might*,'—doubtfully—'be good in Miss Minchin'. (81)

Because of her open-mindedness, Sara does not get stuck in a rut of negative, pessimistic thinking; nor does she choose to vilify Miss Minchin (which could easily be done). She is able to "transcend" or think beyond her difficult circumstances to see some potential good in them and in Miss Minchin.

DISCUSSION QUESTIONS

- I. What role does imagination play in your classes? What sorts of assignments or exercises require your students to exercise their imaginations? Would open-mindedness help your students do better on these assignments or exercises? If so, how?
- 2. Do you buy the idea that you can be open-minded about a particular belief while also holding firmly to it? If so, how is this possible? If not, why do you think this is impossible?
- 3. What tends to prevent you or your students from practicing open-mind-edness? What are the underlying obstacles? What do you think can be done in an educational setting to help students overcome these obstacles?



CHAPTER II

Intellectual Courage: Taking Intellectual Risks

We show courage when we are willing to suffer a potential loss or harm for the sake of some greater good—when we judge that a certain risk is worth taking. We show *intellectual* courage when we subject ourselves to a potential loss or harm in the context of a distinctively intellectual pursuit like learning or inquiring after the truth.

One memorable example of intellectual courage is the journalist Edward R. Murrow's famous World War II news broadcasts. Murrow subjected himself to harrowing conditions (conducting live broadcasts from London rooftops with German bombs raining down) for the sake of reaching and reporting the truth. He felt that the American public had a right to know what was happening during the war and he was willing, for a time, to favor this right over and above his own well-being. (For philosophical discussions of the nature of intellectual courage, see Baehr 2011: Ch. 9 and Roberts and Wood 2007: Ch. 8).

COURAGE IN THE CLASSROOM

Murrow is a fairly extreme example of intellectual courage. If intellectual courage requires putting one's life in danger, it might

be wondered whether it has much relevance to everyday classroom learning. And yet, in surveys of my students over the years, I have found intellectual courage to be the virtue they are most interested in growing in. Further, when asked to cite an example of when they should practice intellectual courage but regularly fail to, the most common response is: asking questions or making comments in class. Many students also recount the bitter fruit of such failures, which include witnessing their peers go on to say

"We show intellectual courage when we subject ourselves to a potential loss or harm in the context of a distinctively intellectual pursuit like learning or inquiring after the truth."

precisely what they had in mind and get rewarded for it, or feeling generally disconnected from the rest of the class or from the subject matter at hand.

Surely my students are not unique in this regard. It's an extremely common thing for students to feel inhibited around each other. Especially in middle school and high school, students attach extraordinary weight to what their peers think of them. In a classroom setting, they often find that the best way to avoid drawing unwanted negative attention to themselves is to keep a very low profile—to do or say as little as possible. The underlying fear of failure or of being looked down upon or laughed at by their peers

can be paralyzing. As this suggests, intellectual courage isn't just about overcoming a fear of physical harm, as it is in the Murrow case. Rather, in an educational context, the harm in question is more likely to be social or psychological (e.g. a fear of embarrassment or failure).

This is why intellectual courage is so central to productive learning. If students are not personally engaged in the learning process—indeed, if they are unwilling to take risks in this context—this will severely limit their intellectual performance and growth. Indeed, given our social nature, and some of the fears and insecurities that emerge from it, intellectual courage is among the most important virtues for students to cultivate.

The good news is that if the conditions in the classroom are right, small steps in the direction of intellectual courage can lead to a virtuous circle. I have found, for instance, that students experience great relief when they learn that so many of their peers share the same fears and reluctance about participating in class. This mutual recognition prompts many of them to begin to take some intellectual risks—to ask questions about things they find confusing or to share their opinion about a topic. When they learn that doing so wasn't nearly as painful as they expected—when they receive positive encouragement from me or their peers for their acts of intellectual courage—this can quickly build a foundation of confidence that leads to more questions and contributions in subsequent class periods.

CREATING SUPPORTIVE CONDITIONS

However, as you might expect, for acts of intellectual courage to be self-perpetuating in this way, certain conditions need to be met. First and foremost, the classroom culture needs to be marked by *trust and respect* (Benninga et al 2003; Berkowitz and Bier 2007; Berkowitz 2012: Ch. 13). Just as a student's positive and supportive experiences with practicing intellectual courage in the classroom can lay the foundation for a habit of intellectual courage, negative experiences—owing either to the behavior or attitude of the teacher or to that of other students—can immediately and permanently extinguish a student's inclination to practice this virtue.

Recently, I observed a class session in which the teacher labored unsuccesfully to get the students to discuss the topic at hand. He asked thought-provoking questions and allowed sufficient time for replies. My initial response was to think that this must just be a "quiet class." Finally, a student raised her hand and in a soft voice hazarded a reply. Unable to hear her reply, the teacher ribbed the student for speaking too quietly. While his response was likely well meaning, it had an edge of sarcasm that the student didn't seem to find humorous as all. Later in the class, the same student offered up another response to one of the teacher's questions. Again the teacher couldn't hear her. This time, instead of asking her to speak up, he simply, and with an air of exasperation, ignored her response and called on another student. The

message to the first student must have been clear: taking risks in this class with this teacher is pointless. I couldn't help but wonder whether the student would say another word the entire semester. Toward the end of the class, when the teacher was again having trouble getting his students to respond to his questions, one rather confident student blurted out: "If you shut people down when they say the wrong answer then of course they aren't going to answer confidently."

Again, one indispensable condition for trying to foster intellectual courage in a classroom setting is a classroom culture marked by trust and respect. Students must know that when they take risks, doing so will have some pay off—or at least that it won't compound their fears about participating in class. They must know

"[G]iven our social nature, and some of the fears and insecurities that emerge from it, intellectual courage is among the most important virtues for students to cultivate."

that they are in a "safe" environment. Such trust and respect must characterize, not just the way that the teacher interacts with the students, but also how students act toward each other. Therefore, while a focus on moral or social qualities like trust and respect may seem somewhat removed from a concern with intellectual

virtues, we can now see that in one important respect the two can't be separated. Growth in intellectual virtues is a matter of deep personal change. As such, it is far less likely to happen in a hostile environment than it is in a morally positive and supportive one.

Another important element of the kind of classroom culture that can make it relatively safe for students to begin experimenting with intellectual courage is intellectual humility. As we learned in a previous chapter, an intellectually humble person is quick to acknowledge or own her intellectual limitations and mistakes; she does not attempt to hide, deny, or rationalize these things. A classroom in which intellectual humility is prized is one in which it is okay to admit that one doesn't know something or to acknowledge that one struggles with certain ways of thinking. It isn't difficult to see how this kind of classroom climate might be conducive to the practice of intellectual courage. When students believe it is okay—even a good thing—to acknowledge their intellectual limitations and mistakes, this can help them face and overcome what might otherwise be a paralyzing fear of failure or embarrassment. In this respect, a focus on intellectual humility can facilitate the practice of intellectual courage.

SOME EXAMPLES OF INTELLECTUAL COURAGE

Galileo Galilei (1564-1642) is widely regarded as the father of modern science. He made major contributions to the fields of

physics, mathematics, philosophy, and especially astronomy. Among these were major innovations to the telescope, which allowed us to peer more deeply into space than ever before. What he found (e.g. satellites revolving around Jupiter, phases on Venus, and sunspots) provided powerful confirmation of the Copernican idea that the earth revolves around the sun.

Despite this new evidence, many powerful figures of his time were unprepared to surrender their belief that the earth is the center of the universe. On several occasions, Galileo courageously defended the truth of this theory before the Inquisition, which was charged with rooting out and punishing heretics. About this experience, he commented: "It is surely harmful to souls to make it a heresy to believe what is proved." This is a bold statement

"Students must know that when they take risks, doing so will have some pay off—or at least that it won't compound their fears about participating in class. They must know that they are in a "safe" environment."

indeed! Galileo also endured the scorn and ridicule of many of his scientific colleagues, who were also resistant to the mounting evidence in favor of a heliocentric model. Despite resistance from many quarters, and real threats to his career and personal well-being, Galileo continued to fight for and defend what he believed to be very important truths.

Jane Goodall (1934-present) is a famous biologist, anthropologist, and conservationist. She is best known for her groundbreaking scientific research on chimpanzees. Early on in her career, she spent 25 years studying chimpanzees in the Gombe National Park in Tanzania, Africa. The research she did there revolutionized our understanding of primates. It taught us, among many other things, that chimpanzees can create and use simple tools, that they sometimes hunt and eat meat, and that they are capable of controlling their emotional expressions.

"When students believe it is okay—even a good thing—to acknowledge their intellectual limitations and mistakes, this can help them face and overcome what might otherwise be a paralyzing fear of failure or embarrassment."

Goodall exemplifies many intellectual virtues, including attentiveness, curiosity, and intellectual thoroughness. Her work with the Gombe chimpanzees also clearly illustrates her intellectual courage. In her desire to understand the chimpanzee way of life in as much detail as possible, she regularly subjected herself to extremely rugged and physically threatening conditions. Describing her pursuit of two chimpanzees, Fifi and Fanni, she recalls:

As I scrambled after them, every branch seemed to catch in my hair or my shirt. Frantically I crawled and wriggled through a terrible

tangle of undergrowth. Ahead of me the chimpanzees, fluid black shadows, moved effortlessly. The distance between us increased. The vines curled around the buckles of my shoes and the strap of my camera, the thorns caught in the flesh of my arms, my eyes smarted till the tears flowed as I yanked my hair from the snags that reached out from all around. After ten minutes I was drenched in sweat, my shirt was torn, my knees bruised from crawling on the stony ground—and the chimps had vanished. (Goodall 1990: 9)

Goodall's quest for understanding compelled her to subject herself to even more serious dangers, for the chimpanzees were at times unpredictable and violent. Below she describes encounters with chimpanzees Goblin and Frodo:

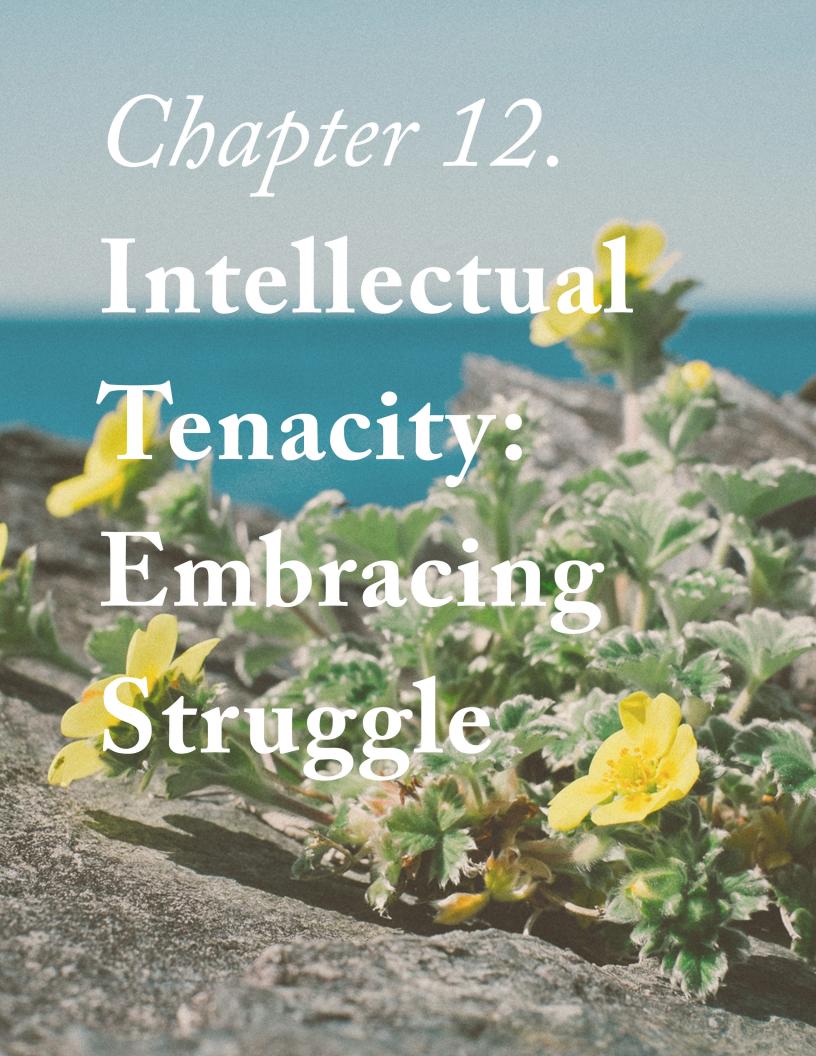
Goblin leapt down and charged past me, slapping and stamping on the wet ground, rearing up and shaking the vegetation, picking up and hurling a rock, an old piece of wood, another rock. Then he sat, hair bristling, some fifteen feet away. He was breathing heavily. My own heart was beating fast. As he swung down, I had stood up and held onto a tree, praying that he would not pound on me as he sometimes does. (3)

[Frodo] wants me to play, and, because I will not, he becomes aggressive. At twelve years of age he is much stronger than I am, and this behavior is dangerous. Once he stamped so hard on my head that my neck was nearly broken. And on another occasion he pushed me down a steep slope. I can only hope that, as he matures and leaves childhood behind him, he will grow out of these imitating habits. (4)

Goodall's courage is remarkable. Again, is it *intellectual* courage because it is manifested or displayed in the context of Goodall's attempt to know and understand the Gombe chimpanzees.

DISCUSSION QUESTIONS

- I. Looking back on your years as a student, does intellectual courage stand out to you as a virtue that you often failed to practice? Why or why not?
- 2. Have your attempts to practice intellectual courage ever backfired? For instance, have you ever taken an intellectual risk only to have been embarrassed by a teacher or your peers? If so, what impact did this have on your practice of intellectual courage?
- 3. What do you see as the connection between intellectual courage and a growth mindset? Why might someone with a *fixed* mindset be especially unlikely to practice intellectual courage? Why might the opposite be true for someone with a growth mindset?



CHAPTER 12

Intellectual Tenacity: Embracing Struggle

Grit" is one of the most popular educational buzzwords today. As defined by "grit guru" and University of Pennsylvania psychologist Angela Duckworth, grit is "the tendency to sustain interest in and effort toward very long-term goals" (Duckworth et al 2007). Grit bears an obvious resemblance to intellectual tenacity, which can be thought of as a tendency to embrace intellectual challenge and struggle. An intellectually tenacious person doesn't give up when she doesn't understand something. Nor does she treat intellectual failure or defeat as a final judgment of her abilities. Rather, she persists. She rethinks her approach and she tries again.

GRIT VS. INTELLECTUAL TENACITY

While grit and intellectual tenacity are closely related, they are not the same thing. Intellectual tenacity is a narrower concept than grit. Grit applies to the pursuit of goals across the various aspects of one's life. Intellectual tenacity focuses on *intellectual* projects and activities—e.g. on the activities of thinking and learning. As such, an emphasis on intellectual tenacity is somewhat more at home in a school or academic setting compared with grit. While teachers may not be in the best position to help students become

grittier or more tenacious in other domains, they can hope to have an impact when it comes to how their students engage with ideas, how they feel about intellectual struggle, and how they respond to failure at school.

There's a further and more important difference between grit and intellectual tenacity. Recall that intellectual virtues are traits that flow from a "love of learning" or a desire to acquire knowledge, truth, or understanding. At least when possessed in their full-

"An intellectually tenacious person doesn't give up when she doesn't understand something. Nor does she treat intellectual failure or defeat as a final judgment of her abilities. Rather, she persists. She rethinks her approach and she tries again."

ness, they have an element of *intrinsic motivation*. Thus an intellectually tenacious person is one who persists in the face of intellectual struggle *out of* a desire to learn, understand, or get to the truth. Grit, by contrast, is equally compatible with intrinsic or extrinsic motivation. A student is no less gritty if she works hard all year in math simply out of a desire to be at the top of her class or to please her teacher. She needn't be interested in math at all. In fact, she might find the subject extremely tedious and boring.

Extrinsic motivation isn't always a bad thing. Often it's good to continue pursuing a worthy goal even when you no longer feel like doing so—even when your reason for persevering is entirely external to the pursuit itself. But there's a danger here as well. Imagine a standout child athlete who trains and competes for hours and years on end primarily as a way of trying to please his parents. When he reaches adulthood and begins to take control over his own life, he quits the sport. He does so because he has no real love for the game—no intrinsic motivation.

As we saw in an earlier chapter on curiosity, something very similar is true in an educational context. Consider, first, the sorts of things parents and teachers use to help students show more grit or tenacity in their schoolwork. These include things like grades ("If you don't do really well on this assignment, you won't be able to earn an A in class") and monetary and other external rewards ("If you get straight As, we'll buy you a new phone"). I'm not claiming that such motivators are always a bad thing, but consider: if, over the course of a person's formal education, her primary reason for engaging in thoughtful or rigorous intellectual activity is to achieve certain goods that are external to the learning process (e.g. grades, a degree, approval of parents or teachers), then what is likely to happen once those external incentives are removed—e.g. once the student no longer gets a report card or class credits or when her parents or teachers are no longer looking over her shoulder to praise (or criticize) her for her intellectual efforts? The obvious answer is that her thoughtful and rigorous intellec-

tual activity will cease because her reasons for engaging in this activity will no longer exist. Thus while most parents and teachers want their students to become lifelong learners and develop a deep love of learning, if we focus on grit or intellectual tenacity without also focusing on intrinsic intellectual motivation, these will be unlikely outcomes. (For more on the educational importance of intrinsic motivation, see Cordova and Lepper 1996, Stipek 2001, and Stipek and Seal 2001. For research on how extrinsic motivation can *undermine* intrinsic motivation, see Ryan and Deci 2000 and Deci et al 2001).

INTELLECTUAL TENACITY AND CURIOSITY

This underscores an important connection between intellectual tenacity and *curiosity*. Curiosity is a source of intrinsic intellectual motivation. Curious people care about learning and understanding at least partly for their own sake. They do not read, think, or inquire merely as a way of achieving some other goal that has nothing to do with learning or understanding. They do these things because they are curious. Thus curiosity and intellectual tenacity are natural complements. We don't want our children or students merely to be curious. For they can be curious but lack the motivation to persist in the face of struggle or failure. Therefore it's important that we help them become tenacious or gritty. However, if the motivation for their intellectual activity is entirely external, this is also a problem. We want our children and students to have a desire to learn; but when this desire wanes, we

want them to keep their eyes on the prize and to stick it out—and we want them to do this at least partly because of how much they value learning and understanding. In other words, we want them to be curious *and* intellectually tenacious.

VALUE MATTERS

A concern with helping students grow in intellectual tenacity brings with it three additional concerns or topics to focus on. First, in order to help students value and develop the kind of commitment to learning that can properly support and inspire a tenacious response to intellectual struggle and failure, we must do our best to make very clear the *value* of what we are trying to teach them. This might involve explaining to them why they'll

"Grit applies to the pursuit of goals across the various aspects of one's life. Intellectual tenacity focuses on intellectual projects and activities—e.g. on the activities of thinking and learning."

need the knowledge in question in the "real world," for example, in their jobs or careers. But, realistically, a good deal of what students learn goes beyond anything that is required for economic or career success. Therefore, we would do well also to think about other kinds of value—other ways in which the knowledge or abil-

ities we're trying to impart to them are connected to their overall well-being. In certain contexts, this might involve an appeal to the idea of being an educated person or citizen: "When you get a little older, you'll find that it's good to be informed about the world, for example, about things like history, geography, and politics. This will give you confidence in lots of social contexts and will make you a more interesting person. It also has the potential to make your experience of the world—for example, of reading a newspaper or listening to a political debate—a richer and more illuminating experience." In other cases it might involve explaining to students how what they're being asked to do in class is helping them develop certain skills that have very broad application in the "real world." For example, while they may never use most of the specific content they learn in a geometry class outside the classroom, becoming skilled and habituated in good deductive reasoning is a major asset. It is helpful in the workplace (what company wouldn't benefit from employees who are able to think and reason well?) and it is crucial to high stakes practical decision-making, for example, to decisions about which university to attend, which career to pursue, where to live, how to invest one's money, and so on (Paul and Elder 2002: 29). While highlighting the underlying value or importance of what you're teaching does take some additional time and effort, the payoff in terms of student buy-in and motivation can be well worth it.

STRUGGLE BY DESIGN

Second, intellectual tenacity necessarily is expressed or exercised in the context of *struggle or failure*. Many teachers—even well-meaning ones—view struggle in a negative light. For instance, they think it reflects poorly on their own abilities or performances as teachers. Relatively few teachers, it seems, see struggle as an important instrument for fostering intellectual growth—an

"Thus while most parents and teachers want their students to become lifelong learners and develop a deep love of learning, if we focus on grit or intellectual tenacity without also focusing on intrinsic intellectual motivation, these will be unlikely outcomes."

instrument that can be intentionally and strategically used in a pedagogical context. But if we're serious about helping our students grow in this virtue, we'll need to create opportunities for them to struggle.

Of course, struggle *per se* isn't valuable. Rather, struggle presents an occasion for practicing tenacity and other intellectual virtues. Therefore, when introducing opportunities to struggle in classroom exercises or assignments, it is important to frame these experiences in the right way for our students and to give them the

support they need in order to convert a potentially negative experience into a positive, growth-oriented one.

THE IMPORTANCE OF A GROWTH MINDSET

Third, it's also critical that our students believe that responding to struggle in a certain way can yield genuine growth in intellectual tenacity and other virtues. That is, they must have a growth vs. a fixed mindset (Dweck 2006, 2010). If I have a fixed mindset, then I will view my intellectual abilities and character as more or less unchangeable—as incapable of significant development or improvement. If this is my perspective, then why should I bother struggling? If I can't improve in the context of struggle or failure, why shouldn't I do what I can to avoid these things? Moreover, when struggle or failure is unavoidable, it's likely to be source of shame for me—an indication that I simply haven't got what it takes to succeed. By contrast, if I have a growth mindset, then I will believe that through thoughtful and intentional effort and practice, my intellectual abilities and character can, overtime, be honed, shaped, and improved. This will free me up to experience struggle or failure, not as an occasion for shame or defeat, but as an opportunity to learn and grow. I'll be able to say to myself: "That was hard. I really didn't perform well. But this isn't the sum total of what I'm capable of. What did I do wrong? How could I go about this differently next time?" A growth mindset provides a kind of mental framework for supporting and inspiring the kinds of efforts that can lead to growth in intellectual tenacity.

SOME ILLUSTRATIONS OF INTELLECTUAL TENACITY

Frederick Douglass (1818-1895) was an American slave who went on to become a famous orator and abolitionist. He is famous for many things; and he was a man of many virtues. One of these virtues is intellectual tenacity. As a Baltimore slave, Douglass's master prevented him from learning to read on the grounds that it would make him useless and unhappy. In his autobiography (2001/1845), Douglass explains that what was to his master "a great evil, to be carefully shunned, was to me a great good, to be diligently sought; and the argument which he so warmly urged, against my learning to read, only served to inspire me with a desire and determination to learn." So Douglass took his education into his own hands:

The plan which I adopted, and the one by which I was most successful, was that of making friends of all the little white boys whom I met in the street. As many of these as I could, I converted into teachers. With their kindly aid, obtained at different times and in different places, I finally succeeded in learning to read. When I was sent on errands, I always took my book with me, and by going on part of my errand quickly, I found time to get a lesson before my return. I used also to carry bread with me, enough of which was always in the house, and to which I was always welcome; for I was much better off in this regard than many of the poor white children in our neighborhood. This bread I used to bestow upon the hungry little urchins, who, in return, would give me that more valuable bread of knowledge. (34)

Douglass's plan was successful indeed. Within a couple of years he was voraciously consuming whatever literature he could get his

hands on, from the Bible to newspapers to political treatises.

In 1991, Rick Walker of Palo Alto, CA, was convicted of murder. However, according to Rick and his family members, his conviction was poorly handled and had sent an innocent man to prison for life. Rick's mother Myrtle contacted a friend whose daughter, Alison Tucher, was in law school at Stanford. After reviewing the facts of the case, she concluded that Rick was indeed innocent. Alison continued to investigate Rick's case, but since she was only a graduate student, there was not much she could do. In the meantime, Rick's attorney filed several unsuccessful appeals

"Many teachers—even well-meaning ones—view struggle in a negative light. ... But if we're serious about helping our students grow in this virtue, we'll need to create opportunities for them to struggle."

and Alison moved along in her career. However, she never forgot about Rick's case. Eventually, she concluded that "the only way to set him free would be to solve the murder" ("Lawyer Hailed As Hero," February 11, 2009). So she undertook a reinvestigation of the case, combing through all the evidence, interviewing witnesses, reviewing public records, and much more. Eventually, she was able to locate five witnesses to the crime whose testimony led to Rick's exoneration. Having spent 12 years in prison on a

wrongful conviction, Rick was freed.

Here's a brief selection from a news report on Rick's story:

Is Alison Tucher a hero?

"Yea, she is," Rick Walker says.

Myrtle Walker says, "It would be easy for her to say, 'Sorry, I'm moving on with my life,' you know, but she didn't do that."

Tucher continued to believe. Myrtle Walker adds, "She had babies, babies, at the time she was working on this and she didn't give up!"

Tucher's actions on Rick Walker's behalf are a great illustration, not just of tenacity in general, but of *intellectual* tenacity in particular. Because it was a legal matter, exonerating Walker was primarily an *intellectual* undertaking—it required combing through evidence, constructing explanations, mounting arguments, and, ultimately, trying to get at and demonstrate the *truth* of the matter. Tucher's story is also an excellent illustration of how a great

"A growth mindset provides a kind of mental framework for supporting and inspiring the kinds of efforts that can lead to growth in intellectual tenacity."

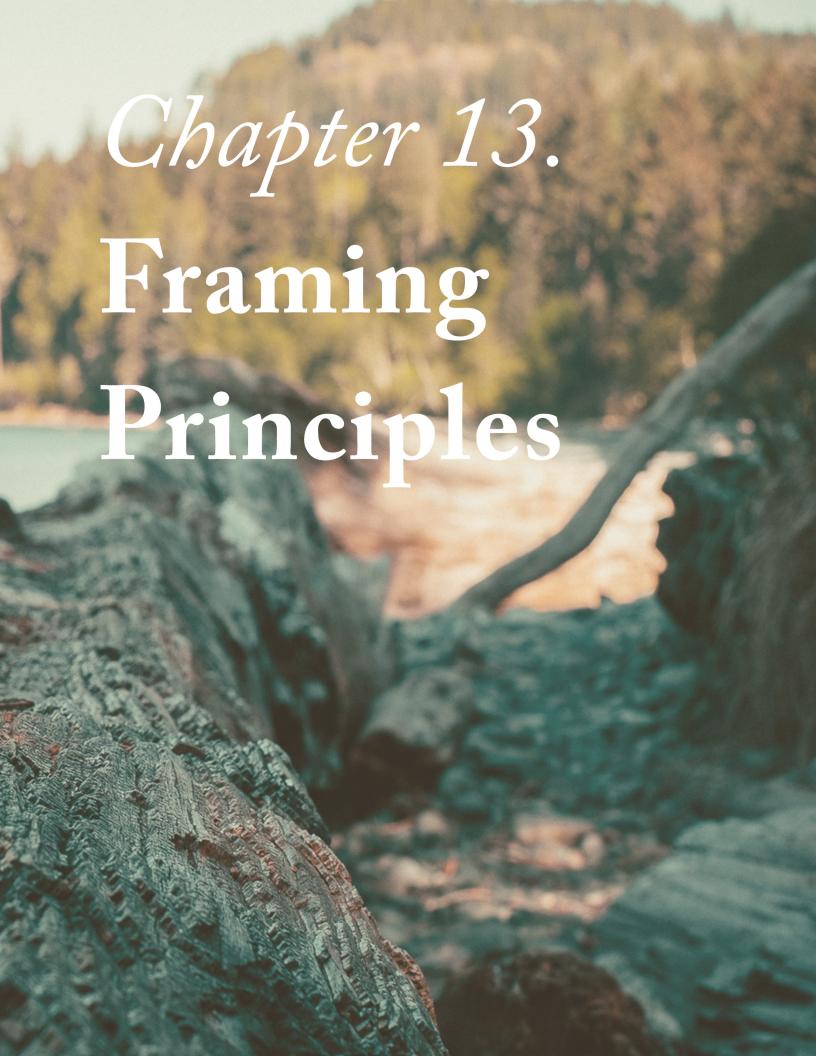
> deal can ride on the quality of our intellectual activity. It shows that intellectual tenacity in particular can have an extraordinary impact on the lives of others.

DISCUSSION QUESTIONS

- I. What strategies do you tend to use to encourage your students to be more gritty or tenacious in their work? Do these strategies tend to involve intrinsic or extrinsic motivators? If you tend to use extrinsic rewards to motivate your students, how might you go about incorporating a greater emphasis on intrinsic motivation?
- 2. Think of a time when you demonstrated intellectual tenacity in an educational setting. What drove or motivated you to do so? Was your motivation virtuous? Why or why not?
- 3. What are some ways that we as teachers tend to rob students of opportunities to practice intellectual tenacity or to become more intellectually gritty? Why do we do this? How might we approach these opportunities differently?

Part 3.

Fostering Intellectual Virtues Outside the Classroom: Core Principles and Practices



We have taken a reasonably close look at nine core intellectual virtues. My hope is that these chapters have provided you with a fairly concrete and attractive picture of what intellectual virtues are and of their importance to thinking and learning.

We can now turn our attention to the primary aim of this guide, which is to explain and illustrate a wide range of strategies for fostering intellectual character growth in an educational setting. In Chapters 14-19, we'll examine various strategies that can be employed outside the classroom, for example, by school leaders and other school stakeholders. In Chapters 20-34, we'll examine strategies that can be used by teachers in a classroom context.

However, before getting to this material, it's important to spend some time reflecting on several guiding principles that can be used to structure our thinking about and attempts to implement the other principles and practices discussed in subsequent chapters. These principles form a kind of framework or lens through which the material discussed later in the guide can profitably be viewed. Indeed, if you were to pursue the strategies discussed in later chapters in ways that violate these principles—a distinct possibility if you haven't thought too carefully about how best to

approach intellectual character education—then you'd be likely, I think, to experience a great deal of unnecessary frustration and lack of success. Again, my goal in this chapter is to focus on some general considerations that, to whatever extent possible, should shape and guide our individual or school-wide efforts to educate for intellectual character growth.

"If I communicate to my students that my goal is that they leave my classroom or leave this school exuding all nine of the virtues discussed in previous chapters, then when this doesn't happen, they may end of up feeling like they've fallen short in some important way."

A REALISTIC VIEW OF SUCCESS

Intellectual virtues are attractive and inspiring qualities. When thinking about them, it's difficult not to think about *exemplars* of intellectual virtue, that is, of people who exemplify these traits in an especially pure or extraordinary form. In many respects, this is as it should be. To understand what intellectual autonomy, curiosity, or intellectual humility are, it can be very useful to examine these qualities in their most outstanding or exemplary manifestations. Indeed, it is for precisely these reasons that most of the illustrations of intellectual virtues shared in previous chapters involved an exemplar of one sort or another.

Nevertheless, when it comes to thinking about ways in which we as teachers can help our students experience growth in intellectual virtues, thinking of intellectual virtues in their purest or most admirable form can also be problematic. For decades, research in social psychology has shown that human virtues are more limited and fragile than what we might initially expect (especially if

"The overall lesson here is clear: be realistic as you conceive of character-based goals for your students. Don't allow ideals of intellectual virtue to set you or your students up for failure."

we've just been reading a biography of a Jane Goodall or a Frederick Douglass!). It has shown, for instance, that human behavior is often strongly influenced, not just by underlying traits of personal character, but also by the situations in which people find themselves, including what might otherwise seem like relatively insignificant or trivial features of these situations (Ross and Nisbett 1991; for how this relates to intellectual character education, see Baehr forthcoming).

One lesson to be taken from this literature is that anything like full or perfect or ideal virtue is extremely rare. To the extent that we possess virtues, we tend to do so only partially or imperfectly. Of course, most of us don't need social psychologists to tell us this. We know the limitations of our own characters. And we

have lived with others long enough to know that perfect or ideal virtue is mostly a chimera.

Why does this matter in the context of trying to educate for intellectual character growth? When it comes to helping our students grow in qualities like open-mindedness and intellectual courage, why shouldn't we aim for the moon? In fact, there are several reasons for caution in this area—several reasons for setting *realistic goals* when it comes to the intellectual character growth of our students.

First, if we expect that in the course of a year or even several years, our students are likely to emerge from their experience with us as paragons of intellectual virtue, then we're bound to be disappointed and to feel like our efforts at intellectual character education have failed. There are simply too many factors that go into shaping who students are and who they become as thinkers and learners. While we can influence some of these, it is unrealistic, even with a good deal of time and a wide range of interventions, to expect the majority of our students to experience radical transformation.

Second, by setting unreasonably high goals for our students, we can end up making them feel like failures. If I communicate to my students that my goal is that they leave my classroom or leave this school exuding all nine of the virtues discussed in previous chapters, then when this doesn't happen, they may end of up feel-

ing like they've fallen short in some important way. This can be cause for unwarranted disappointment and it may sour the students on the very idea that intellectual virtue is something they can and should care about and strive for.

Third, if we begin with an unrealistic target in mind, this can lead us to employ strategies that are similarly unrealistic and ill fitting. If I am (even just implicitly) seeking to make my students into paragons of intellectual tenacity, say, then I may end up designing opportunities for them to struggle that are far too

"[W]hen we think about character-based goals for our students and the sorts of strategies we will employ in pursuit of these goals, it's extremely important for our thinking to be developmentally informed and sensitive."

challenging. This, again, could easily lead to their feeling defeated rather than inspired. Similarly, suppose I am bent on helping my students become exemplars of intellectual humility. In setting my sights so high, I might end up being oblivious to the obstacles my students face in becoming aware of and acknowledging their intellectual limitations and mistakes. This in turn might lead me to adopt strategies aimed at fostering intellectual humility that are unrealistic and ineffective.

The overall lesson here is clear: be realistic as you conceive of

character-based goals for your students. Don't allow ideals of intellectual virtue to set you or your students up for failure. One way to do this is to identify a limited number of virtues that you will focus on over the course of the semester or year (three is typically a manageable number). Then ask yourself: "In the time I have with my students, and with the sorts of efforts I'm prepared to make, what sort of growth or change can I realistically look for in my students? What might meaningful progress in the virtues in question look like for my students?" Of course, it may take some time to figure out what your students are capable of. But a little thoughtfulness and reflection early on can be a good way of avoiding aiming so high that you end up breeding frustration or adopting less than optimal strategies.

To illustrate what realistic progress might look like in a particular context, I'll briefly share my character-based goals for most of the courses I teach at the university level. Bear in mind that these are geared toward college-age students, that the courses in question meet for only three hours per week, and last only 16 weeks. While I think meaningful progress is possible within these parameters, the objectives are fairly modest. They include the following:

Students will (1) acquire a firm understanding of what intellectual virtues are, of why they matter for life inside and outside of the classroom, and of several individual virtues like curiosity, open-mindedness, and intellectual courage; (2) develop a rich, detailed, and accurate understanding of their own intellectual character strengths and weaknesses; (3) regularly practice several intellectual virtues in course-related activities; and (4) undertake an "intellectual disci-

pline" outside of class aimed at growth in one or more target virtues.

In the chapters that follow, we'll examine a wide range of things that can be done to achieve these goals. Special attention will be given to objective (3). At present, I'll make a few quick observations about the other three objectives. First, note that objective (1) is not itself a matter of intellectual character growth, since a person can know a lot about intellectual virtues while failing to embody them. However, knowing about intellectual virtues and why they are important can help one identify opportunities to

"[T]rying to influence the intellectual character of students using posters and pencils is like trying to redirect a wild elephant by simply pointing in the direction you'd like it to go."

practice these virtues and supply some of the motivation to do so. Objective (2) involves having students apply the knowledge described in (1) to themselves—to their own self-understanding or self-conception. It's a matter of helping students see and experience themselves through the lens of intellectual virtues. Finally, objective (4) makes reference to a series of assignments that require students to engage in and write about a self-selected practice or "discipline" aimed at helping them practice one or more target virtues.

These are but one example of the sort of character-based goals a teacher might have for her students. Again, your own goals should reflect your specific context and interests as well as the specific age range and abilities of your students. However, there is a general pattern in the goals just cited that may be worth adopting. If you look closely, you'll notice that the first goal pertains to *knowledge* of intellectual virtues, the second to *self-knowledge* (to knowledge of one's own intellectual character strengths and weaknesses), and the third and fourth to the ongoing *practice* of intellectual virtues. As we'll explore in more detail in later chapters, these represent three main dimensions along which intellectual character education can be practiced.

A DEVELOPMENTAL FOCUS

A second principle is very closely related to the first. It calls attention to another way in which our efforts at educating for intellectual character growth should be psychologically realistic. Here the idea is that when we think about character-based goals for our students and the sorts of strategies we will employ in pursuit of these goals, it's extremely important for our thinking to be developmentally informed and sensitive (for a related discussion, see Lockwood 2009).

What exactly intellectual virtues look like or involve will vary from one developmental stage to another. For example, what open-mindedness or intellectual thoroughness looks like in a ma-

ture adult will be different from what it looks like in a high school freshman, which in turn will be different from what it looks like in a third-grader. This is something we must be mindful of. If I'm teaching third grade and am taking efforts to help my students grow in open-mindedness, but I have in mind an "adult version" of open-mindedness (a version that involves high-level cognitive activity that few if any third graders are capable of manifesting), then I'm setting myself and my students up for failure. Similarly, if this adult version of open-mindedness informs classroom activities aimed at giving students an opportunity to practice open-mindedness, then there is bound to be a mismatch between what I'm expecting of my students and what they're capable of. It is critically important, then, to begin with a developmentally specific and appropriate version of the traits we're looking to foster.

How can we acquire this kind of developmental understanding? There are more and less strenuous efforts we can undertake in this regard. On the more strenuous end, we can read the litera-

"Another important point to keep in mind is that the best approaches to intellectual character education aren't one-size-fits-all."

ture in philosophy and psychology on intellectual virtues (which tends to focus on adult versions of the traits) in tandem with relevant literature in developmental psychology, allowing the latter

to shape and inform our understanding of the former. So, for instance, if I'm a middle school teacher, I might read *Intellectual Virtues* (2007) by Robert Roberts and Jay Wood or *Virtuous Minds* (2013) by Philip Dow (or the first twelve chapters of this guide!) while also reading some work about adolescent psychology and brain development (e.g. *The Whole-Brain Child* [2012] by Daniel Siegel and Tina Payne Bryson or *The Teenage Brain* [2015] by Frances Jensen). I might then ask myself: "How can the accounts of curiosity or attentiveness (or whichever virtues I'm interested in) offered by these authors be tweaked or modified in ways that reflect the workings of the adolescent mind? What might the virtues these authors describe look like in the minds of 11- to 15-year-olds?"

Alternatively, suppose you've decided that you're going to focus on curiosity and intellectual courage with your students. Assuming you have a reasonably good grasp of these virtues, you might ask yourself a series of questions like: "As I think back about the students I have worked with, who comes to mind as an especially good example of these virtues? And who comes to mind as especially lacking them? What does this suggest about what these traits might look like in my classroom or in my students? What are some of the specific behaviors, attitudes, or comments these students displayed that manifested their curiosity or intellectual courage (or their lack of it)?" On this approach, we're drawing attention to our firsthand experience with the developmental stage in question and using this knowledge to inform our

character-based goals and the strategies we employ in pursuit of these goals. The first approach is more top-down and the second more bottom-up. Obviously, we needn't choose between these approaches. We can and should strive to implement them both.

A CULTURAL FOCUS

It can be tempting to think that whether or the extent to which students grow in intellectual virtues is primarily a matter of what goes on between them and their teachers in the classroom, for example, on the sorts of classroom activities or assignments their teachers give or on the kind of relationships they develop with their students. These things certainly matter; indeed, as we'll see

"[E]ducation can and should be life-giving and inspiring for everyone. It involves the exercise, development, and refining of certain fundamental and uniquely human capacities or abilities. In this respect, when done well, intellectual character education can make us more fully human."

in later chapters, they're an indispensable part of what's involved with trying to educate for intellectual character growth. However, if viewed as the whole story, or anything like it, this is an importantly misleading picture (Berkowitz 2002: 79-84; Ritchhart 2015: Ch. 9).

To see why, imagine two teachers, teacher A and teacher B, both of whom care deeply for their students, share the same character-based goals, and use many of the same activities and strategies aimed at helping their students grow in intellectual virtues. In teacher A's case, there's a mismatch between the "hidden curriculum" (Snyder 1973; Ritchhart 2002: 46) in his class and his character-focused goals and efforts. Though genuinely interested in educating for intellectual virtues, A's approach to teaching often stresses quantity over quality. He regularly finds himself concerned more with "getting through all the material" than with allowing his students to reflect on and "digest" it at a deeper level. Several of the routines A has his students engage in seem aimed at maintaining classroom order and avoiding mistakes rather than facilitating active thinking or intellectual risk-taking. The walls of his classroom are decorated with posters containing bland, vaguely inspirational messages about learning.

While teacher A is genuinely interested in having a positive impact on the intellectual character of his students, and while several of the pedagogical activities and strategies he employs are aimed at achieving this goal, this concern hasn't "taken" at an especially deep level. And yet, by comparison with his colleagues, teacher A is doing quite well. Most of his fellow teachers haven't thought at all about how to have an impact on the intellectual character of their students. Nor is this something they're doing naturally or instinctively. Thus there's an even greater mismatch between their pedagogical activities and this objective. Moreover, very lit-

tle about the overarching vision of teacher A's school supports the goal of educating for intellectual virtues. When the principal talks about why the school exists or why it's a good school, she tends to focus exclusively on things like test scores, district and national rankings, and so on.

Compare the situation of teacher A with that of teacher B. Again, teacher B also has some apt and thoughtfully formulated character-based goals for her students and uses several strategies to try to achieve these goals. But unlike with teacher A, these goals and strategies are supported by several other aspects of teacher B's pedagogy and classroom environment. Teacher B is focused on how well her students understand and can explain the subject matter. Because of this she's willing to go deeper into certain points or concepts even if this means having to skip points she might otherwise have planned to cover. She's willing to make sacrifices of quantity for the sake of quality. After spending just a few minutes in her class, one gets the sense that she places a high premium on active thinking and intellectual risk-taking. She'd rather her students try, make mistakes, and learn from them than to arrive at the right answer quickly or on the first try. Her walls are covered with student work that further illustrates these values—work that demonstrates deep understanding of, curiosity about, and thoughtful engagement with the subject matter. Moreover, and perhaps not accidentally, teacher B's broader educational environment supports her character-based efforts. Her colleagues are taking similar steps to support the intellectual character develop-

ment of their students. She meets with them on a regular basis to discuss what's working well and what isn't and to read through some of the latest books or articles on topics like thinking dispositions, making thinking visible, growth mindset, and grit (see, respectively, Ritchhart 2002, Ritchhart et al 2011, Dweck 2006, and Duckworth et al 2007). And her principal supports her efforts. This is evident in the ongoing feedback she receives from the principal and in her annual performance reviews. It's also evident in the principal's comments at assemblies, talks to the broader school community, conversations with parents, and correspondence with the community at large. In these contexts, the principal's focus is on what it really means to be a lifelong learner or to have a love of learning and on what he and the teachers at this school are doing to impart these things to their students. He consistently gives the impression that the school—and education in general—has a much higher purpose than high scores on standardized tests or excelling in school rankings.

It's not at all difficult to imagine that teacher B's efforts at fostering intellectual character growth will be more successful than teacher A's. One major difference between the two cases concerns the classroom and school cultures that the teachers foster and experience. Despite several specific intentions and actions to the contrary, teacher A hasn't created a classroom culture that deeply and systematically supports intellectual character growth; nor does the broader culture of his school do much to support this goal. By contrast, the "cultural elements" of teacher B's classroom

(e.g. the routines, practices, values, images, and language) are carefully and thoughtfully oriented toward helping her students make progress in intellectual virtues. Moreover, she has the good fortune to work at a school in which the principal and overall values, practices, and other culture-building forces are supportive of these efforts.

The broader point these scenarios are intended to illustrate is that the culture of a classroom and of a school at large have a very significant impact on whether students are receptive to and can begin to internalize their teachers' efforts to educate for growth in intellectual virtues. While the efforts and strategies of individual teachers matter, their success depends in large part on the environments in which they work. In later chapters we'll look in more detail at the factors that make up a school or classroom culture. In the meantime, those of us interested in practicing intellectual character education would do well to ask ourselves, not merely, "What sorts of assignments or strategies or techniques should I use?" but also "What is the overall culture of my classroom or school? Is it supportive of this goal? To the extent that it isn't, what adjustments can I make to the various elements that make up this culture?" (See Ritchhart 2002: Chs. 3, 4, and 7 for helpful discussions about creating classroom cultures that support intellectual character growth.)

A THOUGHTFUL AND ORGANIC APPROACH

When it comes to identifying ways of trying to foster intellectual character growth in an educational setting, it can be tempting to think first in terms of posters, bulletin boards, bracelets, t-shirts, and related items that can be used to remind students of the importance of intellectual virtues and to encourage them to begin practicing these traits in their thinking. Indeed, more than a few "off-the-shelf" character development programs take this approach (see Kohn 1997 for a relevant critique). While a thoughtful use of visual reminders can be beneficial in the context of intellectual character education (see Ch. 21), an exclusive or primary emphasis on such things is problematic.

This is largely because character education—whether intellectual, moral, or civic—is aimed at effecting *deep personal change*. It is aimed at transforming students' fundamental beliefs, attitudes, feelings, and choices about thinking and learning. Posters declaring the importance of open-mindedness or pencils with definitions of virtues on them, while potentially having a place within intellectual character education, are by themselves unlikely to have a very deep or lasting effect. Indeed, trying to influence the intellectual character of students using posters and pencils is like trying to redirect a wild elephant by simply pointing in the direction you'd like it to go. Many students are likely to sniff out the superficial and myopic quality of such efforts and may become cynical and untrusting about the very enterprise of intellectual character education.

In light of these observations, it's important to think very carefully and deeply about the sorts of interventions most likely to have a genuine and lasting effect on the intellectual character of our students. While the chapters that follow shed light on several such interventions, we must keep in mind that our thinking about these things should always be informed by the realistic dynamics of personal development and change. It shouldn't be governed by kneejerk thoughts or intuitions, many of which point in the direction of approaches to intellectual character education that are superficial and psychologically unrealistic.

Another important point to keep in mind is that the best approaches to intellectual character education aren't *one-size-fits-all*. As already noted, in attempting to have an impact on the intellectual character of our students, we're attempting to facil-

"Research shows that character education flourishes in school communities in which students and teachers feel empowered."

itate the internalization of certain values, beliefs, and practices. For this to happen, our approaches must reflect and be faithful to who our students are—to their limitations and developmental stages (as noted above), but also to other aspects of their identities and backgrounds (e.g. ethnicity, culture, or socioeconomic status). The point is not that intellectual character education is

Chapter 13: Framing Principles

only suited for certain groups of students or even that it's better suited for some groups than it is for others. On the contrary, such education can and should be life-giving and inspiring for everyone. It involves the exercise, development, and refining of certain fundamental and uniquely human capacities or abilities. In this respect, when done well, intellectual character education can make us more fully human. That said, the point at present is that the details of what intellectual character education looks like (e.g. the specific virtues that are focused on or the characters and narratives that are upheld for emulation) can and should look different from one educational community to another. While there exist certain key principles and practices, these can be adapted in ways that reflect important differences from one educational community to another.

One upshot of this is that we should be cautious about using off-the-shelf character education programs. While certain elements of such programs can be helpful, it's best to develop a program organically—to think about the identities, backgrounds, values, and interests of the teachers and students in question and to ask: "In light of these things, how best can we approach educating for intellectual virtues? Which virtues are likely to be most meaningful or important to this group of students? How do the goals intellectual character education fit with things they already care about? Which exemplars of intellectual virtues are most likely to resonate with them? Which stories?"

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Approaching intellectual character education in this way has another crucial benefit: it *empowers* teachers and students. It gives them some say in and influence over the shape and direction of the relevant educational efforts. Research shows that character education flourishes in school communities in which students and teachers feel empowered (Lickona and Davidson 2005: 69-77; Berkowtiz and Puka 2009). This should be no surprise. If students and teachers feel respected, if they feel like their opinions matter, they'll be more likely to be receptive to the kind of change and personal formation at which intellectual character education is aimed.

CONCLUSION

We have examined four principles that help clarify the "how" vs. the "what" of educating for intellectual character growth. We've seen that the best approaches to intellectual character education will:

- Involve realistic character-based goals;
- Be developmentally informed and focused;
- Place a premium on developing school and classroom cultures that support intellectual character growth; and
- Be thoughtful and organic (vs. superficial or artificial).

DISCUSSION QUESTIONS

I. What do you see as some of the advantages or disadvantages of using exemplars as a way of encouraging students to care about and prac-

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tice intellectual virtues? For two or three intellectual virtues that you think are especially important, try to identify at least one exemplar for each virtue.

- 2. Based on your experience as a teacher or student (or based, perhaps, on the educational experience of your own children), what type of character education or character education programs are you familiar with? What were the apparent goals of this program? What steps were taken or were supposed to have been taken to achieve these goals? Do you think the program was successful? Why or why not?
- 3. Identify an intellectual virtue that you think is especially important and that you can imagine trying to help your students to grow in. To get a developmentally and otherwise accurate sense of what this virtue amounts to, try to list 10 classroom behaviors that you'd expect a student with this virtue to engage in. In short, what *specifically* would this virtue look like manifested in your class?



CHAPTER 14

Purpose

In this and the following five chapters, we'll consider a series of principles and practices aimed at fostering growth in intellectual virtues that can be implemented outside of the classroom. In chapters 20-34, we'll turn to strategies that can be implemented within a classroom setting.

The principles and practices discussed in chapters 14-19 are aimed largely at administrators, board members, and others who have an influence on what happens at a school beyond what happens in the classrooms. To the extent that teachers are also in a position to influence things like the mission, vision, or overall culture of a school, these chapters are written for them as well. In fact, if you're a teacher but feel like you don't have much influence in these other areas, these chapters may still be worth reading. They may help broaden your understanding of how intellectual virtues come about. They may also help relieve some of the pressure you might feel concerning your own efforts inside the classroom.

MISSION, VISION, AND VALUES

One of the most important things that can be done at a school to help students (and others) grow in intellectual virtues is to estab-

lish and maintain a sense of *purpose* at the school that puts this goal front and center. One useful effort in this direction pertains to the mission, vision, and values statements of a school. Mission statements spell out the day-to-day purpose or aim of an organization. Vision statements explain how the world would look if the organization succeeded at achieving its mission over time. And values statements articulate the principles or priorities that guide and constrain the functioning of the organization, including its execution of its mission and pursuit of its vision (see here for more on these statement-types). If a school is seriously committed to promoting the intellectual character growth of its students, this should be evident in its mission, vision, and values statements.

Incidentally, many school mission and vision statements already contain something in the neighborhood of character-based goals. Think, for example, of how common it is for such statements to extol the importance of cultivating "lifelong learners" or a "love of learning." Statements like this are expressions of the reasonable

"If a school is seriously committed to promoting the intellectual character growth of its students, this should be evident in its mission, vision, and values statements."

conviction that education should do more than simply equip students with new knowledge and intellectual skills. They suggest that education should also have a deeper and more personal ef-

fect—one that aligns students' values, habits, and even their emotions and feelings with the goal of personal intellectual growth.

The language and concepts of intellectual character and intellectual virtues are extremely useful for more fully articulating and putting flesh on these worthy but somewhat nebulous aims. Intellectual virtues are the personal qualities or character traits of a lifelong learner. They capture what a lifelong learner will care about, how she will think, and what she will do from one situation to another. She will, for instance, be thoughtful and reflective, asking insightful questions. When the situation calls for it, she'll know how and will be ready to think and form beliefs for herself. But she'll also have a good sense of what her intellectual limitations are, including all that she has yet to learn. She'll be interested in and motivated to understand how others see the world. She'll treat others' beliefs—even those of people very different from her—with fairness and respect. When she's curious about a subject, she'll show tenacity and thoroughness in her attempts to understand it. In other words, she'll be curious, intellectually autonomous, intellectually humble, open-minded, intellectually honest, intellectually thorough, and intellectually tenacious.

The language and concepts of intellectual character and intellectual virtues are also useful for unpacking the idea that education should foster a "love of learning." Recall that a love of learning is the motivational basis of intellectual virtues. As one author has

put it, intellectual virtues are simply the character traits that a truth-loving person—or someone who desires to learn and understand—would want to have (Montmarquet 1993). Intellectual virtues flow from and are rooted in this desire. An intellectually virtuous person asks questions, pays attention to details, and considers alternative perspectives *because* she enjoys thinking and learning.

Though many schools express a concern with goals like lifelong learning or a love of learning, the reality is that very few administrators, school board members, or teachers have thought very carefully about what these goals amount to—about what exactly it looks like to be a lifelong learner or to possess a love of learning, for example, the sorts of thoughts, attitudes, actions, and feelings that comprise these states. To repeat a "thought experiment"

"[M]any school mission and vision statements already contain something in the neighborhood of character-based goals. Think, for example, of how common it is for such statements to extol the importance of cultivating 'lifelong learners' or a 'love of learning."

from a previous chapter: Imagine pulling aside the average public school junior high or high school principal and saying, "Your school is committed to helping students become lifelong learners.

What exactly is a lifelong learner? What are the defining qualities, skills, and actions of such a person? And what exactly are you and the teachers at your school doing to reach this goal? For instance, what are some things you've done in the last week that

"Intellectual virtues are the personal qualities or character traits of a lifelong learner. They capture what a lifelong learner will care about, how she will think, and what she will do from one situation to another."

were aimed at helping your students become lifelong learners? Or, what are some things your teachers are doing in class today that are intended to have this effect?" If your experience is anything like mine, it's unlikely that you'd be very impressed with the answer you receive.

While disappointing, this gap between the official mission of many schools and what really ends up getting valued or pursued at these schools presents an opportunity for those who are interested in taking the aim of intellectual character growth more seriously. It's an inroad or way of helping others see that at one level they are already committed to practicing intellectual character education.

As one example of what it might look like for mission, vision, and values statements to reflect character-based goals, I share the

following <u>statements</u> from the Intellectual Virtues Academy of Long Beach (IVA):

Mission: to foster meaningful growth in intellectual character virtues in a thoughtful, challenging, and supportive academic environment.

Vision: to equip students to engage the world with curiosity and thoughtfulness, to know themselves, and to live well.

Values:

- I. Sense of purpose: we deliberately align all of our thinking and decision-making with the mission, vision, and values of the school.
- 2. Culture of thinking: in all of our thinking and decision-making, we ask questions, seek understanding, and practice the habits of good thinking.
- 3. *Self-knowledge*: believing in the importance of self-knowledge, we practice ongoing self-reflection and self-awareness.
- 4. *Openness and respect*: we strive for a strong sense of community marked by collaboration, empowerment, and intentional openness and respect for the thinking of others.
- 5. *Growth mindset*: being optimistic about the potential for personal growth, we embrace challenges and regard failure as an opportunity to learn and improve.

Virtue concepts pervade these statements. Of course, this is what one would expect from a school with "intellectual virtues" in its very name! For other schools, where intellectual character growth is only part of their overriding focus, virtue-based language may be there but be somewhat less prominent. One example here is the Rosslyn Academy, a private K-12 international school in Nai-

robi, Kenya. "Intellectual virtue" is one of five different "Core Values" that inform and constrain the identity and direction of the school.

SLOGANS AND MOTTOS

Like the sorts of statements just discussed, slogans and mottos communicate messages about the goals and values of an organization. Typically, they're more succinct, informal, and catchy than the other kinds of statements just noted. They also tend to be more transient and susceptible to change and revision. This can be important if you're an administrator or teacher, say, who can't, by his or her own power, bring about a revision to the formal mission, vision, or values statements of your school, but who would like to regularly communicate that your school places a high priority on helping students grow in intellectual virtues. While you may lack the power to change official mission or vision of your school, you may nevertheless be in a position to craft and implement slogans or mottos that communicate this message to colleagues and students.

Because slogans and mottos tend to be more informal and catchy, the best approach here might be to avoid using the somewhat technical term "intellectual virtue" in favor of specific virtue terms like curiosity and wonder or in favor of other terms that are close related to virtue terminology. A natural focus in this regard is on the activity of *thinking*. Because intellectual virtues are the

character traits required for good thinking, educating for growth in intellectual virtues necessarily involves placing a premium on thoughtful, active engagement with academic content (rather than an approach that favors the passive reception of information or the memorization and regurgitation of material). This is the kind of emphasis that can easily be featured in slogans or mottos like "At School X, we're about good thinking!" or "What would a

"Though many schools express a concern with goals like lifelong learning or a love of learning, the reality is that very few administrators, school board members, or teachers have thought very carefully about what these goals amount to."

good thinker do in this situation?" At IVA, when students make thoughtful or insightful remarks, the principal or teachers routinely respond with an encouraging "Good thinking!" Alternatively, drawing on a new slogan for a local public radio station ("Radio for the curious"), a good school motto might be "School for the curious" or "Learning for those who love to wonder."

Other slogans or mottos might feature ideas or concepts that are closely related to but not the same thing as intellectual virtues or virtuous thinking. This might include an emphasis on a "growth mindset" or on the value of struggle and even failure: e.g. "At

School X, we're about intellectual growth" or "We embrace intellectual struggle" or "We treat failure as an opportunity for growth."

At IVA, two slogans or mottos have emerged that seem to capture well some fundamental goals and emphases of the school. The official motto of the school is "Equipping every student to learn and live well." This motto, and the more succinct "Learn and live well," have become a central part of the school's messaging. The idea behind this motto is that intellectual virtues are qualities one needs in order to be a good learner and to make thoughtful and informed decisions across all areas of one's life. As such they are important, not just for learning well, but also for *living* well.

A second motto that has emerged at IVA is "Love and Rigor." This motto came about from a growing sense of two important principles related to successful intellectual character education. The first is that the kind of openness and receptivity required for intellectual character growth occurs most readily in the context of trusting and caring relationships among students and between teachers and their students (love). The second is that intellectual character education is not about a "hippy dippy, think whatever you want, no right answers" approach to education. As explained in an earlier chapter, intellectual virtues aim at deep understanding of important subject matters. The content and structure of these subject matters is real and objective. And acquiring a deep understanding of them is a challenging and complex affair. In this

way, "intellectual rigor" is an essential part of intellectual character education. While "Love and Rigor" might initially seem to pick out two competing educational aims, an intellectual virtues framework brings them together into a single, coherent whole. This is one of the things that make such a framework so useful and attractive.

Whether deliberately created or not, slogans or mottos—or repeated phrases that capture a particular goal or value—are bound to emerge within an educational setting. The point we're dwelling

"Being mission-minded ... is one critical way of ensuring that the goal of fostering intellectual character growth doesn't remain merely that. It is a kind of mental habit or practice that allows us to align all of our thinking and actions with this goal."

on now is that such statements are among the things we can harness in order to build a school culture that supports the goal of intellectual character growth.

PRACTICING MISSION-MINDFULNESS

Our focus thus far has been on ways of building character-based content into the expressed purpose of a school. But this is, at best,

half the battle. A school can adopt mission, vision, and values statements that explicitly and extensively highlight the importance of intellectual character growth, but if this goal is not deeply integrated into the daily life and routines of the school, such well-intended statements will prove impotent. In many ways, the rest of this guide is an attempt to spell out how a school might allow the goal of intellectual character growth to shape and inform what it does on a daily basis. However, in the remainder of this chapter, I will emphasize an overriding point—one that the rest of the chapters should be read in light of. It concerns the vital importance of mission-mindfulness (this idea is explored in greater detail in Chapter 31).

One of the most striking things about IVA is its sense of purpose or mission. As any educator knows, when it comes to making decisions about anything from curriculum to assessment to school policies or systems, it is easy to simply do what's always been done or to adopt the standard practice of one's colleagues or of comparator schools. At IVA, administrators, teachers, and board members routinely check this impulse. Instead, when faced with an important decision, they take a step back and ask themselves questions like: "What would it look like to perform this task with the goal of helping our students grow in intellectual virtues?" or "How can I practice intellectual virtues—and avoid practicing intellectual vices like hastiness, thoughtlessness, or narrow-mindedness—in the process of making this decision?"

Questions like this have an impact on decisions about the sorts of homework assignments, tests, quizzes, and projects that teachers assign. They also influence how the principal thinks about discipline and professional development. This isn't very surprising. But this sort of reflection has an impact on more mundane tasks as well. For instance, several vendors that IVA has worked with have commented on how the staff or board members tend to read contracts and other materials more carefully and thoroughly and to ask more probing questions. This is evidence that the school's mission has infiltrated the daily operations and overall ethos of the school.

Being *mission-minded*—that is, constantly asking how what one is doing relates to and might be shaped or informed by the mission—is one critical way of ensuring that the goal of fostering intellectual character growth doesn't remain *merely* that. It is a kind of mental habit or practice that allows us to align all of our thinking and actions with this goal. While such mindfulness may not have a radically transformative effect on *everything* we do—some of what we do may already be well aligned with this goal and there may be certain tasks or issues on which the mission doesn't have a significant bearing—it provides a very good foundation for and constraint on the wide range of activities we undertake as educators.

To stimulate some further thinking about this, the following are several areas that might initially seem "mission neutral" but that

on further reflection present an opportunity for practicing mission-mindfulness:

- *Physical education*: Does our PE program require students to be thoughtful about their bodies? Does it foster a deeper awareness of connections between the mind and body or between cognitive functioning and physical health?
- *Food*: Are we doing our best to be thoughtful about the food choices offered at our school? How does the food we serve affect the intellectual well-being of our students?
- *Homework*: Is the emphasis on quality or quantity? Am I assigning any mindless busywork? Do my homework assignments consistently require a significant amount of active thinking?
- *Uniforms*: What expectations does our school have for how our students dress? What do these expectations communicate about what we value? Can we create a dress code or uniform policy that gives students an opportunity to practice intellectual virtues?
- *Discipline*: If we aim to foster good thinking, then we must respect students as thinkers. What does this mean for how we handle classroom management and other discipline-related issues? What guidance or restrictions does it impose?
- *Technology*: What are the pros and cons of technology vis-à-vis the goal of intellectual character growth? How can technology be used to foster active, complex, and engaged thinking? When or where should technology not be used?
- *Schedule*: Does our schedule allow for deep engagement with important ideas? Does it help facilitate making connections across different subject matters?
- *Fieldtrips*: Are we giving students opportunities for hands-on, experiential learning? How do these opportunities reflect our values? Does the way we plan and execute them also reflect our values?

CONSISTENCY AND FIRST IMPRESSIONS

To the extent that one is concerned with practicing mission-mindfulness, two additional ideas are worth stressing: namely, consistency and first impressions. A truly mission-driven organization is one in which there is a default expectation that all stakeholders will act in light of and with reference to the organization's mission. For such expectations to exist, *consistency* is key (Ritchhart

"Educating for intellectual virtues is about forming and shaping who our students are becoming as thinkers and learners. Such formation occurs only within the context of trusting and caring relationships."

2002: 47). While we as educators needn't perfectly embody and practice our school's mission, we do need to be very consistent in *trying* to do so. This is crucial if we want to create an environment that naturally gives rise to growth in intellectual virtues. It is also crucial for securing buy-in from students and parents. If either group gets the impression that when we talk about fostering curiosity, open-mindedness, and intellectual courage, we are simply paying lip service to some nice ideas, this will be a significant loss. Being mission-mindful is a powerful way of avoiding this impression.

For similar reasons, we must give special attention to the *first im- pressions* we make on students and parents (Ritchhart 2002: 55f,

80). What a teacher does in the first days of school or what an administrator communicates at a parent orientation set the stage for the remainder of the year. These things also say a great deal about what the teacher and administrator value. If we're serious about trying to educate for intellectual character growth, we must take advantage of these opportunities to communicate this goal and to explain how it will inform what will be happening in our schools and classrooms throughout the year.

THREE CAVEATS

While mission-mindfulness is a critical practice, it can go wrong in various ways. To help avoid these mistakes, it may be helpful to consider three caveats.

First, it is very important to avoid being mission-driven at the expense of the *relationships and well-being* of the persons involved. Educating for intellectual virtues is about forming and shaping who our students are becoming as thinkers and learners. Such formation occurs only within the context of trusting and caring relationships (Lickona and Davidson 2005: 53-55; Berkowitz and Bier 2006). Accordingly, efforts at being mission-driven shouldn't be blindly top-down. Feedback loops must be established and we must be willing to adjust our mission (or at least our understanding of or approach to it) in light of how it is affecting the people involved. A very similar point can be made about buy-in. If, in our attempts to be mission-driven, we are doing things to, say,

alienate teachers or other important stakeholders, then our efforts will be counter-productive. We will block precisely the sort of commitment we're seeking to foster (Lickona and Davidson 2005: 34-39).

Second, any robustly mission-driven organization runs the risk of *oversaturation*. By focusing too much or too often or in the wrong ways on its mission, an organization can do damage to the motivation of its stakeholders. This can happen in different ways. For instance, if the overarching goal is spoken about too frequently or always in the same way, then stakeholders are bound to grow

"Being mission-driven isn't primarily a matter of creating pencils, bracelets, or bumper stickers with our school's mission statement on them."

weary of it and it is likely to lose its force and meaning. For this reason, as suggested in the discussion above of school-wide slogans, it is important to vary the language that is used to talk about and broadcast the mission. Again, this can be done by regularly focusing, for instance, on good *thinking* and the formation of good thinkers rather than on intellectual virtues per se. It can also be done by sometimes using implicit rather than explicit means to reflect and embody the mission. Indeed, much of the mission-driven character of a school should occur or exist behind the scenes.

A third way in which mission-mindfulness can go awry is in the attempt to make intellectual virtue concepts cute, cool, or otherwise "relevant" to our students. Being mission-driven isn't primarily a matter of creating pencils, bracelets, or bumper stickers with our school's mission statement on them. While there can be a place for such things, research suggests that, taken by themselves, these are not effective forms of character education (Kohn 1997). This is hardly surprising. Any time we as adults try to make things cool or relevant to our kids, we run the risk of being greeted with justifiable skepticism or scorn.

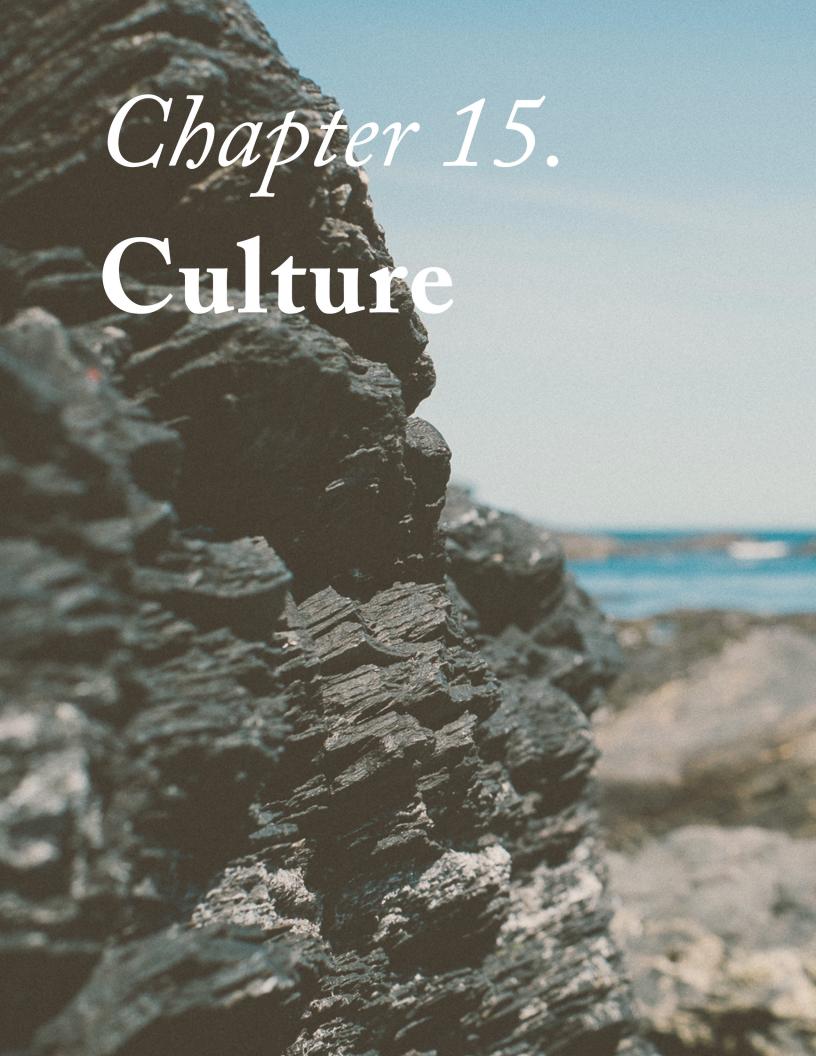
In this connection, it's worth keeping in mind that when practicing intellectual character education, what we're "peddling" is something fundamentally good and human. We're attempting to tap into and nurture students' natural curiosities, abilities, and dispositions. We're trying to help them grow and mature as people. Accordingly, an attempt to be systematically mission-driven shouldn't compel us to "dress up" intellectual virtues in ways that, while perhaps getting our students' attention in the moment, will later lead to a lack of commitment or buy-in on their part.

DISCUSSION QUESTIONS

I. What is the *stated* purpose of your school? How, if at all, does this differ from what you perceive as its *actual* purpose? What might it look or feel like to practice mission-mindfulness in relation to the stated purpose of your school? Give a few concrete examples. How, if at all, would this differ from practicing mission-mindfulness in

relation to the actual purpose of your school?

- 2. What are the first impressions that a prospective parent is likely to receive of your school (e.g. via parent communications, orientation, etc.)? What do these impressions suggest about the purpose or goals of the school?
- 3. Can you identify things that take place at your school outside of classroom instruction (e.g. school rituals, traditions, awards, etc.) that may help foster such values as lifelong learning or a love of learning? Can you identify things in the same general category that appear to work *against* these values?



CHAPTER 15 Culture

In this section of the guide, we're examining ways of trying to foster intellectual character growth outside of the classroom, that is, in other areas of a school setting.

In the previous chapter we considered the merits of incorporating a focus on intellectual virtues into formal and informal statements of educational purpose (e.g. mission statements and mottos). We also examined the importance of being mindful of these statements in all aspects of the school's operation. In the present chapter we turn to a related topic: school culture. We'll examine a number of cultural variables and consider how they can be brought into alignment with the goal of helping students develop the character traits of a good thinker and learner (for a related discussion, see Casey 2011).

We can begin by noting a general definition of culture: "Culture is what is created from the messages that are received about how people are expected to behave. Cultures develop in any community of people who spend time together and who are bound together through shared goals, beliefs, routines, needs or values" (Taylor 2005: 6).

In keeping with this definition, we'll focus here on the following cultural elements:

- Heroes and role models
- Language
- Rituals and traditions
- Celebrations and honors
- Physical space and objects
- Governance structures and practices

As we'll see, these elements can be harnessed to communicate the value of intellectual virtues and to inspire a shared commitment to understanding and practicing these virtues. My aim is to provide a sketch of a school-wide culture that is systematically aimed at fostering intellectual character growth (this discussion is influenced by and in several respects mirrors the discussion in Chapters 4-7 of Ritchhart 2002).

HEROES AND ROLE MODELS

Every culture has its heroes and role models—individuals who embody its deepest values and aspirations. Thus if we want to develop a school culture that is oriented toward intellectual character growth, we would do well to identify individuals—fictional and real, past and present—who exemplify intellectual virtues in a concrete and compelling manner (Berkowitz 2012: 31-40; Berkowitz and Bier 2006; Berkowitz 2007).

In selecting a list of such persons, it's important to focus on identifiable and specific traits of intellectual character. This is a point

"The importance of having intellectual role models and heroes isn't difficult to appreciate. They make very real and concrete what might otherwise seem like mere lofty and abstract ideals."

at which it's important not to confuse intellectual virtues with moral virtues, on the one hand, or with innate or hardwired cognitive excellences, on the other. So, for instance, while someone like Mother Theresa might be an ideal *moral* role model, it's not as clear that she's an exemplar of intellectual virtues (though it's possible that she was). Similarly, while it might be tempting to uphold a Stephen Hawking or an Albert Einstein as an intellectual role model on account of their sheer cognitive capacity and brilliance, we mustn't confuse these natural intellectual gifts with cultivated habits of mind. (Incidentally, as I get to below, Einstein in particular, in addition to being naturally brilliant, was also an exemplar of several intellectual character virtues.)

Some figures we've seen fit to uphold as intellectual role models at the Intellectual Virtues Academy of Long Beach (IVA) include:

• Jane Goodall, for the deep curiosity, attentiveness, intellectual courage, and intellectual tenacity she demonstrated in her decades-long study of chimpanzees in the Gombe National Park in Tanzania.

- Abraham Lincoln, for the curiosity and intellectual tenacity he showed in his many projects in self-education and for the intellectual humility and open-mindedness he often showed in the context of political deliberation and debate.
- Frederick Douglass, for the intellectual courage and tenacity he exemplified in his efforts to learn to read and write.
- Albert Einstein, not for his prodigious intellect, but rather for his passionate curiosity and his deep intellectual humility before the physical universe.
- The fictional character of Jane Eyre, for the intellectual autonomy and intellectual courage she demonstrates as she challenges female stereotypes in 19th century British culture.

This list is a work in progress. And of course it's nowhere near complete. But it does go some way toward illustrating a further important point: namely, that it's important to select role models that your students will be able to identify with and be interested in. This means, among other things, striking an appropriate balance in terms of gender, race, ethnicity, culture, and so on.

The importance of having intellectual role models and heroes isn't difficult to appreciate. They make very real and concrete what might otherwise seem like mere lofty and abstract ideals. Moreover, they provide *attractive* and *admirable* representations of these ideals. In short, intellectual role models are inspiring. They inspire us to emulate and cultivate what is attractive and compelling about the persons in question. For this reason, identifying a short list of intellectual role models or heroes that will be regularly reflected on and talked about can be a helpful way of getting students interested in pursuing growth in intellectual virtues.

LANGUAGE

Language is also a key ingredient of culture. This is true especially of normative or evaluative language, that is, language that is used to describe things that are regarded within the culture as good or bad, praiseworthy or blameworthy, and so on. The language of intellectual character and intellectual virtues obviously fits in this category, for again, it picks out a range of rich and admirable

"The rituals and traditions of a group consist of things its members routinely do that have special meaning or significance and that contribute to the group's distinctive 'way of life."

personal qualities. Accordingly, to develop a school culture supportive of intellectual character growth, it's important that the language of intellectual character and intellectual virtues be woven into the daily discourse of the school. Such language includes various "trait terms" like curiosity, open-mindedness, attentiveness, and intellectual honesty, but it also includes related language having to do with personal growth and good thinking (see Ritchhart 2002: Ch. 6 and 2015: Ch.3; Costa and Kalick 2008: Ch. 7; and Tishman et al 1995: Chs. 2-3). This language should consistently be on the lips of administrators, teachers, students, and others. They should be very familiar with and comfortable using it. And, at least over time, use of this language should be-

come a matter of habit. Indeed, this is critical if the language is to become part of the actual culture of the school.

The importance of intellectual virtues language extends beyond discourse among administrators, teachers, and students. It can also be profitably integrated into communication with parents, board members, and community members. Likewise into advertising, marketing, and social messaging. Again, making the language of intellectual character, intellectual virtues, and related concepts consistently central in these areas conveys a clear message about the values and aspirations of the school community.

Some specific examples along these lines include:

- Frequent use of intellectual virtues language at information nights for prospective students (along with any needed explanations of these terms).
- Parent newsletters that feature and illustrate particular virtues (e.g. intellectual courage, intellectual humility, intellectual autonomy, etc.).
- Frequent (but natural and appropriate) use of virtues language in a wide variety of school communications.
- Advertisements for the school that include terms like curiosity, creativity, open-mindedness, grit, perseverance, and the like (e.g. "Wanted: Creative and Curious Students" or "What Are You Curious About?").

RITUALS AND TRADITIONS

The rituals and traditions of a group consist of things its members

routinely do that have special meaning or significance and that contribute to the group's distinctive "way of life." Accordingly, if I'm in a position to influence the rituals or traditions practiced at my school, and if I'd like the culture at my school to be one that promotes intellectual character growth, then I would do well to consider how a concern with intellectual virtues might be integrated into these activities (Carter 2011: Ch. 2; Ritchhart 2015: Ch. 7 and 2002: Ch. 5; and Seider 2012: 111).

The sorts of rituals or traditions I have in mind can be practiced by an entire student body at school-wide meetings, by administrators and teachers in a professional development context, or by board members at regularly scheduled meetings. Below I briefly discuss several examples. Again, the aim of these activities is to integrate an emphasis on intellectual virtues—whether explicit or merely implicit—into meaningful, culture-making experiences that members of the school community have on a routine basis. They are ways of embedding a concern with intellectual character growth into the very fabric of the community's day-to-day existence:

Scholar's Pledge. A friend of mine who teaches elementary school has his students recite a "Scholar's Pledge" each day along with the Pledge of Allegiance. As part of the pledge, students commit to practicing virtues like intellectual courage, curiosity, and intellectual humility. A similar pledge could be used in an assembly format, such that each time the student body meets together, all students recite a school-wide pledge or mission statement highlighting a commitment to being curious, probing for understanding, practicing

intellectual courage, and so on.

Board activities. Similarly, if a school's mission or vision statement incorporates a focus on intellectual character growth, the board chairman or the board members as a group could adopt the tradition of reciting the mission or vision statement at the beginning of each meeting, reminding themselves and anyone present of the school's virtue-based commitment and focus. At IVA board meetings, five

"For any school you are familiar with, consider: When are celebrations held at the school? What do they tend to celebrate? What honors and awards are given out at the school on a monthly, semesterly, or annual basis? What do these suggest about the fundamental values of the school?"

to ten minutes of each meeting are devoted to a board member-led reflection on intellectual character and its importance to learning and living well. We have found this practice to be an effective way of further educating board members about an intellectual virtues approach to education and reminding us all of IVA's ultimate focus.

Virtues Ceremony. Another tradition at IVA is a weekly "Virtues Ceremony." On Friday afternoons, the student body meets together to recognize students who teachers have seen practicing particular intellectual virtues. Teachers briefly describe what they've seen and praise the students in question for their intellectual activity. The other students at the meeting add to this support by chanting together things like "Good thinking!" or "Way to think!" This is a weekly part of what happens at the school. It serves as a good reminder to students and teachers alike of what is—and isn't—most valued at the school.

Parental activities. Virtues-based traditions might also involve parents. For instance, one could bring a parent or two to the school each semester to speak briefly with students about the kinds of thinking they do at their jobs and the kinds of thinking strengths, habits of mind, or intellectual virtues they need in order to do their jobs well. Making this a routine occurrence at the school would be a way of inviting parents to reflect on the intellectual virtues they need in their respective lines of work and of helping students to see the "real world" application of their school's focus on intellectual character.

Annual talks. Another school-wide tradition that would be open to parents and other adult stakeholders is an annual talk or lecture on some aspect of intellectual character education. Each year, a speaker (who could be a member of the school community or, if funding is available, an outside expert) could explore a particular virtue like curiosity or open-mindedness, explaining what the virtue involves, sharing some rich examples of the trait, discussing its importance to learning, and talking about some of its applications to other areas of life. Alternatively, the lecture could be devoted to a topic importantly related to intellectual virtues: e.g. a growth mindset, positive psychology, or intrinsic intellectual motivation. Members of the local community could be invited to this event. This would be a way of communicating the character-based focus of a school to a larger audience while also reaffirming this commitment from within.

CELEBRATIONS AND HONORS

Closely related to rituals and traditions are celebrations and honors. One can learn a lot about a school by paying attention to what it celebrates and honors. For any school you are familiar with, consider: When are celebrations held at the school? What do they tend to celebrate? What honors and awards are given out

at the school on a monthly, semesterly, or annual basis? What do these suggest about the fundamental values of the school?

Celebrations and honors provide another way for a school to exercise and strengthen its commitment to growing students' intellectual character. For instance, as a way of showing its commitment to active thinking and wondering, a school might host an annual celebration of a particularly excellent and influential idea or concept. A good example is "Pi Day," which is already celebrated by many schools on March 14 as a way of helping students see what is fun and fascinating about this and other important math-

"By establishing awards for particular virtues, we may inadvertently encourage at least some students to behave in intellectually virtuous ways but to do so for the wrong reasons—e.g. just to get the award or to win the approval of peers or teachers."

ematical concepts. Similar celebrations could be held in honor of concepts like justice, beauty, or wisdom. Alternatively, a school could host an annual event celebrating an excellent thinker, past or present. This would be an ongoing and formal way to recognize and uphold a particular intellectual role model or hero—one that exemplifies the intellectual virtues most valued at the school in an especially compelling and admirable way.

Another natural practice along these lines would be to give annual honors or awards to students who exemplified particular intellectual virtues especially well over the course of the year (e.g. a curiosity award, an intellectual courage award, etc.). Something like this can, I think, be a good idea. However, this is a good point at which to consider an important caveat about virtue-based prizes or awards. Ideally, students would practice and cultivate intellectual virtues because they enjoy learning or because they are intrinsically motivated to do so. By establishing awards for particular virtues, we may inadvertently encourage at least some students to behave in intellectually virtuous ways but to do so for the wrong reasons—e.g. just to get the award or to win the approval of peers or teachers. While external motivation for intellectually virtuous activity isn't always a bad thing, it is best to minimize external incentives for intellectual virtues and to increase internal motivation. Therefore, while virtue-based awards can be a good idea, this practice needs to be approached in a thoughtful and cautious manner. (For more on the educational significance of intrinsic motivation, see Berkowitz 2012: Ch. 6; Ryan and Deci 2000 and Deci et al 2001; Berkowitz 2012: Ch. 6.)

One way of doing this would be to honor students who—as far as we can tell—have shown the greatest increase in intrinsic motivation, for example, those who have really grown in deep curiosity and wonder. Another would be to limit virtue-specific honors to those virtues that are least susceptible to extrinsic motivation. While it is not hard to imagine a student exercising carefulness,

thoroughness, or intellectual tenacity for the sake of winning a "virtue competition" or receiving the praise of her teachers, this is more difficult to imagine in relation to virtues like curiosity, intellectual humility, or intellectual courage.

PHYSICAL SPACE AND OBJECTS

The look of a place often says something important about the type of place it is—not just functionally but also about what is valued in that space. If your school has a deep commitment to fostering intellectual character virtues, this should be evident to anyone who steps onto the campus. Visitors should get the sense that this is a place in which curiosity, open-mindedness, imagination, perseverance, and related traits are valued. This might be an impression they get from thought-provoking quotations on the walls or

"For any given school, we can ask: how do high-level decisions by school leaders or board members get made? The answer to this question will reveal a lot about the values and culture of the school."

from a prominently displayed "curiosity board" (the latter being a board on which students pose interesting questions to which other students or school staff supply answers; for a similar idea see Tishman et al 1995: 186). Or they might get this impression from the use of vivid and inspiring colors or artwork. The selection and

arrangement of furniture can also communicate a school's commitment to fostering intellectual virtues. Do the type of furniture and how the furniture is arranged indicate that the school is a place in which collaboration and interaction are valued? Finally, where possible, it is also worth thinking about how a school's defining images and symbols (e.g. logos, banners, flags, crests, etc.) might reflect a commitment to fostering intellectual character growth. Do these images and symbols provoke thought and wonder? (For more ideas along these lines, see Ritchhart 2015: Ch. 4 and 2002: Ch. 7).

<u>IVA's logo</u> nicely illustrates a couple of these points. First, it is colorful and attractive. More importantly, the three marks at the center of the logo are a subtle representation of the letters I, V, and A. They are also an instance of the Muller-Lyer Illusion: the middle lines of each shape are identical in length; however, to the naked eye, they clearly appear to be of different lengths. Thus the logo itself provides an occasion for puzzlement and wonder.

A few other examples of physical space, objects, and related factors are worth considering:

Light. Is there sufficient light? Is some of the lighting natural? Where artificial lighting is used, is it used in creative and interesting ways? Landscaping. Does it exist? Is it thoughtful? Does it inspire reflection? Is it beautiful?

Beauty. Philosophers have long drawn a connection between truth and beauty. Given a school's commitment to helping students under-

stand what is true and to acquire knowledge and deep understanding, it should also be concerned with introducing beauty into the learning environment. This is especially true if a school is attempting to help students grow in the personal qualities oriented toward truth, knowledge, and understanding. So it's worth considering: Has an effort been made to introduce beautiful spaces and touches of beauty throughout the campus?

Doors. Do doors at the school tend to be open or closed? One would hope that at a school committed to fostering a vibrant intellectual community, and thus also ongoing conversation, collaboration, and relationship-building, there would tend to be a lot of open doors. This stands in contrast with a school at which teachers and administrators are not pursuing a common, vital goal and therefore tend to keep to themselves.

Bathrooms. School bathrooms tend to be uninspiring spaces, to say the least. However, they are also spaces that we tend to remember. How, then, might a school's bathrooms reflect its commitment to fostering intellectual character growth? One would hope that such spaces would be clean and graffiti-free. But there may be other ways as well. A school might, for instance, commit to making their bathrooms especially colorful or to countering typical bathroom messages with other, more positive and thoughtful messages or quotations selected by the students. These are ways of bringing an air of dignity and respect to the school—of showing that the school is committed to helping students grow and mature as thinkers and learners.

GOVERNANCE STRUCTURES AND PRACTICES

A final culture-building practice—or group of practices—pertains to school governance. For any given school, we can ask: how do high-level decisions by school leaders or board members get

made? The answer to this question will reveal a lot about the values and culture of the school. In what follows, I briefly describe several qualities of decision-making structures and practices that can contribute to school culture in ways that support intellectual character growth:

Respect and support. As already noted, for intellectual character education to work, there must be a positive adult culture at the school (Berkowitz 2012: Ch. 17); and for that to exist, teachers and other adults must feel respected and supported. Naturally, this has implications for the manner in which decisions that affect these parties get made. While consistent with strong leadership and significant distinctions in power and control, it means that unilateral decision-making in these areas will be limited. It also means that coercion will be assiduously avoided. Rather, when feasible, decisions will be made in a collaborative manner, with board members, the school leader, teachers, and other stakeholders working together, listening to each other, and respecting each other's opinions, needs, and desires. In short, school leaders, teachers, and other adult figures should feel empowered in their pursuit of their students' intellectual well-being (Lickona and Davidson 2005: 69-77; Berkowitz and Puka 2009).

Room for disagreement. One critical way of respecting each other as thinkers and learners involves having a genuine and high tolerance for disagreement. There should be formal and informal room in decision-making processes for others to register their disagreement. And dissenting opinions ought to be treated accurately and even charitably. In other words, decision-making should be viewed as an important, if sometimes challenging, opportunity to practice virtues like open-mindedness, fair-mindedness, intellectual patience, and intellectual charity.

Asking questions and considering multiple perspectives. A similar but

somewhat broader point is that schools committed to intellectual character education must also make formal and informal room for asking questions and considering multiple perspectives. Intellectual humility demands that we recognize that we don't have all the

"One critical way of respecting each other as thinkers and learners involves having a genuine and high tolerance for disagreement."

answers. Given our fallibility and other cognitive limitations, it is important for decision-makers to act and deliberate in ways that are careful and thorough. This in turn requires (but isn't limited to) playing "devil's advocate," that is, raising possible questions or objections to a favored viewpoint or course of action. It also means having an open mind toward other ways of doing things or other perspectives on what we're trying to do. At IVA, this—as well as the previous two points—is reflected in three of the school's core <u>values</u>:

- I. Culture of thinking: In all of our thinking and decision-making, we ask questions, seek understanding, and practice the habits of good thinking.
- 2. *Self-knowledge*: Believing in the importance of self-knowledge, we practice ongoing self-reflection and self-awareness.
- 3. *Openness and respect*: We strive for a strong sense of community marked by collaboration, empowerment, and intentional openness and respect for the thinking of others.

Transparency. Intellectual humility and related virtues like intellectual honesty and respect also require that decision-making processes be as transparent as possible. This doesn't mean that stakeholders should have unfettered access to sensitive information. But it does mean that board members and school leaders should refrain from making decisions they couldn't reasonably justify to other stakehold-

ers and that in general stakeholders should have access to the basis of or rationale for decisions that affect them. Transparency also demands the difficult and often delicate practice of not "spinning" or rationalizing decisions. As such, a commitment to transparency provides an ongoing invitation to practice, not only intellectual humility, but also intellectual courage.

Policy development. In order to formalize several of the values and practices noted above (e.g. transparency, room for questions and disagreement, etc.), it is important to formulate and adhere to board and school-wide policies that embed and reflect them. Such policies provide an additional layer of reinforcement, ensuring that the values and practices in question will be upheld even when doing so is difficult, inconvenient, or otherwise costly. A lack of such policies, by contrast, opens the door to inconsistent, arbitrary, and non-transparent decision-making.

Evidence and reasons. Also central to several of the values and practices noted above is the habit of providing evidence or reasons for decisions that affect other stakeholders. By possessing and exercising this habit, board members and school leaders demonstrate intellectual respect for the persons affected by their decisions. They also guard against the temptation to govern thoughtlessly, carelessly, or capriciously. And they further advance the goal of transparency.

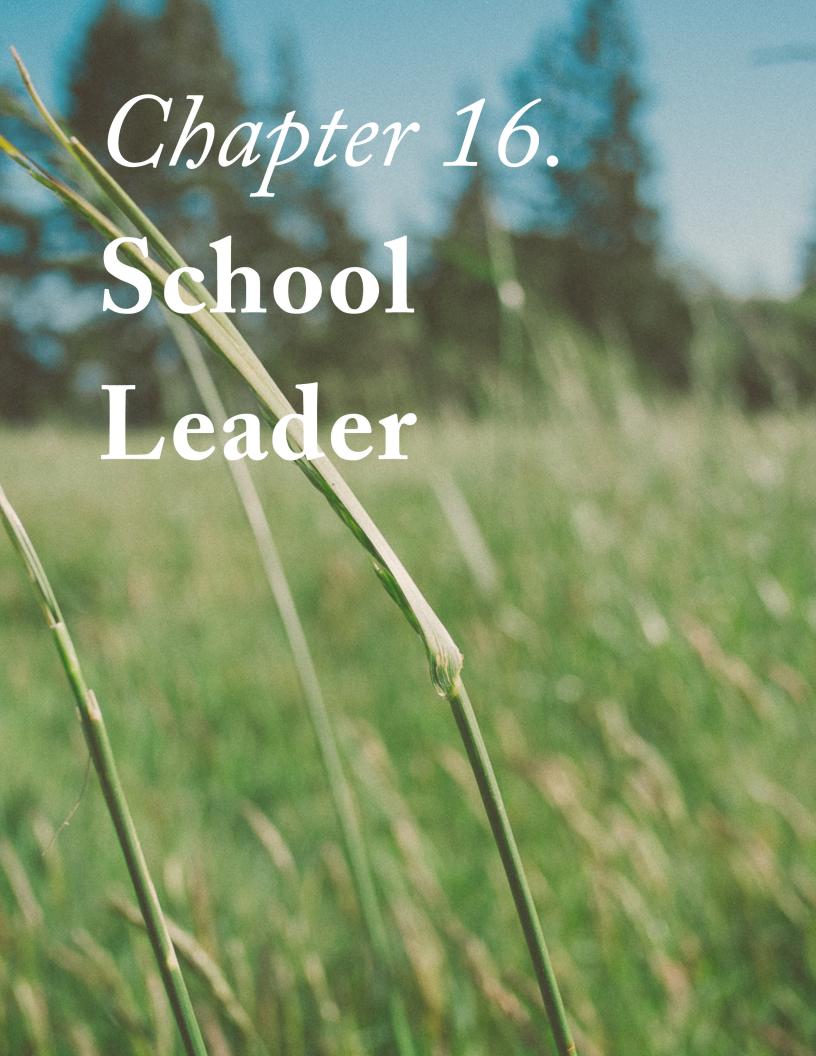
CONCLUSION

The focus of this chapter has been ways of building a school culture that are supportive of educating for intellectual virtues. In particular, we have focused on culture-building practices that can be undertaken outside the classroom or within a school at large. In the chapters immediately following this one, our focus will re-

main at this level. Beginning with Chapter 20, our attention will turn to classroom-based practices.

DISCUSSION QUESTIONS

- I. How would you define culture? Are school cultures different from other cultures? Try to identify two or three "cultural elements"—things that make a school culture what it is—that weren't discussed in this chapter.
- opment isn't simply—or even primarily—a matter of what happens between students and teachers in a classroom. Does this seem right to you? What are the limits of the kind of character-based impact a teacher can have in a classroom setting? How can cultivating a character-based school culture compensate for some of these limits?
- 3. For any one of the cultural elements described in this chapter, ask yourself: How is my school doing in this area? What is it doing well? How could it be improved? Then list some specific steps you could take to help bring this element into better alignment with the goal of fostering intellectual virtues.



CHAPTER 16

School Leader

In earlier chapters we've noted that the adult culture of a school—especially the culture among the teachers—is as critical as any other factor to the school's success at fostering intellectual virtues (Berkowitz and Bier 2006; Berkowitz and Puka 2009).

More than any other individual, the principal or school leader has influence over the quality of this culture. For this reason, schools committed to practicing intellectual character education must work hard to find and a support a qualified school leader (Costa and Kallick 2008: Chs. 15-17). In this chapter, we'll examine several qualities of such a leader. There are, of course, other qualities that a good school leader will possess. I'll limit my attention here to those qualities most relevant to educating for intellectual character growth.

PRACTICING INTELLECTUAL VIRTUES

A suitable school leader is, first and foremost, one who practices intellectual virtues. These qualities—or their absence—will be difficult to hide. They will be manifested whenever the person engages in active thinking and decision-making. If you have the opportunity to play a role in hiring the leader of your school, you

might consider asking yourself the following sorts of questions during the interview process: "Does the candidate present himself as having all the answers? Does he pause to listen to a question before answering it? Does he actually answer the question he's asked? Is he willing to admit when he doesn't know something? How interested is he in an intellectual virtues approach to education? Is the candidate a curious person? Is he an active learner? Can the candidate think outside the box? Can he give clear and

"A suitable school leader is, first and foremost, one who practices intellectual virtues."

convincing examples of when he has manifested intellectual virtues in a leadership context?" These questions can illuminate the extent to which the person is disposed to practice virtues like intellectual humility, open-mindedness, intellectual carefulness, intellectual honesty, and curiosity.

PASSION FOR LEARNING AND IDEAS

In their truest or purest form, intellectual virtues spring from an intrinsic love of thinking, learning, knowledge, understanding, and other "epistemic" goods. Therefore, in addition to the intellectual virtues noted above, a school leader who is well equipped to practice intellectual character education will be an inquisitive, thoughtful person—she will be an active learner who cultivates her mind and superintends her own intellectual growth in an on-

going way. Questions like the following shouldn't strike her as irrelevant to her work as a school leader and she should be able to provide thoughtful and articulate replies: "What are you curious about? What ideas or questions are you passionate about? If you had the opportunity to earn another advanced degree, what would you study? What was the last book you read? Who's your favorite author? If you could watch a TED talk on anything, what would it be?" In short, a qualified school leader will model the kind of intrinsic motivation that intellectual character education aims to foster in students.

PASSION FOR AN INTELLECTUAL VIRTUES MODEL

While a good school leader need not be an expert on intellectual character or intellectual virtues, it is important that this person have a sufficient grasp of these concepts and that they strike a deep chord with him. A qualified leader introduced to the idea of intellectual character or intellectual virtues for the first time is likely to respond by saying things like: "This is the way I've been trying to teach and lead all along. The idea of intellectual character and intellectual virtues gives me a framework and language to better understand and articulate what I'm already passionate about and have already been trying to do. While I wasn't familiar with the language before, the basic ideas and practices are very familiar—and very exciting!"

In addition to showing passion for an intellectual virtues educa-

tional model, a qualified school leader must also be able to describe and defend the model in a clear, compelling, and winsome manner. Again, if the person is being exposed to the language and concepts for the first time (e.g. in the context of a job interview),

"[A] qualified school leader will model the kind of intrinsic motivation that intellectual character education aims to foster in students."

she may not quite meet this mark; it will likely take some time for her to understand the meaning of some of the more specific terms and get comfortable using them properly. Nevertheless, my work with educators has convinced me that qualified school leaders are able to articulate and give a reasonably compelling defense of why an intellectual virtues approach is valuable and effective even before they understand or can describe all of the details of the approach. This ability is an important indicator that the person in question will be an effective representative of the school's mission to other stakeholders and community members.

EMPOWERING AND COLLABORATIVE LEADERSHIP STYLE

It isn't difficult to imagine the kind of leadership style that is likely to, say, promote teacher satisfaction and inspire teachers to internalize the school's educational mission. Nor is it difficult to imagine leadership styles that are likely to have the opposite ef-

fect. School leaders who are controlling, unsympathetic, checked out, hypocritical, rule with an iron fist, micromanage, and so on, are likely to alienate the adults they work with (from teachers to parents to board members). They will be extremely ill equipped to "lead on mission." Indeed, insofar as they are supportive of the mission of the school, other stakeholders may even come to be against it. For this reason, a school committed to fostering intellectual virtues needs a school leader who listens openly and thoughtfully and who acts on what she hears. She needs to empower and show appropriate confidence and trust in her teachers (Hattie 2012: Ch. 9). She needs to create space for and show a genuine commitment to collaboration (Berkowitz and Puka 2009; Lickona and Davidson 2005: Ch. 4). She needs to be principled but flexible, to "go to bat" for her teachers with students, parents, and board members, and to set reasonable expectations and provide appropriate supports. In all things, she needs to "walk the walk."

TEACHABILITY

School leaders cut out for intellectual character education also need to be teachable. This quality has at least two dimensions. First, the leader must be interested in undertaking sustained self-reflection and self-assessment in intellectual virtues and making efforts to superintend his own intellectual character growth. Like his teachers and students, he must strive to understand his own intellectual character strengths and weaknesses and to act in

light of what he learns, for example, by continuing to practice his strengths and to minimize the influence of his weaknesses. This is crucial both as a form of modeling for others but also because

"[T]he leader must be interested in undertaking sustained self-reflection and self-assessment in intellectual virtues and making efforts to superintend his own intellectual character growth."

of the insight it will give him into the process of teaching for and growing in intellectual virtues. He'll have a better understanding of the experiences and challenges faced by teachers and students at the school. Second, the school leader must also be teachable in the sense of being open to—indeed passionate about—learning more about intellectual virtues and how they can be fostered. He must be committed to identifying and developing a deep understanding of the "best practices" associated with an intellectual virtues educational model. This is likely to involve, among other things, keeping up with the educational and related research on intellectual character education.

VIRTUE-BASED PROFESSIONAL DEVELOPMENT

Because most teachers do not receive training in an intellectual virtues model in their professional preparation, they need ongoing opportunities to learn about, discuss, and ask questions per-

taining to this model. The school leader must see that such opportunities are available. One very natural way of doing so is to devote some substantial portion of the professional development curriculum and time to intellectual character education (Berkowitz and Bier 2006: 7; Ritchhart 2002: 181, 216, and 230-46). Thus a suitable school leader should be willing, able, and enthusiastic about developing and leading a professional development program that gives prominent attention to intellectual virtue formation. This qualification draws on several of the qualities discussed above: the leader herself must be interested in and teachable with respect to an intellectual virtues model, she must be able to explain and give a convincing account of the model's importance, and she must interact with teachers on these topics in ways that are thoughtful, attentive, open, empowering, and collaborative.

SUPPORTING THE SCHOOL LEADER

Finding and hiring a school leader with the above qualifications is a significant achievement and one that will go a long way toward creating the kind of school culture and environment in which widespread intellectual character growth is a real possibility. However, the stakeholders responsible for supporting and evaluating this person must also provide him with the proper support. In the previous chapter, we examined certain aspects of what this is likely to involve.

Below I touch on a few additional points and practices:

Build virtue concepts into formal responsibilities and performance evaluations. If a school leader is expected to devote a significant portion of her time and energy to shaping the focus and direction of her school in ways that align with the goal of fostering intellectual virtues, but these expectations are portrayed as secondary to more traditional or immediate responsibilities, or if she is faced with this expectation but isn't evaluated at least partly on the basis of how well she meets it, this will obviously leave her in a frustrating and unhelpful position. For this reason it is important to build certain virtue-based responsibilities into a school leader's formal job description and responsibilities (see Appendix C for some examples). Similarly, it is important that certain virtue-based standards get incorporated into the overall set of standards or criteria against which this person's job performance is assessed. Such standards, instead of focusing on, say, the actual intellectual character growth of students (which can be difficult to measure, especially in short windows of time), should focus on the leader's employment of the "best practices" of intellectual character education, that is, they should lead evaluators to consider whether the school leader has been taking steps—like those outlined in this guide—that are known to stand the greatest chance of having a positive effect on students' intellectual character.

Provide opportunities to master the model. If the school leader is to be an informed and passionate spokesperson for intellectual character education, and if she is to lead teachers in learning about and practicing the strategies proper to this approach, then she must be given ample opportunities and resources to develop a deep and thorough understanding of an intellectual virtues educational model. This can be done by making it possible for the school leader to attend conferences or seminars on the topic, by providing her with a budget to buy books and other materials related to intellectual virtues and education, to take an "intellectual retreat" in which she reads and studies pertinent resources, and so on. Again, developing the required

mastery of an intellectual virtues educational model takes time and resources. If a school leader is expected to faithfully implement this model, then whoever oversees her position must ensure that she is adequately prepared to do so.

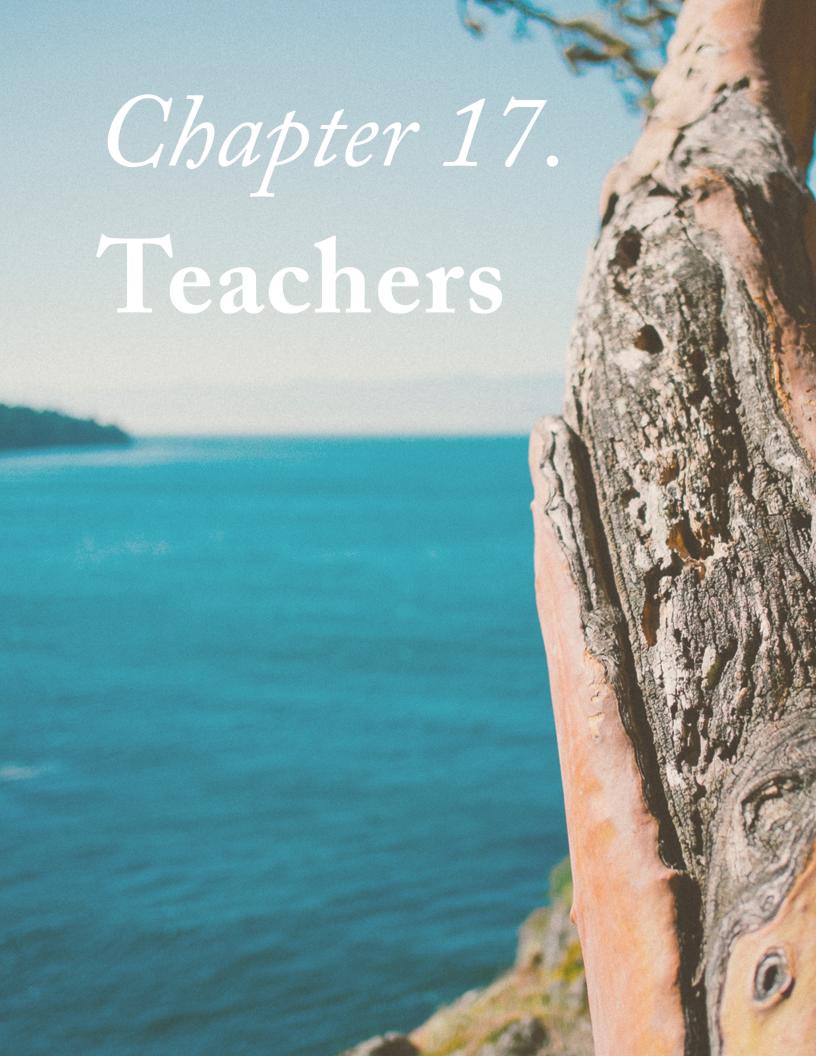
Help create a culture oriented around intellectual character growth. Even a school leader with all the above qualities and qualifications will struggle to build a school that fosters intellectual virtues if the school environment or culture is not supportive or conducive to this end. This, then, is a further reason to ensure that all elements of a school culture are aligned with the goal of helping students grow in intellectual virtues. As discussed in the previous chapter, the school leader herself will be in charge of much of this alignment. However, for her to be properly supported, other stakeholders who have the power to shape and contribute to school culture (e.g. teachers and board members) must do what they can to create conditions in which the sort of school leader described above will be able to thrive and grow.

Support the leader's virtue-based initiatives. A related point concerns how other influential stakeholders respond to a school leader's attempts to practice intellectual character education. Any good leader will pursue various activities and initiatives aimed at fostering intellectual character growth. Some of these are bound to require the participation and cooperation of board members, teachers, parents, and others. To support the leader so that she in turn can best serve the students, these stakeholders must do what they can to help these initiatives and activities succeed.

DISCUSSION QUESTIONS

I. Which qualities do you think are most important for leading a school that is committed to practicing intellectual character education? Try to list several. How do these qualities compare with the qualities discussed above?

- 2. Think of the best school leader you've worked with or encountered. What "habits of mind" or intellectual virtues did this person regularly practice? To what extent did this person's intellectual character influence the culture of the school?
- 3. What are some ways that key stakeholders (e.g. teachers, staff, and board members) might *interfere* with or *limit* the effectiveness of a school leader's efforts to create a school culture aligned with the goals of intellectual character education? What values, fears, or questions might lie at the heart of these obstacles? What can a school leader—and the stakeholders themselves—do to address or overcome them?



CHAPTER 17

Teachers

Linfluential when it comes to educating for intellectual virtues. Teachers spend the most time with students. The intellectual character traits they model are the ones students are most likely to emulate. They are major contributors to the "adult culture" of the school: their vision for education, their enthusiasm, and their job satisfaction will have a major impact on the climate of the school and the extent to which this climate leads to students' development of intellectual virtues. For these and other reasons, it's critical that schools interested in intellectual character education hire and support qualified teachers. In this chapter, we'll consider some of what this might involve.

Unsurprisingly, the qualifications for teachers overlap substantially with those for a school leader discussed in the previous chapter. Nevertheless, the exact nature and significance of these qualifications can differ. Therefore it's worth giving separate consideration to the qualities of a teacher equipped for and committed to educating for intellectual virtues (see Appendix C for an itemized specification of some of these qualifications).

PRACTICING INTELLECTUAL VIRTUES

Qualified teachers must themselves possess and regularly practice intellectual virtues (Ritchhart 2002: 210-17). This is important for several reasons, not the least of which is that one of the most powerful pedagogical means of fostering intellectual character growth is the "authentic modeling" of intellectual virtues (see Ch. 29). If as a teacher you don't possess these traits, then you can't authentically model them for your students. For this reason, when hiring or evaluating teachers, it is important to pay careful attention to their intellectual character strengths and weaknesses. Depending on the person and situation, this can be done in various ways, including self-assessments exercises (e.g. one might ask job candidates to write about or discuss which intellectual virtues they're strongest in and which they're weakest in) or peer assessment (e.g. asking teachers to observe each other's teaching and to identify which virtues they seen in action). If involved in the hiring or evaluation process for teachers, you might also pay close attention to the following:

Thinking. When the person describes or explains something, is he careful, thorough, and attentive to detail? When he describes a perspective he rejects or disagrees with, is the description fair and honest? Overall, does he seem like a thoughtful individual?

Questions. Does he wonder about things? Does he ask good questions? Is he inquisitive?

Passions. What motivates this person as an educator? How does he

understand his job? Does he see himself primarily as a purveyor of knowledge and skills? Or does he view himself as having an impact on who students are as thinkers and learners—on their underlying beliefs, attitudes, and feelings about thinking and learning? How does he think and feel about his subject matter? Is he passionate about history, math, science, or whatever subject he teaches?

Actions. Does his actual behavior as a teacher align with his stated passions and values? How does he allot his class time? What sorts of assignments and homework does he give? Do these things reflect a deep commitment to helping students think deeply and carefully about the subject matter? How does he interact with students? Does he clearly care about and respect his students as thinkers and learners?

PASSION FOR LEARNING AND IDEAS

One qualification alluded to above merits separate treatment. Educators well suited for the practice of intellectual character education will possess a deep curiosity about and passion for their subject matter. Sadly, this isn't always required or even expected of teachers. Some teachers receive the highest marks and praise simply on account of loving the craft of teaching itself or an account of loving kids. While both of these are good things, and while the latter in particular plays a fundamental role in helping students experience intellectual character growth (Ch. 20), there is no substitute for a genuine love of learning and passionate curiosity about your subject matter. These are essential because a big part of educating for intellectual virtues is modeling curiosity and related forms of thoughtfulness (Ch. 29). A teacher who merely

loves the craft of teaching and cares deeply for students may fail to satisfy this further requirement.

TEACHABILITY

Like the qualified school leader, teachers must be willing to undertake sustained self-reflection and self-assessment and to use the insight they gain from this process to work on improving their own intellectual character (Ritchhart 2002: Ch. 10). They must be willing to develop a model or view of how their minds work—a model of how they tend to think, including their intel-

"Educators well suited for the practice of intellectual character education will possess a deep curiosity about and passion for their subject matter."

lectual character strengths and weaknesses—and to allow this model to inform and shape all aspects of their teaching. They must also be teachable in the sense of being interested in learning more about how best to educate for intellectual character growth. For this reason, it's important to avoid hiring teachers who are "set in their ways." For many teachers, educating for intellectual virtues will involve challenges to and the revision of some of their deeply held educational beliefs and entrenched pedagogical habits. Thus a willingness to grow, learn, and adapt is essential.

PASSION FOR AN INTELLECTUAL VIRTUES APPROACH

Qualified teachers must also be passionate about the enterprise of educating for growth in intellectual virtues. This enterprise ought to resonate with and excite them. Even the relatively uninitiated ought to be able to recognize in the model some of their most deeply held educational beliefs and values. Again, you should expect to hear from them comments like: "This puts words to what I've always thought," "This gives meaning and purpose to what I'm doing as a teacher," "This helps capture why I got into teaching in the first place," and so on. Implementing a focus on intellectual character development isn't easy, especially if you're doing it for the first time. Thus the kind of buy-in that such comments are indicative of is vital to the successful implementation of an intellectual virtues model.

WILLINGNESS AND ABILITY TO INTEGRATE

It isn't enough that our teachers are passionate and willing to learn more about an intellectual virtues approach. They also need to be willing and able to put this knowledge and passion to good use. That is, they must be prepared to integrate the "best practices" of an intellectual virtues model into their actual teaching and other interactions with students. This is no small feat. Again, most teachers are not trained to approach their craft in this way. Many are taught that their primary responsibility is to impart knowledge and to help students become proficient in certain in-

tellectual skills. According to an intellectual virtues model, this is a very incomplete picture of what teaching is about.

One missing element is a commitment to impacting how students are disposed to act, think, and feel in a learning context, that is, the development of their intellectual character. For many teachers, taking this goal seriously will require being open to feedback and making significant adjustments to how they teach, including how they foster knowledge and intellectual skills. This is challenging, both practically and volitionally. Teachers must learn

"They must be willing to develop a model or view of how their minds work—a model of how they tend to think, including their intellectual character strengths and weaknesses—and to allow this model to inform and shape all aspects of their teaching."

how to tailor their teaching strategies and adjust their assignments and expectations in light of this goal. This is bound to take hard work, including some trial and error. Moreover, once this understanding is in place, they must also be willing to *act* in light of it until the relevant practices become second nature.

COMMITMENT TO COLLABORATION

Intellectual character education is not a solitary enterprise. While it is certainly possible to integrate a focus on intellectual character development into one's teaching on a solo or individual basis, and while such efforts can be worthwhile, this is likely to feel like an uphill battle. This is especially the case where your peers, principal, or the overall culture of your school favor approaches to teaching that are *antithetical* to intellectual character education, for example, by promoting rote memorization or an exaggerated concern with grades or state test scores. Ideally, you would work together with your colleagues to pursue the intellectual character development of your students (Ritchhart 2002: 235-37).

But not all educators can be counted on to be "team players" or to collaborate with their colleagues in this way. Thus whether in a hiring or an evaluation process, school leaders and other decision-makers would do well to consider questions like: "Will this

"Where intellectual character education is being practiced, virtue concepts can be explicitly and prominently featured in statements of teacher responsibilities and expectations."

person work productively with others to promote the goals of intellectual character education? Does she listen well to others? Can she identify what's good or reasonable in others' ideas? Or

is she primarily a critic? Does she get frustrated and impatient when others veer off topic? Is she willing to receive critical input? Or does such feedback tend to make her defensive? Is she willing to try new ideas? Does she enjoy working with others? Does she find collaboration invigorating? Or, if left to herself, would she rather teach and work in isolation?"

PROVIDING SUPPORT

If we are expecting teachers to possess the qualities and commitments sketched above, then we must also see to it that they receive the required support. Such support is very similar to that owed to school leaders endeavoring to educate for intellectual character growth (Ch. 16). It includes the following:

Building virtue concepts into stated expectations and evaluations. Where intellectual character education is being practiced, virtue concepts can be explicitly and prominently featured in statements of teacher responsibilities and expectations—e.g. in statements about what teachers are expected to know or learn and about the sorts of pedagogical practices they are expected to employ. Once these expectations are in place, it will be natural also to include virtue concepts in the standards used to evaluate teachers. If it's an important part of your responsibility as a teacher to learn about and practice the principles of intellectual character education, then when it comes time for your annual performance evaluation, the outcome of the evaluation should depend significantly on whether and how well you've done these things.

Providing intellectual growth opportunities. Teachers trying to educate for intellectual virtues need to have their own intellectual growth be

tended to and supported. This might involve providing them with opportunities to attend conferences or seminars about intellectual character education or giving them small budgets to spend on books and related materials that will help them learn more about this approach. Alternatively, it might involve giving teachers opportunities to deepen their understanding and passion for the subjects they teach—e.g. giving an English teacher a budget to spend on literary works or sending a science teacher to a cutting edge technology conference.

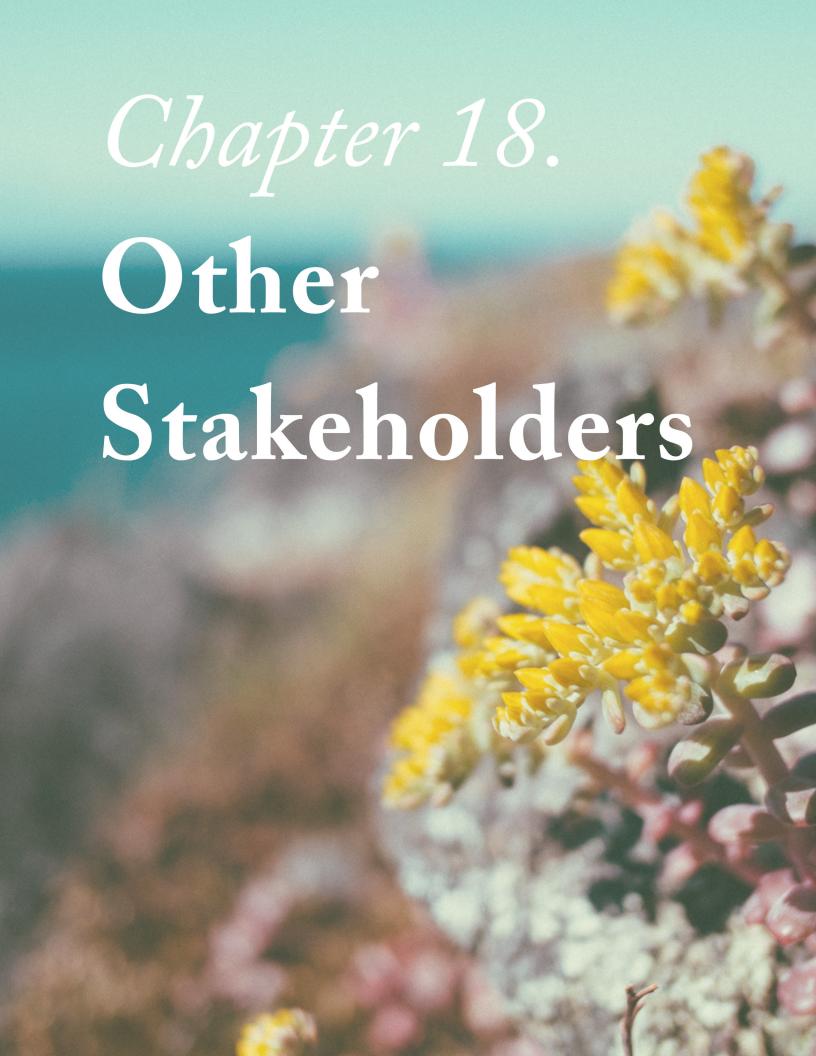
"[T]eachers should be given an opportunity to explore their own educational values and beliefs and to ponder and discuss fundamental questions related to educational theory and practice."

Ongoing collaboration and professional development. As suggested above, teachers need regular time to reflect on, discuss, and brainstorm about educating for intellectual virtues (Ritchhart 2002: 210-17; Berkowitz and Bier 2006: 7, 28-20). As discussed in the previous chapter, it is up to the school leader to develop and implement a strong virtues-based professional development program and to ensure that teachers have adequate opportunities to collaborate in their efforts. These meetings should address, among other topics, the fundamental aims and goals of education. They shouldn't focus exclusively on pedagogical techniques or strategies. Rather, teachers should be given an opportunity to explore their own educational values and beliefs and to ponder and discuss fundamental questions related to educational theory and practice. Once they have considered some of these issues, they'll be in a better position to understand, appreciate, and implement the kinds of practices and techniques central to intellectual character education (see Chs. 20-34).

Creating a supportive culture. Finally, we noted in a previous chapter that the effectiveness of efforts to promote intellectual character growth in an educational setting will depend in no small part on the attitudes and satisfaction level of the teachers involved. If you're expected to systematically implement a focus on intellectual character development in your teaching, but the surrounding culture of your school doesn't support—indeed even works against—this aim, then you're bound to grow frustrated and discouraged. Accordingly, the school leader, board of directors, and other stakeholders must work assiduously to create a school culture in which teachers committed to educating for intellectual virtues feel valued and supported.

DISCUSSION QUESTIONS

- In your current role as a teacher or administrator, when do you most clearly practice intellectual virtues? Which virtues do you practice and why? When do you most clearly *neglect* to practice intellectual virtues? Which virtues do you neglect to practice? Why do you do so?
- 2. In your experience with professional development programming, what sorts of things do these programs tend to cover? What's most useful to you about these programs? What's missing from them? How might attention to bigger and deeper questions about education enhance some existing professional development programs?
- 3. Try to identify three tangible ways in which your practice of intellectual character education could be effectively incentivized by your immediate supervisor (e.g. by a principal or school board). What incentives could they introduce? What obstacles could they eliminate?



CHAPTER 18

Other Stakeholders

In the previous two chapters, we examined the importance of hiring and supporting the right school leader and teachers. In this chapter we'll broaden our focus to include two additional groups of stakeholders: school board members and families (especially parents). Specifically, we'll look at several things that can be done by or for these groups that can improve a school's capacity for positively impacting the intellectual character of its students.

BOARD OF DIRECTORS

The importance of a school board, for our purposes, consists in the governing and supervisory role it plays in connection with creating and implementing policies, hiring and performance evaluations, budgeting and finances, strategic planning, and related activities. At some schools, a different body or group of individuals may oversee some or all of these activities. What I have to say in this chapter is directed to any such group, that is, to any supervisory body that has the power and flexibility to align high-impact activities and processes with the goals of intellectual character education.

One responsibility of school boards is to oversee the faithful im-

plementation of the school's mission. Where this mission includes a commitment to fostering intellectual character virtues, board members must be selected and trained with this responsibility in mind. The following are several considerations or strategies apropos of this important point.

VETTING BOARD MEMBERS

In the same way that school leaders and teachers need to demonstrate certain virtue-based qualifications, prospective board members should also be vetted with an eye to whether they can help promote intellectual character development at the school. Board members should be clearly enthusiastic about the enterprise of educating for intellectual virtues, able to say something meaningful

"[T]hey must also be individuals who, given the impressions they make on existing board members and input from others who know them well, manifest intellectual virtues in their thinking and interactions with others."

about why they are supportive of this mission, willing to deepen their understanding of intellectual virtues and their importance to education, and willing to engage in ongoing reflection on and assessment of their own intellectual character strengths and

weaknesses. Very importantly, they must also be individuals who, given the impressions they make on existing board members and input from others who know them well, manifest intellectual virtues in their thinking and interactions with others.

This means not bringing on board members who are closed-minded, dogmatic, intellectually arrogant, unreflective, intellectually careless, and so on. This can make for some difficult decisions, for these qualities can be possessed by experienced and talented individuals who in other respects might make valuable contributions. Nevertheless, given the critical governance capacity of school boards and their role in setting budgets and allocating other school resources, these are worthwhile sacrifices.

ONGOING EDUCATION IN AN INTELLECTUAL VIRTUES MODEL

Board members also need ongoing training in an intellectual virtues model that addresses questions like: What exactly are intellectual virtues? Why do they matter? How are they related to other cognitive abilities or to similar moral traits? What's the nature of particular virtues like open-mindedness or intellectual courage? How are the various virtues related to each other, for instance, how is intellectual carefulness different from but related to intellectual thoroughness? This can be done in any number of ways. One possibility is an annual one-day or half-day board retreat a significant element of which is a focused consideration and

discussion of the nature and value of intellectual virtues. Another strategy is to involve board members in a book club that meets periodically to read about and discuss the latest work in intellectual character education.

At the Intellectual Virtues Academy (IVA), while we're still working out how best to train board members in an intellectual virtues model, we have adopted a couple of strategies that seem to be effective. The first is to provide all board members with free copies of books pertaining to intellectual virtues and education (e.g. Ron Ritchhart's Intellectual Character [2002], his Creating Cultures of Thinking [2015], or Philip Dow's Virtuous Minds [2013]). Second, as noted in a previous chapter, the first five to ten minutes of each board meeting are devoted to a short reflection or presentation on a particular intellectual virtue or on some other topic related to intellectual character education. These presentations are led by board members on a rotating basis. We have found them to be effective at helping individual board members feel invested in the mission of the school and the board as a whole to be mindful of the ultimate purpose of its work.

SELF-REFLECTION AND SELF-ASSESSMENT

Schools that are seriously endeavoring to impact the intellectual character of their students need board members who see the world through an intellectual virtues lens. When they watch the news, surf the web, or have conversations with friends, they no-

tice the "movements" of other people's minds—how they think and which intellectual character traits they manifest. This kind of awareness comes partly through ongoing acquaintance—of the sort described above—with the basic concepts and tenets of intellectual character education.

"Schools that are seriously endeavoring to impact the intellectual character of their students need board members who see the world through an intellectual virtues lens."

However, it can also be fostered by providing board members with opportunities to reflect on and develop a better understanding of their *own* intellectual character strengths and weaknesses. Like principals, teachers, and students, board members should have a good sense of how their minds work—of the sorts of intellectual habits and dispositions that tend to govern their thinking. At the board level, this kind of self-knowledge can be promoted through the administration of self-report measures (e.g. Angela Duckworth's 12-item grit scale) or brief self-reflection exercises at board meetings (e.g. where board members are asked to identify one of their intellectual character strengths or weaknesses and to give an example of how this quality has played out in their lives or careers).

PRACTICING AND MODELING INTELLECTUAL VIRTUES

Finally, it is of the utmost importance that board members be personally committed to practicing intellectual virtues in their work on behalf of the school, for example, in how they make proposals, collect bids, listen to each other, defend their opinions, respond to arguments and alternative standpoints, communicate with families and the broader public, and so on. As with teachers and the school leader, board members should constantly be asking themselves: how does our school's mission bear on what we're doing or discussing? Or, more specifically, what would it look like to practice or model intellectual virtues in this situation? This can feel burdensome. And it can, in the short term, make for additional work, for example, by postponing a decision until all parties can provide input, reading very carefully and asking questions about the details of a contract, or working hard to understand a complex problem. In the long term, however, the result will be a pattern of more thorough and responsible decision-making and an overall board culture marked by transparency, thoughtfulness, and mutual respect.

One special application of this general point concerns the development of and adherence to board and other school *policies* (e.g. fiscal policies and policies pertaining to facilities usage, operations, hiring, sexual harassment, and much more). Such policies are the tracks on which the board operates. To a significant extent, a board that is committed to intellectual character education

will operate on a unique set of tracks. Thus as a board develops or revises its policies, it should be focused intently on whether and how the policies reflect the school's distinctive mission. At the very least, its members should ensure that there is not tension between the actions required by the policies and the goal of fostering a school culture that is conducive to intellectual character growth.

PARENTS AND FAMILIES

As we've seen in previous chapters, intellectual character growth is an ambitious and deeply personal educational aim. It involves changes to how students are disposed to think and learn and to some of their fundamental beliefs and feelings about these activities. While teachers can have an impact on such things, families typically wield an even greater influence. Therefore, school lead-

"Like principals, teachers, and students, board members should have a good sense of how their minds work—of the sorts of intellectual habits and dispositions that tend to govern their thinking."

ers committed to helping their students grow in intellectual virtues should make calculated efforts to secure support for this goal from students' parents and families. Ideally, intellectual character education would be a joint enterprise between schools and

families. (This point is regularly emphasized in the literature on traditional character education. See e.g. Ryan and Bohlin 2003; Berkowitz and Beir 2006 and 2007; Berkowitz 2012: 41; Lickona and Davidson 2005; and Lickona 2004: Ch. 3 and 1991: Ch. 20.)

While in some cases parents may be too busy or preoccupied to support and reinforce the efforts made by teachers and others at a school site, there are many relatively simple ways of helping bring them on board. Below I quickly discuss several of these:

Making regular use of virtues language in school communications. Helping parents become familiar with and comfortable using the language of intellectual character and intellectual virtues is a simple but critical first step. This can be done through intentional and frequent use of "trait terms" like curiosity, open-mindedness, intellectual autonomy, and intellectual humility. It can also be useful to underline these terms or put them in boldface whenever they are used. This is a way of repeatedly drawing parents' attention to the connection between what is being said and the character-based mission of the school.

Providing parents with profiles of key virtues. One helpful way of securing parental support consists of helping parents develop rich conceptions of each of the particular virtues that the school is focusing on. At IVA, we have found it helpful to have one or two-sentence definitions of each of our nine "master virtues." We have also formulated very brief slogans intended to capture the gist of each virtue (e.g. for attentiveness, "Look and listen"; for open-mindedness, "Think outside the box"; and so on). We have placed these definitions and slogans on bookmarks that we give to parents whenever possible. A related idea is to provide parents with short essays or blog posts on each of the target virtues. Similar "virtue profiles" could be included in monthly newsletters sent home to parents. Essays of this

sort are a nice way to highlight precisely what the virtue in question amounts to and how or why it is valuable, whether in an educational context or in the "real world." It is also an opportunity to share vivid and inspiring examples of these traits.

Making resources available online. Another natural step is to host an array of readings, videos, or other resources on the school website. This gives parents and others an opportunity to pick and choose what they want to read about and to explore certain aspects of intellectual character education at a deeper level.

Hosting ongoing opportunities for parents to learn more about intellectual character education. These can be built into regularly scheduled meetings, for example, by devoting a certain portion of a Back to School Night or PTA meeting to helping parents better understand what

"As with teachers and the school leader, board members should constantly be asking themselves: how does our school's mission bear on what we're doing or discussing?"

intellectual virtues are and why they matter. Alternatively, a school can host semesterly events devoted exclusively to helping parents and other interested community members develop a better understanding and appreciation of intellectual character education (at IVA, we refer to this as the "Parent Academy"). This could take the form of an information night that gets parents and other family members actively engaged in thinking about or practicing intellectual virtues—e.g. by having them practice certain "thinking routines" regularly used at the school. Or it could take the form of a reading group that examines a book or article on the importance of intellectual virtues or on how parents can support their student's growth in these traits.

On the former point, two recent columns in the New York Times

might be worth reading and discussing. One is a column by Thomas Friedman titled "How to Get a Job at Google" (2014) in which certain intellectual character strengths (including intellectual humility) are identified by a Google executive as among the chief characteristics the company looks for when it is hiring. A second is a column by David Brooks titled "The Mental Virtues" (2014). Brooks discusses several intellectual character virtues, which he describes as character

"[F]or parents to effectively understand and promote the mission of fostering intellectual character growth, it is important for them to take deliberate steps toward better understanding and 'owning' their own intellectual character strengths and weaknesses."

virtues needed by the "information age office jockey" who spends most of his day in front of a computer screen. To stimulate thinking about how parents can foster intellectual virtues in a home or family context, C.J. Simister's *The Bright Stuff* (2009) could form the basis of a fruitful book discussion.

Self-reflection and self-assessment. As with other stakeholders, for parents to effectively understand and promote the mission of fostering intellectual character growth, it is important for them to take deliberate steps toward better understanding and "owning" their own intellectual character strengths and weaknesses. Thus parents should be provided—at information nights, in newsletters, on the school website, etc.—with exercises and tools they can use to reflect on their habits of mind, perhaps alongside of or in conversation with their students.

Intellectual growth opportunities. Another useful strategy is to plan

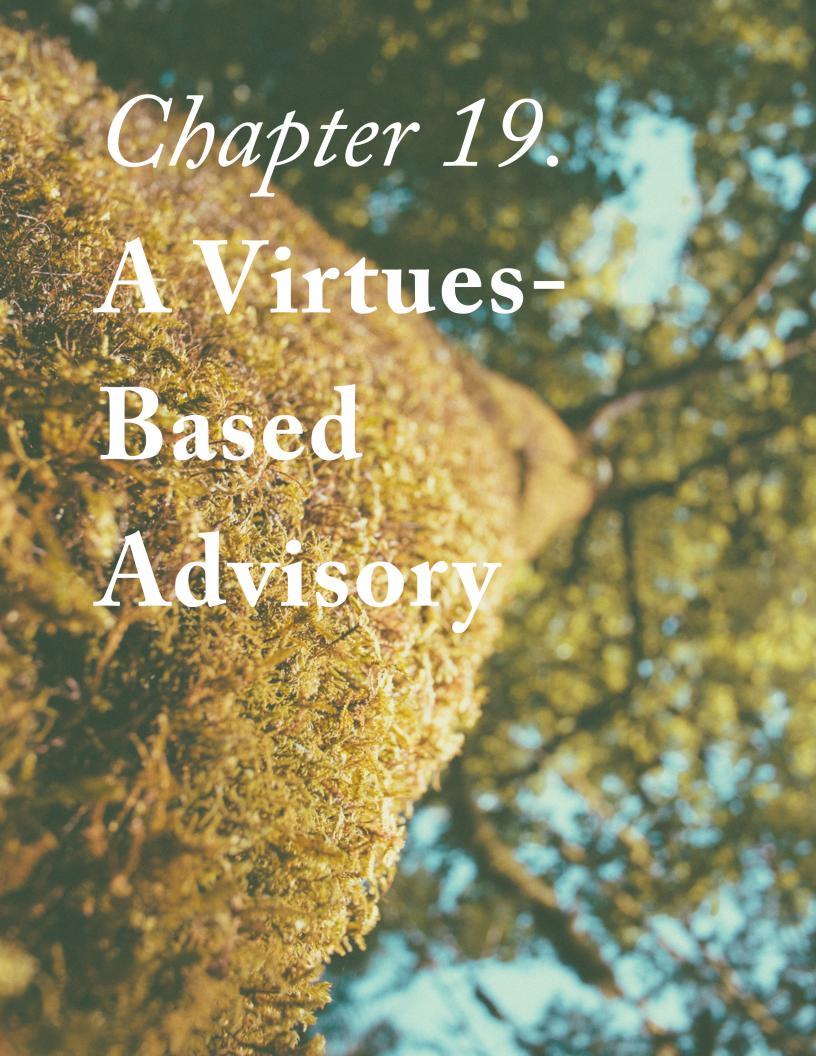
and sponsor intellectual growth opportunities for entire families. This might involve organizing a weekend fieldtrip to a local museum or cultural center. Or it could involve a family book club program in which entire families are encouraged to read a particular book. In the latter case, the topic of the book needn't have anything to do with intellectual character; rather, the point would be to give families an opportunity to engage in active thinking and intellectual exploration together. The idea, then, is to provide families with opportunities to practice intellectual virtues and, where natural, to discuss and reflect on them as well.

Career sharing. As described in a previous chapter, another event might involve having parents who work in non-academic settings talk with students at an assembly or in a similar context about the kind of thinking their jobs demand and thus about the intellectual virtues they need or use on a frequent basis. This can help students see the "real world" application of their school's focus on intellectual character development. It can also help parents reflect on and become more invested in this focus.

DISCUSSION QUESTIONS

- I. If you're a teacher or school leader, in what ways might the school board or other body that oversees your school support your commitment to educating for intellectual virtues? What specific actions or policies could they adopt?
- 2. If you're a school board member (or the equivalent) where do you see opportunities to practice intellectual virtues in your work on the board? Try to identify one example in which a school board member practiced one or more virtues while making an important decision. What was the impact? Can you think of an example in which you or another board member neglected to practice one or more virtues?

3. What do you imagine might be the biggest *obstacles* to getting parents to "buy into" an intellectual virtues educational model? Beyond those noted above, what might be some effective strategies for helping parents develop a better understanding of or support for this model?



The focus of advisory programs varies widely from school to school. At some schools, advisory functions more or less as a study hall; at others, it is an opportunity to focus on social and emotional skills; at others still, the focus is on civic participation and responsibility. However, as I'll elaborate on in this chapter, advisory programs also present an ideal opportunity to practice intellectual character education, particularly as a complement to other school-wide and classroom-based efforts aimed at fostering intellectual virtues.

In this chapter, I'll describe in some detail the advisory program that has been developed at the Intellectual Virtues Academy (IVA). I recognize that few schools will be in a position to adopt a program like this in its entirety; and some that are may prefer to take a different approach. Nevertheless, my hope is that by describing this particular program in some detail, I'll convince you that a virtues-based advisory program of one sort or another can play an important role in efforts to foster intellectual virtues in an educational setting. And, if you're a school leader, I hope also to stimulate your thinking about what such a focus might look like at your own school, whatever its distinctive emphases and constraints happen to be.

STRUCTURE OF ADVISORY MEETINGS: PART I

At IVA, students meet in groups of eight with an adult advisor for one hour each week. Groups include students from multiple grade levels. Each year new groups are created. Advisors consist of the school principal, all full- and part-time teachers, a select number of IVA board members, and a select number of IVA parents. All advisors undergo training in an intellectual virtues model and meet together on a monthly basis to exchange ideas, address challenges, and provide mutual support.

I'll begin by describing the basic structure of an advisory period. I should note that this structure is something of a template that is followed only more or less depending on the particular week or group in question. As I explain more below, advisors are encouraged (within limits) to adapt some of the structure of their meetings to the particular needs and interests of their group.

The one-hour advisory period is broken into two parts. The first 20-30 minutes generally are devoted to any *one* of the following three activities:

General check-in time. Especially at the beginning of the year, it is important for advisors to get to know their advisees and for the advisees to get to know and begin to feel comfortable with each other. Therefore, one option for the first half of the advisory period is any kind of exercise (e.g. "Two Truths and a Lie") that will allow group members to get to know each other and begin building trust and camaraderie within the group. As we'll get to below, one of the pri-

mary aims of the advisory program is for each advisee to experience a positive, trusting relationship with an adult figure. For this reason, it is important from the outset that advisors spend time getting to know each advisee personally. A general check-in time serves this purpose well.

Direct Instruction. Knowing about intellectual virtues—e.g. what they are, why they're valuable, and how they're different from related cognitive or moral strengths—is neither necessary nor sufficient for actually being intellectually virtuous. One can habitually ask thoughtful and penetrating questions without having a concept of

"[I]f one intends to practice intellectual character education in a robust way, one's efforts should include a certain amount of direct instruction about intellectual virtues and their educational significance."

or even knowing the word "curiosity." Similarly, one can know a lot about curiosity or intellectual courage, say, while nevertheless failing to be very curious or intellectually courageous oneself.

All of this notwithstanding, having a good grasp of what intellectual virtues (including *particular* virtues like curiosity or open-mindedness) are or involve can play a useful role in attempts to cultivate and foster these qualities. We'll explore this point in greater detail in a later chapter (Ch. 22). At present, the point is that if one intends to practice intellectual character education in a robust way, one's efforts should include a certain amount of direct instruction about intellectual virtues and their educational significance. A character-based advisory program provides an excellent opportunity for this. Accordingly, advisory groups at IVA often devote the first half hour of the advisory period to some form of direct instruction in the virtues.

This can take a number of different forms. At IVA, we have assembled a growing collection of concrete examples of the school's "master virtues" drawn from fictional sources like novels, short stories, and plays and from non-fiction sources like history and autobiographies. Thus on a given week an advisory group might spend the first half of the period reading and discussing questions about one or more of these examples. The examples provide a very tangible—and usually very compelling—depiction of the relevant traits. As such they provide a good basis for thoughtful discussion and reflection.

On other occasions, the first half of advisory is devoted to viewing a video clip (e.g. on YouTube or from a TED Talk) that addresses or exemplifies one or more intellectual virtues. Advisors are encouraged to use a "thinking routine" or at least a series of thoughtful questions to structure the group's discussion of the video. (As we'll discuss in greater detail in Ch. 16, a thinking routine is a simple exercise with a few main steps that facilitates thoughtful reflection on a particular idea, question, or object. See Ritchhart et al 2011 for more on this topic.) This story and video about a Kenyan boy who practiced several intellectual virtues in the process of engineering a solution to a problem threatening his community is a nice example of this sort of content. Some questions that advisors and students might discuss after watching this video include:

- What kind of mind does this boy have? What kind of thinking does he engage in?
- How might someone else (you, maybe) have responded to the challenge he was confronted with (i.e. that of having to protect his family's cattle from predators)? What thinking qualities might they (or you) have demonstrated?
- What are the results of this boy's good thinking? What does this suggest about the importance of good thinking?

Direction instruction in advisory can also involve reading articles or blog posts or watching a video about some idea or concept that is im-

portantly related to (but not the same thing as) intellectual virtues. A nice example here is a <u>short article</u> on a "growth mindset" by psychologist Carol Dweck titled "Even Geniuses Work Hard." A typical discussion of an article like this would be aimed at helping students understand the core ideas and begin to make connections between these ideas and intellectual virtues (e.g. how having a growth mindset is importantly related to pursuing growth in intellectual virtues).

Finally, at the beginning of the year, all the advisory groups at IVA meet together for a period of three weeks for an introduction and overview of IVA's master virtues. Three virtues are covered each week. Typically, there will be a "station" for each virtue. Students at each station engage in an exercise (often a thinking routine) that gives them an opportunity to practice the virtue in question. The advisor leading the exercise then provides a brief explanation of the virtue they've just practiced.

3. Self-reflection or self-assessment exercises. A further important aim of the advisory program is for students to get to know their own intellectual character strengths and weaknesses. Therefore, a third

"[M]any topics or questions that seem, on the surface, to be simple or cut-and-dried turn out not to be on closer inspection."

option for the first half of an advisory period is a self-reflection or self-assessment exercise. One simple but effective exercise is to have each student in the group share their response to a question like the following:

• What is your greatest intellectual character strength? How does it help you in your life as a student or outside of school?

Give one example. Then answer the same questions for your greatest intellectual weakness or area for improvement.

- What virtue or virtues did you find yourself practicing (or failing to practice) this week? Be as specific as possible. What was the outcome?
- What virtue do you most want to grow in? Identify some very specific steps that you're willing to take between now and our next meeting to practice this virtue in your life as a student. (Naturally, with a question like this, it's important to give students an opportunity the following week to report back on whether they took the relevant steps and how it went.)

The primary goal of these exercises is to help students begin to apply what they know about intellectual virtues—especially about *particular* virtues like curiosity, intellectual humility, or intellectual autonomy—to their understanding of themselves.

We also use the first half of advisory to conduct occasional assessments aimed at uncovering whatever progress students are making toward the character-based goals we have for them. This might involve giving them a short quiz to see whether they can list and define each of IVA's nine master virtues. Or they might be asked to read several scenarios and identify which virtue is called for in each scenario. It might also involve administering self-report measures for each of these traits. Given the importance of trying to ascertain how effective the character-based program is at the school, it is very useful to have advisory as a regular place and time in which such measurements can be taken (see Appendix D for more on the topic of measurement).

STRUCTURE OF ADVISORY MEETINGS: PART II

The second half of advisory consists of student-led explorations of topics they are intrinsically curious about. At the beginning of each year (and on an as-needed basis throughout the year) students are asked to generate a list of topics they'd like to learn more about. To get at these interests, we ask them questions like: If you could watch a YouTube video or a TED Talk about any topic, what would it be? Sometimes we use a thinking routine to help them generate ideas. The advisor vets each student's list of questions, helping the student identify at least a couple of topics or questions that are narrow enough to be discussed over the course of one or two advisory periods but that also clearly lend themselves to thoughtful reflection and discussion. Each student then signs up to facilitate a group discussion or inquiry about one of his or her topics on a given date.

When that date arrives, the student, sometimes with guidance from his or her advisor, leads a structured exploration of the topic in question. Typically, this involves the use of a thinking routine. Again, I'll have more to say about thinking routines in a later chapter (Ch. 26), but a quick example is "Think, Puzzle, Explore." With this routine, students are asked first to state what they *think* (not necessarily what they *know*) about the topic in question. Next they are asked to *puzzle* about it, that is, to come up with as many questions as possible about it. Finally, they are asked to identify how they might go about further *exploring* the

topic. This is but one of dozens of different thinking routines (again, see Ritchhart et al 2011 for an excellent overview and exploration of thinking routines). Prior to leading a discussion, students are asked to think carefully about which routines might pair best with the topic or question they've selected (at IVA, stu-

"Because of their small size, advisory groups are an excellent opportunity to communicate to students that they are known and genuinely cared for."

dents are already familiar with a wide range of thinking routines because of how often they're used in core academic classes). In addition to thinking routines, students sometimes structure their discussions around a video, object (e.g. painting), or radio program (e.g. Radiolab) that pertains to their topic.

Some recent topics have included: how dictatorships emerge, the history and mythic status of Atlantis, Malcolm Gladwell's "10,000-Hour Rule" of success, lucid dreaming, how music affects mood, time travel, the nature and causes of stress, the difference between a "fixed" and a "growth mindset," what intellectual virtues look like in a parent/child relationship, black holes, animal knowledge, handwriting analysis, brain freezes, the Bermuda Triangle, and optical illusions.

As this suggests, students often pick very broad topics. Therefore,

several advisors have found it helpful to require students to narrow their focus to one specific question pertaining to their topic: e.g. What causes black holes? How exactly does handwriting analysis work? Is time travel a real possibility? This, in fact, is one of two main criteria that tend to be used in judging whether a proposed discussion topic is suitable. The other—briefly noted above—is that the topic or question must lend itself to thoughtful reflection and discussion. Therefore, questions like "How long can human beings hold their breath?" or "What's the oldest known civilization?" don't make good advisory topics. Answers to these questions are (for the most part) too straightforward. That said, it's also worth noting that many topics or questions that seem, on the surface, to be simple or cut-and-dried turn out not to be on closer inspection. Therefore, advisors are encouraged to help students seek out what there is to puzzle or wonder about in connection with the topics or questions they're drawn to.

This second component of the advisory period serves at least a couple of useful purposes. First, it directly nurtures curiosity by allowing students to actively and thoughtfully explore a topic they're intrinsically interested in and to do so in a safe, low-stakes environment (there are no grades in advisory). Second, it also affords students an opportunity to practice a wide range of other intellectual virtues by asking them to do things like focus on important details (attentiveness), consider issues from multiple perspectives (open-mindedness), probe for deeper understanding (intellectual thoroughness), come up with their own ideas (intellectual autonomy), and take intellectual risks

by asking questions or sharing their opinions (intellectual courage).

OVERALL AIMS OF THE PROGRAM

The formal aims of IVA's advisory program, many of which have already been touched on, are as follows:

- I. To ensure that all students experiences a caring and supportive relationship with an adult figure at the school.
- 2. To ensure that all students develop an understanding of the nature and value of intellectual virtues (including each of IVA's nine "master virtues").
- 3. To help students develop a rich and accurate understanding of their own intellectual character strengths and weaknesses.
- 4. To provide students with ongoing opportunities to practice and cultivate a wide range of intellectual virtues.

It should be fairly clear how the various components of the advisory program align with these overarching goals: the check-in component ensures that students are experiencing a caring and supportive relationship with an adult figure; the "direct instruction" ensures that students develop a good understanding of intellectual virtues and why they're important; self-reflection and self-assessment exercises help students develop a better understanding of their own intellectual character strengths and weaknesses; and the topic- or question-based inquiries provide them with ongoing opportunities to practice a wide range of intellectual virtues. It

should also be clear how, when structured in something like this way, a virtues-based advisory program can provide an excellent opportunity to practice intellectual character education.

ADDITIONAL POINTERS AND CONSIDERATIONS

In this final section, I'll quickly identify several principles and pointers that we have found to be important to the optimal functioning of the advisory program at IVA:

Focus on relationships. As we've noted in several chapters, students are unlikely to be open to revising their intellectual values and practices in a hostile or unsupportive environment. Because of their small size, advisory groups are an excellent opportunity to communicate to students that they are known and genuinely cared for. This requires that advisors make deliberate attempts to get to know and to communicate genuine interest in and concern for the well-being of each student. There is no substitute for this personal touch.

Create a strong expectation of respect. Similarly, students must feel that they can trust, not only their advisors, but also their peers. Therefore, from the very beginning, it's critical that a strong expectation of mutual respect be established in the group. This means, among other things, that personal critiques or jabs are off limits. It also means that every student should be able to expect to be listened to and to have his or her ideas taken seriously. Such expectations are far from guaranteed. Indeed, the immediate chemistry of some groups may tend in the opposite direction. Therefore, advisors may have to spend a considerable amount of time and effort early in the year on establishing group-wide expectations of respect. A failure to make this kind of investment early on will likely result in even greater problems or limitations in the group down the line.

Memorize the virtues. This may seem like a trivial point, but it isn't. The ultimate goal of advisory groups is to help students grow in intellectual virtues. It's hard to steer the group in this direction if one doesn't have a good understanding of these traits to begin with. Again, at IVA, we target nine specific intellectual virtues. It's critical, then, that all advisors know what these virtues are and are able to provide at least a "quick and dirty" definition of them. An inability to do this will leave the advisor incapacitated when it comes to several important advisory goals and responsibilities.

Provide virtue-based feedback. One such responsibility is providing virtue-based feedback. Encouragingly noting when a student has practiced a particular virtue can be a very powerful way of recognizing and reinforcing the intellectual activity in question. Advisory

"Nothing makes intellectual virtues more attractive than living and breathing examples of them. Thus one of the most effective things advisors can do ... is model intellectual virtues in all of their thinking and interactions with students."

sessions are highly intellectually active and interactive. As such, students are often noticing important details, raising insightful questions, coming up with their own ideas, taking risks, and more. Thus they regularly present opportunities for advisors to say things like: "Nathan, I really like how you listened attentively to what Maria said and were even willing to revise what you said in light of it. That was a great demonstration of attentiveness and open-mindedness."

Model the virtues. Nothing makes intellectual virtues more attractive than living and breathing examples of them. Thus one of the most

effective things advisors can do—and something without which they are almost guaranteed to be ineffective—is model intellectual virtues in all of their thinking and interactions with students. First and foremost this means modeling passionate curiosity—wondering, asking questions, puzzling. It also means listening attentively and openly to students, being willing to admit when they don't know something, probing for deeper understanding, and not giving up in their attempts to understand. While advisors should never be overbearing and should let students' thinking and questions drive the discussion, they mustn't be intellectually passive or reticent either. They need to get into what they're doing—to engage, think, and wonder.

Be flexible. The discussion up to this point can suggest that a good advisory group will follow a strict schedule and structure. While organization and preparedness is important in order to maintain a focus that aligns with aims of the advisory program, the structure of these groups should be flexible. For instance, the presentation schedule drafted at the beginning of the year is likely to need to be revised many times given that some students will want to change topics and that some topics will take longer or not as long as expected. As a general rule, we tend to say that advisors should keep at the forefront of their minds the overall aims and purposes of the advisory program (noted above) and to allow the structure and flow of the group to take shape accordingly. In other words, advisors must be flexible and adaptive to the needs, dynamics, and interests of their group. They should let a spirit of genuine wonder and curiosity guide and inform their supervisory activities.

DISCUSSION QUESTIONS

I. Does your school have an advisory program? If so, what are its stated aims and goals? To what extent, if any, do these goals align with the promotion of intellectual character development?

- 2. If you are a school leader, try to identify three very concrete or specific ways in which an emphasis on intellectual virtues might be integrated into the advisory program at your school.
- 3. The advisory program at IVA places a strong emphasis on the importance of relationships. Based on your own personality or experience, why do you think this might be critical to helping students practice and grow in intellectual virtues? Support your answer with an example or two.

Part 4.

Fostering Intellectual Virtues Inside the Classroom: Core Principles and Practices

CHAPTER 20

A Safe and Supportive Classroom Environment

In the previous seven chapters, our focus has been on strategies and practices that can be undertaken outside the classroom. But these measures aren't freestanding. They're intended to complement classroom-based practices that can also be used to develop virtuous habits of mind. In this and remaining chapters, we turn our attention to these latter practices—to things that you as a teacher can do in the context of classroom instruction to facilitate your students' growth in intellectual virtues.

Several measures discussed in these chapters overlap with one or more of those discussed in previous chapters; however, as we'll see, their application to a classroom context can be sufficiently different so as to merit separate consideration. It's worth bearing in mind, along the way, that the effectiveness of these strategies and practices will be magnified to the extent that they are implemented within the kind of school climate and culture described in the first half of the guide.

SAFETY AND RESPECT

Intellectual character growth, we've seen, involves deep personal change: it affects what one cares about, what one believes, how

one feels, and how one is disposed to think and act. An intellectually virtuous person cares about learning, believes that thinking and knowledge are valuable, delights in intellectual exploration, and is disposed to wonder, ask questions, seek explanations, and consider alternative perspectives.

For students to be open to the kind of change involved with growth in intellectual virtues, they must believe and feel that they are in a "safe" environment (Ritchhart 2002: 70-72; 167-70). While this includes physical safety, it goes far beyond that. Students feel safe, in the relevant sense, only if they also feel like they can be themselves, take risks, share their beliefs, and so on, without

"Every classroom operates according to a set of values.

Certain things are praised and rewarded; others are frowned upon or even punished; and others still are regarded as neutral, being neither rewarded nor frowned upon."

the threat of personal judgment, ridicule, or critique from others. This doesn't mean that their ideas or work or actions can't be evaluated or assessed by their teachers or peers. The latter activities can be undertaken in ways that are entirely consistent with personal respect. What it does mean is that *personal* criticism and judgment—criticism or judgment aimed at who a student is as a

person or at a student's potential for success or growth—must be avoided. This includes any kind of judgment or criticism that is likely to elicit shame or humiliation. If a student fears speaking up or fears trying hard in school because she thinks that doing so may lead to negative judgments or remarks about her basic cognitive abilities or her very dignity as a person, then even the most valiant efforts at helping this student grow in intellectual virtues are unlikely to prove effective. For, again, growth in these traits requires personal openness and engagement.

A RESPECTFUL CLASSROOM CULTURE

For these and other reasons, it is essential to successful intellectual character education that we as teachers create classroom cultures that place a very high premium on respect. The following are some steps that can be taken in this direction:

Modeling. Our attitudes and actions as teachers are among the strongest cultural forces in a classroom (Lickona 2004: Ch. 5 and 1991: Ch. 5; Ritchhart 2015: Ch. 5 and 2011: 161-64). Thus we must, without exception and in all of our interactions with students (and others), model respect. This means having a good sense of what counts as respectful behavior and what doesn't, being alert to situations in which one might be tempted to act less than respectfully, and choosing to act in a respectful manner. In the event that we end up crossing the line, speaking or behaving toward students in ways that are less than respectful, we must immediately acknowledge and own this, apologizing as necessary. If students can be confident that we will always treat them with respect, this will go a significant way toward helping them feel safe and treat each other with respect.

Classroom values. Every classroom operates according to a set of values. Certain things are praised and rewarded; others are frowned upon or even punished; and others still are regarded as neutral, being neither rewarded nor frowned upon. It is, of course, the rare or non-existent classroom that rewards overt disrespect. However, no small number of classrooms reflect a neutral stance toward certain respectful or disrespectful behaviors. Think, for example, about the practice of unreflectively calling on whichever student raises his hand quickest or in the most noticeable fashion. This fails to do justice to the fact that every student can and should have an opportunity to contribute constructively to classroom discussions. Along similar lines, research shows that in many classrooms, boys tend to get called on more than girls, presumably at least partly because of their tendency to be more outgoing and assertive (Frawley 2005). As these examples illustrate, we as classroom teachers would do well to take a step back and ask ourselves questions like: "Which actions are most rewarded in my classroom? Which actions are frowned upon or discouraged (whether implicitly or explicitly)? When it comes to policies and practices that signal respect for students, is the culture of my classroom neutral (or even hostile) to any of these?"

Expectations. Values are closely related to expectations. Indeed, the former lead naturally to and are expressed in the latter. Classroom expectations are norms, rules, or principles that students are expected to abide by (see Ritchhart 2015: Ch. 2 for more on the importance of expectations). They are not mere ideals that we are trying to make progress toward or that we merely hope our students will achieve. Rather, expectations carry the force of duty or obligation. Here we might consider: "What sorts of actions or behaviors do my students know are prohibited in my classroom?" If my classroom is marked by a culture of respect, this should be evident in my answer to this question. It should be a well-established and familiar truth in my classroom that any form of disrespect—e.g. personal critique or humiliation of any kind—is unacceptable. Importantly, my students should also have a good sense of what this does and doesn't permit

and why it is such an important expectation.

Premium on listening. What respect looks like or demands will vary considerably from one context to another. In a classroom context, respect makes significant demands on how we listen to others. Classrooms are highly social and interpersonal contexts. And they involve a constant exchange of information and ideas. Thus they also provide constant opportunities for students and teachers to show respect (or disrespect) to others on the basis of how well they listen to each other's ideas. A classroom in which students talk over each other or are more concerned with blurting out their momentary thoughts than with listening to what the teacher or their peers are saying won't be a respectful place.

But why exactly should listening to others be a matter of respect? Isn't it enough that we simply allow others to speak? When students in particular share their thoughts and opinions, they are sharing some small piece of themselves. This involves considerable vulnerability. Unsurprisingly, then, responses to their thoughts and opinions

"When students in particular share their thoughts and opinions, they are sharing some small piece of themselves. This involves considerable vulnerability."

can feel very personal. In these responses, students read messages—whether intended or not—about themselves. While some students can be oversensitive or take non-personal criticism personally, it is, as a general rule, quite reasonable to view others' responses to our genuine intellectual efforts as an indication of how well we are being respected. Thus while proper respect requires more than just listening, it requires at least this much.

This illustrates an important point about the virtue of attentiveness.

The attentive learner is one who is genuinely present in the learning process. In a classroom exchange of ideas, this means, among other things, that she listens thoughtfully and carefully to what the teacher and her classmates have to say. As this suggests, attentiveness is an important part of the kind of respect we're reflecting on.

Treating students with respect and ensuring that they do the same with each other does not, of course, represent the upper limit of what we should want and aim for in our classrooms. As I'll get to in a moment, we should also encourage our students to *care* about and *support* each other. Nevertheless, while respect does not define the upper limit of how classroom interactions should go, it does define the lower limit. Anything less than respect is a serious problem—both in its own right and with an eye to creating a classroom environment that is conducive to intellectual character growth.

FORMING CARING AND SUPPORTIVE RELATIONSHIPS WITH STUDENTS

It is a tall order to get students to positively care about and support each other. While there are things we can and should do to this end, the success of these efforts is at least partly outside of our control. What we do have control over, however, is the extent to which we cultivate caring and supportive relationships with our students.

Some teachers think of their primary role as the delivery of ac-

ademic content. Others would add the responsibility of helping students develop certain intellectual skills or "core competences." If you are one of these teachers, the idea that you should also seek to cultivate caring and supportive relationships with your students may seem altogether unreasonable. You may think of this as above your pay grade and outside your job description.

But this attitude ignores a growing body of literature showing that learning—even academic learning—occurs best in the context of caring and supporting relationships (see Ritchhart 2015: Ch. 8; Berkowitz and Bier 2006; Siegel 2012). Safety and respect lay the groundwork for such relationships, but they do not guarantee them. Developing trusting and caring relationships with

"Developing trusting and caring relationships with our students requires more than safety and respect—it requires positive attention to and action on behalf of their well-being."

our students requires more than safety and respect—it requires positive attention to and action on behalf of their well-being. The upshot is that even if our primary concern happens to be our students' acquisition of knowledge and skills, we would still do well to get to know them and to show care and concern for each one of them as persons.

This is no small challenge. Attending to the individual well-being of our students in a caring and supportive way requires, among other things, a kind of deep and genuine presence on our part. This is a problem because there are days when our hearts and minds are elsewhere. While we may be thinking about what we're doing well enough to make it through our lesson, we are not really present with our students. For some teachers—those whom we tend to describe as "checked out"—this may be the norm. Unfortunately, a lack of personal presence in the classroom is a major obstacle to forging positive relationships with our students. Yet, even once we're made aware of this, such presence can be difficult to practice. This may be because being truly present with others requires being truly present with ourselves as well—it requires being honest with ourselves about what we're really thinking and feeling or how we're really doing. Sometimes this can be an uncomfortable and unpleasant process.

This challenge notwithstanding, if we can manage to be present with our students, this can have a transformative effect on our teaching. In my own experience, I have found that making an effort to be present with my students prevents my mind from wandering or being pulled in the direction of the many different things going on in my life at the moment. Instead it helps me be oriented toward the details of my students' thinking, which in turn puts me in a much better position to approach whatever content we're addressing in the right way, at the right pace, etc. In this way, being present can contribute to more effective teach-

ing. It is also a signal to my students that I am interested in and available to them.

The following are some simple practices we can engage in as we seek to cultivate caring and trusting relationships with our students:

Listening and asking good questions. As suggested above, attentive listening is one way I can show students that I am present and interested in what they have to say or in how they are doing. One way to make clear to my students that I am attentively listening is by asking thoughtful questions. This indicates to them that I'm interested in what they have to say, which in turn is an indication that I have some concern for them as persons.

Taking a personal interest. There is, of course, only so much we can we do to get to know our students personally. Some of us interact with hundreds of students over the course of a year. However, even within such limits, we can profitably ask ourselves: "To what extent do I make attempts to get to know at least some of my students on a personal level? What are some additional (realistic) things I can do both to cultivate and demonstrate a personal interest in my students?" Most of us can probably do more to create opportunities to get a window into who our students are, including their personal stories and interests.

One small measure I take along these lines is as follows. At the beginning of each semester, I ask each student to share a single "unique and interesting" fact about himself or herself, that is, a fact that likely sets the student apart from other students in the class and does so in an interesting or remarkable way. Students write these facts on a notecard along with other useful information (e.g. major, year in school, hometown, contact info). I use these cards to take attendance

throughout the semester. On the first day of class, I ask students to share their unique and interesting facts with the rest of the class. Instead of having each student simply state his or her fact and then quickly moving on, I typically ask several follow up questions. This ends up giving me greater insight into who each student is and an opportunity to show that I have a personal interest in each student.

"One way to make clear to my students that I am attentively listening is by asking thoughtful questions. This indicates to them that I'm interested in what they have to say, which in turn is an indication that I have some concern for them as persons."

Then, over the course of the semester, I'll regularly refer back to these facts, often in a playful way. Given the way students' eyes often light up when I do so, I suspect that the fact that I remember their unique and interesting facts has special significance for them. While a small and simple example, this way of taking a personal interest in students illustrates both that doing so needn't be too onerous and that remembering personal information about our students (and showing that we remember) can be an impactful way of showing that we care about them.

Making time. A further step we can take toward developing more caring and supportive relationships with our students is to create more opportunities to spend time with them. For most teachers, time is scarce. Thus what exactly this looks like may vary a great deal from one teacher to another. Nevertheless, here again it is unlikely that all or even most of us are already doing everything we can to spend time with our students. Thus we might consider doing things like: seizing, even creating, opportunities to engage in conversations

with students after class or at the end of a school day; hosting occasional small events in our homes for a select number of students (e.g. students who show the most improvement, take the most risks, show a willingness to struggle, or demonstrate some other important quality); sending an occasional encouraging email to a student and asking one or more questions that might make for some follow-up discussion (e.g. encouraging a shy student who makes a rare contribution to class discussion and asking him how it felt and whether he's prepared to do it again); or hosting official office hours (or more office hours) and encouraging students to come and talk about "anything and everything." These are a few ways in which we can create opportunities to interact with students and to demonstrate that we care about them and are willing to invest in their well-being.

Sharing about oneself. The final two suggestions have a less obvious connection with the goal of fostering caring and supportive relationships with students. The first concerns sharing various aspects of our "private lives" with students. Like most other teachers, I have found that any time I share personal stories or information with my students (e.g. about my family, my experiences growing up, or any failure or struggle I've experienced), this immediately gets their attention. It typically results in looks of amusement and wry smiles. This shouldn't be surprising to us. We know—precisely because we were once in their place!—that students tend to think of us as creatures whose existence is limited to the four walls of our classrooms. Hence the shock when they see us outside of this context (e.g. at a grocery store or restaurant).

There's a deeper message in this dynamic. Students are not used to experiencing us as "real people." While to some extent that is probably inevitable, I think it is also due to the fact that we often don't *present* ourselves as real people. That is, we don't share about our personal lives—our personal histories, families, challenges, struggles, loves, and triumphs. This is significant, given our present concern, because any real relationship is a two-way street. If I seek to get to

know my students but am unwilling to reveal anything about myself, the success of my efforts will be limited at best. Thus an important way of cultivating caring and supportive relationships with our students is to be more open with them about who we are as people.

It should go without saying that there are important limitations to this recommendation. Certain kinds of personal information shouldn't be shared with students at all. And some teachers have a default tendency to talk too much about themselves. Thus the suggestion here is to be open about yourself within appropriate limits and in ways that you have reason to think will help you to cultivate more caring and trusting relationships with your students.

Limiting sarcasm. A good sense of humor is a pedagogical virtue. Some of us have senses of humor that at least tend toward the sarcastic. While a kind of playful sarcasm can be consistent with a caring and supportive disposition toward our students, sarcasm in the absence of this kind of disposition can be a dangerous thing. It can be hurtful to students and can generate mistrust. I recently observed a teacher with a sharp but sarcastic sense of humor that pervaded his interactions with students. On certain points, his humor was well received. At times, however, it was expressed in comments that were at least borderline berating. And when it did so, it clearly shut down communication with the students in question. The damaging character of sarcasm can be easy to miss for the sarcastic teacher: from the teacher's point of view, she is just being humorous, and her humor isn't intended to be hurtful; while, from the student's point of view, what's salient is the underlying critique. Thus a good general rule is to be careful with sarcasm and to use it sparingly and thoughtfully.

RISK-TAKING AND EMPOWERMENT

The overall focus of this chapter is on steps that can be taken to create a classroom environment or culture that is safe and supportive. In this context, we have examined the importance of respect and of forming caring and supportive relationships with our students. In this final section, I want to touch on two additional strategies.

The first is to create a classroom environment that also places a high premium on intellectual risk-taking. We will explore this in more detail in a later chapter. For now I want briefly to consider its importance to safety. Think for a moment about why a student might feel that a particular classroom is not a safe place. One possible answer is that the culture or dynamics of the class are such that if the student answers a question or puts forth an effort and the answer she gives or work she does is wrong, she is likely to get embarrassed and feel like a failure. This expectation reflects something important about what's valued in the class. It suggests that success is defined in terms of an ability to get the right answer and especially to get the right answer on the spot or on one's first attempt. In this way, what's emphasized or valued in a particular classroom can have a major influence on whether or the extent to which students feel safe in that space.

Accordingly, one way to help students feel safer in our classes is to prize things other than an ability to get the right answer or

to do so on the spot or without having to struggle. We can do this by deliberately and forcefully valuing intellectual risk-taking. We can regularly explain to our students that and why we value risk-taking. We can build opportunities to practice risk-taking

"We can regularly explain to our students that and why we value risk-taking. We can build opportunities to practice risk-taking into in-class exercises and group work. And we can praise it when we see it."

into in-class exercises and group work. And we can praise it when we see it. This can have a significant impact on whether a student feels safe engaging and participating in our classes. If a student knows that a willingness to take risks is something that's valued, even expected, in my courses, then, naturally enough, the student will experience my class as one in which it's safe to do so, even when doing so involves sharing a wrong answer.

Finally, as we've seen, an important part of creating a safe class-room is creating a respectful classroom. Moreover, we've seen that creating a respectful classroom involves *not* engaging in certain kinds of disrespectful activity, for example, in any kind of personal critique. However, there are also important *positive* aspects of respect that can and should be practiced in the classroom. One of these is *empowerment* (see Berkowitz 2012: Ch. 10; Hattie 2012: Ch. 9).

Imagine a classroom in which the teacher says she greatly respects her students but where the students have no control whatsoever over any aspect of the course or over how the course proceeds from day to day (e.g. how much time is spent on a topic that the students find especially puzzling or exciting). While this could be appropriate in a very limited range of cases, this possibility does strain credulity. This is because part of what it is to respect other persons is to give them a certain degree of autonomy or control. What this looks in an educational setting will, of course, depend a great deal on the specific context in question, for instance, on the developmental stage of the students or on the particular educational aims at stake. But the point remains that if we want our classrooms to be safe and supportive places, we must look for ways to empower our students and to give them a sense of ownership over what goes on in certain aspects of our courses (Berkowitz 2012: 79-84; Ritchhart 2002: 155-57). This might involve letting them determine or at least have substantial input regarding the creation of certain classroom policies, the selection of a class project, or the topics or questions they choose to address for a particular assignment. It may also take subtler and more spontaneous forms, for example, letting students' comments guide and shape some of the content of one's teaching in unexpected ways. Measures like these can encourage students to come out of their shells, engage with the subject matter, apply themselves, and thus to enter into deeper learning.

Chapter 20: A Safe and Supportive Classroom Environment

DISCUSSION QUESTIONS

- 1. Think of a teacher you've had whose classroom felt to you like a safe and supportive place. What do you think this teacher did to make his or her classroom feel this way? How did this impression affect your intellectual activity? Now think of a teacher you've had whose classroom didn't feel like a safe place. Why was this the case? And how did it affect your intellectual performance?
- 2. Does the idea of being "personally present" with your students make sense to you? What would it look or feel like for you to be more present in this way? How do you think it might affect your interactions with and relationship with your students?
- 3. Try to identify three things you presently do on a regular basis that empower your students. Then try to identify three things you *could* do that would empower them further.

CHAPTER 21

Strategic Use of Time and Space

In the present section of the book, we're examining steps that classroom teachers can take to help their students grow in intellectual virtues. In the previous chapter and this one, I'm discussing some steps that are, in a way, preconditions to the more direct measures that will be discussed in following chapters. In Chapter 20 we examined the importance of establishing a safe and supportive classroom climate. In this chapter we'll examine the role that a thoughtful use of time and space can contribute to helping students grow as thinkers and learners.

ALLOTTING OUR TIME

Time is a precious and scarce resource in most educational settings. Most teachers have limited control over how they use it. They are, for instance, expected to cover a wide range of content standards according to a strict "pacing plan." But even in situations like this, it would be unrealistic to suggest that most teachers have *no* control over how they allot their instructional minutes.

The point I want to call attention to is that what we as teachers do with this time says a lot about what we value. It also says a lot

about the kind of impact our classes are (or aren't) likely to have. Thus if we want to do what we can to ensure that our classes have a positive impact on the intellectual character of our students, we would do well to ask ourselves: "How well does my allotment of the time I have with my students reflect this pedagogical goal?" (For a good discussion of this point, see Ritchhart 2015: Ch. 4.)

You may find this a difficult question to answer. It may not be obvious to you how your "temporal expenditures" bear upon the goals of intellectual character education. However, with just a bit of reflection, it should become clear enough how various kinds of classroom activities and routines involve a better or worse use of time.

The following, for instance, are some classroom activities that, while quite familiar and widely engaged in, generally do *not* involve a very effective use of time:

- Making announcements
- Taking attendance
- Returning papers
- Explaining rules, policies, and instructions
- Worksheets
- Writing large quantities of information on the board
- Tangents and digressions
- Problem sets that emphasize rote and repetitive application of rules or formulas
- Round-robin activities (e.g. round-robin reading)

This is a rather limited list of familiar pedagogical activities that involve an inefficient allotment of precious instructional minutes. The first several items on the list are what Ron Ritchhart has referred to as "housekeeping routines" (2002: 87). These activities are obviously devoid of any substantive learning. Other items on the list, while more academically oriented, nevertheless leave a great deal to be desired. The main problem with all the items on the list is that they are not "thinking rich." Instead they are "thinking poor," that is, they do not invite deep or thoughtful engagement with the subject matter. Moreover, several of them are especially time-consuming. Thus they generally amount to "high cost, low yield" investments of our temporal resources.

To get a sense of what a more effective use of instructional minutes looks like, consider the following intellectual activities:

- Thinking
- Wondering
- Reflecting
- Asking questions
- Explaining
- Analyzing
- Probing
- Deriving
- Giving reasons
- Identifying arguments
- Identifying objections
- Extrapolating
- Solving puzzles
- Applying and extending knowledge

For the most part, these terms and phrases don't pick out a specific set of classroom activities or routines. They are, however, a good guide to identifying activities and routines that are "thinking rich" and thus amount to a better investment of our class time. In fact, insofar as we're concerned with aligning our use of this time with the goal of intellectual character growth, we might do better, at least initially, to dwell on intellectual activi-

"[W]hat we as teachers do with this time says a lot about what we value. It also says a lot about the kind of impact our classes are (or aren't) likely to have."

ties like these than to try to identify more specific activities. This is because many familiar classroom activities can be used well or poorly from a temporal standpoint. Thus we might do better to begin by considering: "For any given class, to what extent are the instructional minutes for that class devoted to activities, exercises, or routines that are thinking rich?"

Indeed, a helpful exercise along these lines might be to create a "temporal expenditures" chart or spreadsheet in which you record, for a series of class sessions, the sorts of activities to which you allocate instructional minutes and the extent to which these activities are thinking rich. You could then reflect on what this breakdown says about how well your allotment of instructional minutes corresponds with your actual pedagogical goals. Finally,

in response to what you find, you could then create a "temporal budget" that specifies a superior distribution of instructional minutes and use this budget to inform and guide your lesson planning.

CREATIVE USE OF SPACE

We often don't think about how the physical aspects of our class-rooms can affect the kind and quality of learning that takes place in them. However, it isn't difficult to believe that things like how students' bodies are positioned or the kind of light or images that are present in the classroom might affect how students learn. Nor does the fact that we fail to think about these effects make them any less real. In this section, I'll address three ways in which the use of physical space can enhance or detract from classroom learning. Unsurprisingly, these ways will overlap substantially with the discussion in Chapter 15 about ways that physical aspects of the school at large (outside individual classrooms) can contribute to the kind of culture that exists at the school. (See Ritchhart 2002: 57-61, 170-73; Ritchhart et al 2011: 243-44).

Before getting to this discussion, however, it is worth considering: What do the physical features of your current classroom (e.g. furniture, images, quotations, colors, etc.) suggest about the kind of teacher you are or the kind of learning that takes place in this space? If someone were to enter your classroom after school hours, what impression would they receive about these things (Tishman

et al 2011: 50-51)? Finally, how well does this impression align with your pedagogical goals? For instance, how well does it align with your desire to see your students grow in intellectual virtues?

"What do the physical features of your current classroom (e.g. furniture, images, quotations, colors, etc.) suggest about the kind of teacher you are or the kind of learning that takes place in this space?"

For most of us, there is likely to be at least somewhat of a mismatch between the physical features of our classrooms and the goals and aspirations we have as teachers. In light of this, it is worth reflecting a bit more on the significance of these features and on what can be done to bring them into alignment with the goal of fostering intellectual character growth.

First, certain physical features of our classrooms express and reinforce important educational values. These include the following:

Quotations and questions. In his book Intellectual Character (2002), Ron Ritchhart tells the story of a lackluster educator whose classroom wall is adorned with a poster featuring a lazy-looking gorilla and the words "Thinking makes me tired" (61). While humorous, such a poster is likely to reinforce rather than challenge students' perceptions of learning as boring, tedious, and meaningless. If we're interested in seeing our students grow in intellectual virtues, then we should try to identify adornments of a more thoughtful variety. One possibility already employed by many teachers is the use of inspiring quotations and questions. Consider, for example, the famous

quote from Albert Einstein: "I have no special talent. I am only passionately curious." This quotation speaks volumes. For one thing, it suggests a distinction between innate intellectual talents, on the one hand, and more volitional and cultivatable traits like curiosity, on the other. And it implicitly values the latter over the former. Moreover, the fact that the quotation is from *Einstein* of all people makes it even more significant and powerful. That he viewed his own unsurpassed intellectual accomplishments as attributable to his curiosity, not to his intellectual giftedness, offers hope to the rest of us. It suggests that if we are willing to think, wonder, and persevere in our quest for knowledge and understanding, we might be rewarded with considerable success. Alternatively, consider questions like "Why are we here?" or "Why is there something rather than nothing?" The former is a nice example of an "essential" or "through-line question" that can be used by teachers to organize course content and inspire student engagement (Ritchhart 2002: 58-59). An English teacher, for instance, might use the question "Why are we here?" as a way of analyzing and comparing several works of literature that address this theme. And she might post this question prominently on her wall as a way of priming the imagination of her students and preparing them for thoughtful reflection on several literary texts. The question "Why is there something rather than nothing?" might be useful in a science class that deals with fundamental questions about physical reality. Again, questions like this inspire wonder. And while exposure to them on a single occasion is unlikely to have a significant effect, if students see and attend to them (even if just half-consciously) over the course of an entire semester or year, they may, especially when combined with other influences, play a role in helping students become more thoughtful and engaged.

Intellectual virtues language. Prominently featuring attractive and compelling renderings of key words and concepts can have a similar effect. Indeed, this is a way of giving explicit emphasis to words and concepts central to an intellectual virtues approach. At the Intellectual Virtues Academy, all of the classrooms feature the names and

succinct definitions of each of the school's nine "master virtues" (e.g. curiosity, intellectual humility, intellectual autonomy, etc.). Another approach would be to prominently post slogans that correspond to specific virtues: e.g. "Ask questions" (curiosity), "Admit what you don't know" (intellectual humility), and "Think for yourself" (intellectual autonomy). This can be especially effective when combined with other strategies aimed at fostering intellectual character growth. For example, the virtue terms can serve as an ongoing reminder to students that these are the core values of their school. And they can serve as an ongoing reminder to teachers to regularly give their students opportunities to practice the specific traits in question.

Student thinking. There is a growing body of research that suggests that students learn to think well by being exposed to examples of good thinking, and more specifically, by actually seeing or looking at such examples—rather than by, say, listening to an explanation of what good thinking amounts to (Ritchhart et al 2011: Chs. 2 and 11). It's not difficult to imagine why this might be so. Examples of good thinking are concrete and specific. They put flesh on abstract concepts and principles. This has implications for how we use space in our classrooms. In particular, classroom walls and bulletin boards provide an excellent opportunity to display examples of good thinking—ideally of good student thinking. These visible representations can inform students about and inspire them to experiment with and practice good, careful, deep thinking. Prominently displaying them on our classroom walls can be an effective way of praising and reinforcing the thinking of the students whose work it is. In both of these respects, then, making students' good thinking visible in the classroom can be an effective way helping them understand what good thinking amounts to and encouraging them to develop habits of good thinking.

Second, physical aspects of one's classroom can also be used to encourage certain forms of interaction and intellectual engage-

ment. The obvious example here is classroom furniture, both the type of furniture that is present and how it is arranged. To a certain extent, these things may not be under our control. But, here as elsewhere, the goal is to make the most of whatever freedom and resources we have.

If your classroom has traditional student desks, one thing you might think about is how the arrangement of desks can be used to facilitate or hinder one's pedagogical goals. Think, for instance, about the way that desks are typically organized—in multiple linear rows. What does this physical arrangement suggest about the aims or goals of the class in question? What message does it send?

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In particular, classroom walls and bulletin boards provide an excellent opportunity to display examples of good thinking—ideally of good student thinking."

One plausible answer: the teacher is the most important figure in the classroom and the job of students is to listen and absorb what the teacher has to say. If this is your view, then the traditional arrangement may be fitting. But if your goal is to foster the practice and development of intellectual character virtues, the traditional

arrangement, at least as the exclusive way of organizing the room, leaves a lot to be desired. One familiar alternative would be to arrange desks in a circle. This leaves students facing each other and positions the teacher as one of several interlocutors. But this needn't be the only alternative. How else could desks be arranged in a classroom to facilitate thoughtful and deep engagement with the subject matter?

While one can make creative use of traditional classroom furniture, ideally one would have some freedom to procure at least some items that are less traditional. One possibility here would be to use larger or smaller tables instead of traditional desks. At tables, students are in a better position to engage with each other when called upon to do so. Raised tables can provide an opportunity for restless students to stand while remaining at the table and without being disruptive. Finally, many classrooms have comfortable areas with couches or large chairs on which students can read, think, or talk with each other. Again, the overall challenge here is to think about how whatever items of furniture you have in your classroom can be arranged and used to promote thoughtful intellectual engagement.

Third, in addition to prominently displayed words and messages and a thoughtful arrangement of classroom furniture, things like color, light, and visual images can also have an impact on the overall mood and feel of a classroom in ways that can affect the quality of student learning:

Color and light. Social psychology has shown that human behavior can be influenced to a surprising extent by minor situational factors and influences (Ross and Nisbett 1991). In one famous study, helping behaviors increased when the subjects were in the vicinity of a Cinnabon store, breathing in its sweet aroma (Baron 1997). Given the connection between subtle situational factors and human behavior, it's worth considering how things like lighting and color might be used to facilitate intellectual activity and engagement. Think, for example, about a dimly lit classroom or a classroom with bad fluorescent lighting and drab colors. This is unlikely to be a very intellectually inspiring space. Compare this with a classroom that has large windows, a good deal of natural lighting, and tasteful use of multiple vivid colors. While the differences hardly guarantee that students in this second classroom will be intellectually engaged and inspired, it isn't hard to imagine that they might have some significant, even if very subtle, effect. Together with some of the other measures already discussed, a creative and inspiring use of light and color in classrooms can affect the overall atmosphere of the room in ways that fit with and can even help facilitate the practice of intellectual virtues like curiosity, open-mindedness, and attentiveness.

Visual images. When I think about the images that tend to adorn classroom walls in elementary and secondary schools, what comes to mind is largely pretty generic and uninspiring (think, for example, of the gorilla poster mentioned above). This is an unfortunate missed opportunity, for physical images like photographs and artwork can also be used to facilitate the practice of intellectual virtues (Ritchhart 2002: 57-61, 170-73). Especially relevant here are images that feature or otherwise might inspire thoughtful intellectual activity like wondering, questioning, puzzling, and contemplating. Thus you might consider asking yourself: "What paintings, photos, or other images have you been especially struck or moved by in the past? What about these images did you find so compelling? Could you post copies of these images in your classroom? If not, what are some other images that might have a similar, stirring effect on you or your students?"

Beauty. A very closely related point concerns the importance of beauty. As indicated in a previous chapter, philosophers of long ago liked to talk about the "unity" of goodness, truth, and beauty. The exact meaning and force of this point would require a much greater explanation than I can begin to provide here. Wrapped up in this view, however, is the idea that there is a deep connection between, for example, our experience and appreciation of beauty, on the one hand, and our ability to grasp and understand truth and knowledge, on the other. If this is even remotely correct, then places of learning should be places of beauty. Introducing beauty into your classroom, whether through art, photographs, artifacts, plants, flowers, or other beautiful objects, can bring a vitality to it that can help make students more receptive to deep and thoughtful intellectual engagement and thus to intellectual character growth as well.

In this section, we've examined three different ways that features of the physical environment of a classroom can be harnessed to promote growth in intellectual virtues. The first was using things like quotations and questions or displaying products of good student thinking as a way of communicating and reinforcing important educational values. The second concerned the design and arrangement of classroom furniture. And the third concerned the use of other physical elements like color, light, and visual images.

DISCUSSION QUESTIONS

- I. Identify three routines that you regularly engage in with your students. Are these routines "thinking rich"? If not, would there be ways of modifying these routines to make them a little more thoughtful?
- 2. If someone went into your classroom after hours, what inferences

might they draw about the kind of teaching and learning that tends to occur in your classroom? Would these inferences be correct? Try to identify three relatively simple and inexpensive changes you could make to the physical appearance of your classroom to bring this appearance into closer alignment with your educational values and objectives.

3. Do you buy the idea that goodness, truth, and beauty are deeply connected? Put another way: do you think your students would be more open to learning (truth) if your classroom were a beautiful space (beauty)? If so, why might this be the case? If not, why not?

CHAPTER 22

Direct Instruction

In the previous two chapters, we examined how creating a safe and supportive classroom environment and making strategic use of time and space are importantly related to educating for intellectual virtues. These strategies are aimed at creating a classroom environment—relationally and physically—that is conducive to intellectual character growth. In this chapter and the chapters that follow, our attention will turn to more specific strategies and interventions that can be used to similar effect. We'll begin, in the present chapter, by looking at the role of "direct instruction" in matters of intellectual character.

This chapter is considerably longer than most of the others for a specific reason. For the most part, educating for intellectual virtues is a matter of "how" not "what," that is, it's a matter of how we go about teaching students about math, science, history, and so on. The practice of direct instruction in intellectual virtues is an exception to this. Therefore, in addition to dwelling on the "why and how" of direction instruction, I also seek to spell out a good deal of the "what," that is, the content that might be covered or conveyed in this context.

THE MERITS OF DIRECT INSTRUCTION

By "direct instruction" I mean teaching students what intellectual virtues (and vices) are, how intellectual virtues are related to the other (e.g. moral) dimensions of personal character, how the various intellectual virtues are related to each other, and why intellectual virtues are important for learning and living well. The idea is that having a rich understanding of these topics can play an important role in helping students grow in intellectual virtues.

You might doubt this. For instance, you might point out, plausibly enough, that lots of people are intellectually virtuous—open-minded, curious, intellectually courageous—without having any real idea of what "intellectual virtues" are or of how intellectual virtues are similar to or different from other kinds of excellences. Further, you might note, also very plausibly, that good education has *always* fostered qualities like open-mindedness and curiosity, even in contexts in which these qualities were never mentioned, let alone studied or reflected on. Thus you might wonder: What's the point of teaching students *about* intellectual virtues? In fact, you might even wonder whether doing so could be counterproductive. If we regularly talk with students about intellectual virtues and encourage them to pursue growth in these qualities, they might react by distancing themselves from this goal or deeming intellectual virtues "uncool."

These are legitimate points and concerns. I agree that knowing

about intellectual virtues isn't necessary for growing in intellectual virtues. And I agree that by teaching students about intellectual virtues as part of a broader effort to help them grow in these qualities, we run various risks, including the risk of alienating or even turning students against the pursuit of intellectual

"[B]y providing our students—as well as teachers and other stakeholders—with direct instruction in intellectual virtues, we are equipping them with a shared conceptual and terminological framework."

character growth. However, none of this shows that a limited and thoughtful amount of direct instruction in matters of intellectual character and virtue can't make an overall attempt at intellectual character education more potent and successful. Indeed, there are several reasons for thinking that it can (Perkins and Salomon 1989; Berkowtiz and Bier 2006, 2007; Berkowitz and Puka 2009).

First, by providing our students—as well as teachers and other stakeholders—with direct instruction in intellectual virtues, we are equipping them with a *shared conceptual and terminological framework*. We noted in an earlier chapter that a culture is partly constituted by the language or languages spoken by its members. Thus a common language or vocabulary can help unify the members of a culture. And when the language reflects the distinctive

aims or goals of the culture, it can help unify its members under or in the pursuit of these aims and goals. This is precisely what fluency in the language and concepts of intellectual character and intellectual virtues can do in an educational community seeking to educate for intellectual virtues (Seider 2012: 64-70; Tishman et al 1995: Chs. 2, 3). But, of course, such fluency requires a good deal of direct instruction.

Second, direct instruction in intellectual virtues is a way of giving students a deeper understanding of what exactly intellectual virtues are (and aren't) and of why they are valuable or worth trying to cultivate. As such, it can help guide and motivate the practice of intellectual virtues. If I have a good understanding of the nature of open-mindedness or intellectual thoroughness, say, then when I set out to try to practice and grow in these qualities, I'll have a much better idea of what I need to do-of the ways I need to think, the questions I need to ask, etc. Getting clear on the value of intellectual virtues is important as well. One aspect of direct instruction involves exposing students to "exemplars" of intellectual virtue (that is, people or characters who "exemplify" intellectual in an especially clear and remarkable way). Exemplars are attractive and compelling. Therefore, learning about and reflecting on them can help motivate attempts to cultivate intellectual virtues (see Walker 2002 for a related discussion).

Similarly, helping students understand that intellectual virtues aren't *merely* relevant to education or the "life of the mind" can help

broaden their motivation to care about and pursue these qualities. As noted in a couple of previous chapters, an executive at Google recently identified "intellectual humility" as one of the five major qualities that his company looks for in all of its employees (Friedman 2014). Helping students see that by developing good habits of mind they'll be in a better position to pursue the careers that interest them can have a powerful effect.

The motivation to practice intellectual virtues can also be bolstered by pointing out the connection between these qualities and other important goals and values, for example, the goal of morally responsible decision-making. In many areas of life, making morally responsible decisions requires thinking things through very carefully and thoroughly, asking good questions, consider-

"In many areas of life, making morally responsible decisions requires thinking things through very carefully and thoroughly, asking good questions, considering possible problems or objections, and so on. In other words, it requires intellectually virtuous thinking."

ing possible problems or objections, and so on. In other words, it requires *intellectually virtuous* thinking. Thus helping students see how intellectual virtues are importantly connected with other things they care about can be a way of getting them on board

with the project of intellectual character education. And direct instruction in intellectual virtues can and should do precisely this.

Third, getting a better understanding of what qualities like intellectual autonomy, intellectual humility, intellectual thoroughness, and open-mindedness are can also provide students with greater awareness of opportunities to practice these traits (Ritchhart 2002: 136-37; Perkins and Salomon 1989). If I have only a very fuzzy idea of what intellectual autonomy is, for example, then when a particular assignment or other circumstance calls for an exercise of this virtue, I might fail to recognize this and therefore fail to practice intellectual autonomy. This is true even if I value this virtue and would like to have more of it (Perkins and Tishman 2006). Accordingly, one important outcome of direct instruction is an enriched understanding of particular virtues that will enable students to better recognize opportunities to practice these virtues.

Fourth, learning more about intellectual virtues opens up the possibility of deeper self-understanding and self-awareness. Again, helping students develop a good grasp of what intellectual virtues are and why they're important can cause them to see, not just the world, but also *themselves* in a new way. Without an understanding of what curiosity, intellectual thoroughness, or intellectual tenacity are, I'll be unable to tell very well to what extent I'm growing or need to grow in these qualities. By contrast, if I have a rich understanding of these qualities, I'll be in a position to

apply this knowledge to my understanding of my own mind and intellectual character. This will make me more self-aware. It will also put me in a much better position to navigate life: I'll know my intellectual character strengths and weaknesses and will be able to take steps and make decisions in light of this knowledge (Tishman et al 1995: Chs. 6, 7).

Fifth, direct instruction nicely complements other pedagogical strategies aimed at fostering intellectual virtues. One of several possible examples here is the way that intellectual virtues language can be used to provide positive feedback on student performance. Virtues language is richly descriptive and meaningful. It packs a punch. In this respect, it differs from language like "Good job," "Right," and "Nice point." The latter language is evaluatively thin. By couching our positive feedback to students in virtues terminology, we provide them with concrete information about their performance, make it more likely that they will repeat this performance in the future, and link their performance with the stated objectives of the class and school at large. For the use of virtues language to have this effect, however, students must be well acquainted with it and have a good sense of what it picks out. That is, they will need some direct instruction in intellectual virtues.

THE CONTENT OF DIRECT INSTRUCTION

What sort of content should form the basis of direct instruction

in intellectual virtues? This is a difficult question to answer in an unqualified way. The appropriate content is likely to vary from context to context depending on things like which intellectual virtues are being emphasized at the school, the developmental stage or stages of the students, their ethnic, cultural, or socioeconomic backgrounds, etc. That said, I think it's safe to say that direct instruction should provide substantive answers to certain

"Virtues language is richly descriptive and meaningful. It packs a punch. In this respect, it differs from language like 'Good job,' 'Right,' and 'Nice point.'"

general questions, including: What are intellectual virtues? How do they differ from related qualities? In what ways are intellectual virtues valuable? How are intellectual virtues formed? What's the nature of individual virtues like curiosity, open-mindedness, and intellectual courage? What ideas or concepts are closely related to the concepts of intellectual character and intellectual virtues?

To give at least a rough idea of what the content of direct instruction might look like, I'll briefly discuss each of these six questions:

1. WHAT ARE INTELLECTUAL VIRTUES?

The goal here is to give students a general definition or account of intellectual virtues that can then be developed and fleshed out in

various ways. On one plausible way of understanding intellectual virtues, they are the *personal qualities* or *character traits* required for good thinking and good learning.

As *personal qualities*, they say something about who we are as people—they describe (in part) the *kind* of people we are. For instance, you might know, of a particular person, that her name is Amelia and that she was born in Seattle. But this doesn't tell you anything about Amelia as a person. By contrast, suppose you know that Amelia is open-minded, intellectually honest, intellectual humble, and intellectually tenacious. This does tell you something significant (and positive) about the kind of person she is.

To say that intellectual virtues are *character traits* is to say that they're dispositions to *act*, *think*, *and feel* in various (good or excellent) ways. Intellectual courage, for example, might involve speaking up in support of something you believe or persisting with an inquiry even in the face of potential harm to yourself (actions). It might also involve holding to a particular belief or being willing to ask yourself certain tough questions (thinking). Finally, intellectual courage also requires having a certain level of confidence and not being crippled by fear (feelings).

To further unpack the idea that intellectual virtues are the character traits of a good thinker or learner, you might also discuss with students several concrete examples in which a person, despite

other qualifications, is unable to engage in successful thinking or learning *without* exercising virtues like curiosity, open-mindedness, or intellectual carefulness (e.g. a scientist, community leader, or computer programmer, respectively).

2. HOW DO INTELLECTUAL VIRTUES DIFFER FROM RELATED
QUALITIES?

Here the aim is to head off certain misunderstandings or misconceptions students might have about intellectual virtues. I'll briefly discuss two. First, some students are likely to confuse intellectual virtues with other cognitive abilities which, while perhaps not entirely hardwired, are more a matter of cognitive hardwiring or raw ability than are intellectual virtues. A good example here is intelligence as it has traditionally been conceived of—or, if you prefer, IQ. Another possibility is the quality of being a "good test-taker." It is very important for students to understand that these things are almost entirely distinct from intellectual virtues. A person can be utterly brilliant in the IQ department while nevertheless being intellectually lazy, arrogant, dogmatic, and closed-minded. And a person can be curious, intellectual humble, attentive, and intellectually tenacious while not being intellectually "gifted." Likewise a person can possess a wide range of intellectual virtues while still struggling in a testing context, either because of test anxiety (say) or because the test requires a particular kind of thinking that is distinct from the kind of thinking required by intellectual virtues.

Second, in the absence of clarification, there's a good chance that students will regularly conflate intellectual virtues with moral or civic virtues. This is very understandable given that words like "courage," "humility," and "autonomy" are used to describe all three sets of traits. However, while intellectual virtues are closely related to and bound up with moral and civic virtues, it's important to be mindful of the differences between them.

One way of helping students avoid this confusion is to present intellectual virtues (e.g. curiosity, open-mindedness) as the character traits of a good *thinker* or *learner*, moral virtues (e.g. compassion, generosity) as the character traits of a good *neighbor*, and civic virtues (e.g. tolerance, respect) as the character traits of a good *citizen*. A little reflection on and exploration of these claims

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(including a discussion of *examples* of each type of virtue) should make clear enough that there are some important differences between intellectual virtues, on the one hand, and moral and civic virtues, on the other. (Of course, it will also reveal some import-

ant overlap: e.g. to be a good neighbor, you have to be attentive and open-minded toward others; and to be a good citizen, you have to think through political issues carefully and thoroughly.)

When it comes to helping students make distinctions between, say, *intellectual* courage and *moral* courage, a helpful point can be that intellectual courage is just courage (in general) applied in the context of thinking or learning, or in the pursuit of knowledge and understanding, while moral courage is just courage (in general) manifested in a moral context.

3. IN WHAT WAYS ARE INTELLECTUAL VIRTUES VALUABLE?

To help students buy into the enterprise of education as intellectual character development, it's important that they "see" and understand the value of intellectual virtues. As suggested above, I think this value can be described in at least three ways. First, intellectual virtues, unsurprisingly, are *intellectually* valuable. They can help students succeed at academic and other intellectual pursuits (e.g. chess). Second, intellectual virtues are *morally* valuable. To be a responsible person and to treat other people well (including one's friends and families), one must be prepared to think in certain ways. If I'm not open-minded toward my friends, if I don't listen to them in attentive ways, or if I'm never curious about who they are or what they care about, then they're unlikely to remain my friends very long. Similarly, if as a driver I'm not attentive to my surroundings or fail to make careful observations

or judgments, I might end up hurting myself or someone else. In these and many other ways, acting responsibly or living well requires thinking well. Third, intellectual virtues are also *practically* (or pragmatically) valuable. For instance, it's the rare job or career in which a person won't be more successful if she can think deeply, carefully, or creatively. As the character traits of a good thinker, intellectual virtues go a significant way toward equipping students for successful careers. This is becoming more and more clear based on articles like the one about Google noted above and from the increasing importance employers are placing on so-called "soft skills," which include intellectual virtues like curiosity, intellectual humility, and open-mindedness (Heckman and Kautz 2012; Farnham et al 2015).

In addition to underscoring the types of value just noted, it's also important to invite students to identify and discuss *other* ways that intellectual virtues are valuable. They can do so by exploring questions like: Imagine a person with *no* intellectual virtues. What would this person's life be like? What things (if any) might they gain? What sorts of things would lie beyond their reach?

4. HOW ARE INTELLECTUAL VIRTUES FORMED?

The story about how intellectual virtues are formed is long and complex. It's also a story that is still unfolding as psychologists, cognitive scientists, and other experts continue to shed new light on the factors and processes that contribute to character develop-

ment. Nevertheless, it can be helpful for students to have at least a rough idea of some key points and principles pertaining to the development of intellectual virtues.

One such point is that intellectual virtues aren't something that a person is simply born with (or without). It's true that by nature or on account of how we're parented or the community in which we grow up, most of us have certain natural *tendencies* that make it harder or easier for us to develop certain intellectual virtues. However, virtues themselves arise (in part) through the repeated practice of thinking and actions that are characteristic of the virtues in question. To quote Aristotle: "[W]e become builders by building, and lyre-players by playing the lyre. So too we become

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just by doing just actions, temperate by temperate actions, and courageous by courageous actions" (2000: 23). Similarly, one becomes intellectually careful by practicing carefulness repeatedly and in a relatively broad range of contexts. One becomes intellectually tenacious by repeatedly beating back the impulse to quit.

And one becomes open-minded through the repeated practice of taking up and giving a fair hearing to alternative points of view. Of course, the flipside of this is that virtues can also be *lost* on account of a lack of practice. If I repeatedly neglect to practice open-mindedness when doing so is called for, then at a certain point I won't be open-minded, even if at an earlier point I was. Helping students understand this point will enable them see that (to a significant extent) whether they develop certain virtues is something that is *under their control*.

That said, it's also important not to paint too simplistic of a picture here. The reality is that practicing a virtue isn't always enough to develop it. And for many of us, there may be psychological or character-based obstacles that prevent us from being able or willing to repeatedly practice certain virtues to begin with (see Porter 2015, forthcoming). This is also something that students should be made aware of. We should, as time permits, provide them with as nuanced of an account as they can comprehend about the full range of factors that influence a person's intellectual character development.

5. WHAT'S THE NATURE OF INDIVIDUAL VIRTUES LIKE CURIOSITY,

OPEN-MINDEDNESS, AND INTELLECTUAL COURAGE?

The real goal of intellectual character education is not for students to become intellectually virtuous in some vague or general sense but rather to grow in certain quite specific traits like curiosity,

Therefore direct instruction in intellectual virtues should include significant focused attention on whatever the target virtues are in the classroom or at the school in question. At the Intellectual Virtues Academy, we've developed the following formulations for each of the school's nine "master virtues": a simple and concise (but accurate) *definition*, a *slogan* that captures the general idea, and at least two to three concrete *examples* drawn from history, literature, movies, or elsewhere. To illustrate, I'll briefly share the definitions and slogans for all nine virtues:

Curiosity: a disposition to wonder, ponder, and ask why. A thirst for understanding and a desire to explore. *Slogan*: Ask questions!

Intellectual humility: a willingness to "own" one's intellectual limitations and mistakes. Unconcerned with intellectual status or prestige. *Slogan*: Admit what you don't know!

Intellectual autonomy: a capacity for active, self-directed thinking. An ability to think and reason for oneself. *Slogan*: Think for yourself!

Attentiveness: a capacity for being "present" while learning. Notices and attends to important details. Slogan: Look and listen!

Intellectual carefulness: a sensitivity to the requirements of good thinking. Quick to notice and avoid intellectual pitfalls and mistakes. Slogan: Avoid errors!

Intellectual thoroughness: a willingness to probe for deeper meaning and understanding. Unsatisfied with mere appearances or easy answers. *Slogan*: Go deep!

Open-mindedness: an ability to think outside the box. Gives a fair and honest hearing to competing perspectives. Slogan: Think outside the box! Intellectual courage: a readiness to persist in thinking or communicating in the face of fear, including fear of embarrassment or failure. Slogan: Take risks!

Intellectual tenacity: a willingness to embrace intellectual challenge and struggle. Keeps its "eyes on the prize" and doesn't give up. *Slogan*: Embrace struggle!

For some of the *illustrations* or *examples* we have identified for each of these virtues, see Chapters 4-12, which explore these virtues in more depth.

We have found the combination of definitions, slogans, and concrete examples to be an effective way to impart a basic but still relatively "thick" conception of the particular virtues we're attempting to foster at the school.

6. WHAT IDEAS OR CONCEPTS ARE CLOSELY RELATED TO THE
CONCEPTS OF INTELLECTUAL CHARACTER AND INTELLECTUAL
VIRTUES?

While intellectual virtues are the primary focus of the kind of direct instruction we're concerned with, it can also be useful to acquaint students with importantly related concepts. I'll briefly discuss two examples.

One is the notion of intrinsic motivation. There is a considerable

and growing body of research about the difference between intrinsic vs. extrinsic motivation and the importance of this difference to intellectual performance and growth. Briefly, a student is *intrinsically* motivated to think about math or history, say, if his motivation for doing so doesn't depend on the possibility that he'll receive certain external treats or rewards. Thus a student who learns about math or history just because he is curious about the relevant aspects of these subject matters is intrinsically moti-

"The real goal of intellectual character education is not for students to become intellectually virtuous in some vague or general sense but rather to grow in certain quite specific traits like curiosity, attentiveness, intellectual thoroughness, and intellectual courage."

vated. By contrast, a person who learns about these things simply as a way to get a good grade or to earn a new iPhone or other treat is *extrinsically* motivated. Research has shown, unsurprisingly, that intrinsically motivated students do better in school. It has also shown, somewhat more surprisingly, that when teachers or parents do things to boost students' extrinsic motivation, their intrinsic motivation actually decreases (Deci et al 2001; Ryan and Deci 2000; Stipek 2001).

How is this connected with trying to educate for intellectual vir-

tues? One important observation is that intellectual virtues, at least in their purest or fullest form, spring from intrinsic intellectual motivation. A fully intellectually virtuous person thinks outside the box, pays close attention to details, seeks and provides deep explanations, and so on, because she desires to learn and understand. And she prizes learning and understanding at least partly for their own sake. Thus to grow in intellectual virtues is to grow in intrinsic motivation. This connection between intrinsic motivation and intellectual character growth is a good thing for students to understand. It can help them care more about being intrinsically motivated. And it can help them make sense of certain things their school or teachers tend to talk about or prioritize.

A second example is the distinction between a fixed and a growth mindset (Dweck 2006, 2010). If I have growth mindset, then, among other things, I view success in school as something that is (to a significant extent) under my control. I don't view my ability to do well in math, for instance, as depending mainly on whether I'm "a math person" (i.e. whether I have a natural gift or aptitude in math). Instead, I view it (largely) as a function of whether I can learn to ask the right questions, think outside the box, persevere, and so on. This in turn has important implications for how I think and feel about struggle and failure. If I have a fixed mindset, then I view the fact that I struggle in or have failed in a certain area as evidence that I simply don't have what it takes to succeed. This in turn leads me to avoid doing things in that area (e.g. taking a challenging math course). It may also lead to feel-

ings of insecurity or even shame. By contrast, if I have a growth mindset, believing that my ability to succeed is substantially under my control, then I will think about and experience struggle, and potentially even failure, not as sources of condemnation, but as opportunities to learn and grow.

It isn't difficult to see how the distinction between a growth mind-set and a fixed mindset is relevant to educating for intellectual character growth. The latter will succeed only if students believe that they really can grow in qualities like intellectual autonomy, attentiveness, and intellectual courage. And if they do believe this, this will free them up to experience struggle or failures in these areas as opportunities to reflect, regroup, and try again. At IVA, we have found the language of a fixed and growth mindset to be something that students can readily understand and that helps them understand and more readily pursue the practice of intellectual virtues.

METHODS OF DIRECTION INSTRUCTION

The previous section sought to provide an idea of the kind of content that might be shared and discussed in the context of direction instruction in intellectual virtues. But the question remains: When or how should this content be conveyed? This will vary a great deal from one context or teacher to another. However, to prime your imagination on this point, I'll briefly discuss several possibilities.

One is to conduct short mini-lessons at the beginning or end of a class period. These could be devoted to one core idea or virtue each. For instance, you might consider covering one virtue per week, allotting a total of 15-20 minutes for each one. Or, if that sounds like too much, you might do the same but on a monthly basis. Obviously, introducing anything new into your curriculum will mean that you have fewer instructional minutes to devote to something else. However, if you're doing what you can to be as thoughtful and efficient with your class time as possible (e.g. along the lines described in the previous chapter), the idea of, say, devoting 20 minutes to direct instruction on intellectual virtues per month should not be too onerous.

This kind of direct instruction can easily be reinforced by a second kind, namely, posting virtue terms, definitions, or slogans prominently on the walls of your classroom. As we also noted in the previous chapter, this can serve as a constant reminder to teachers and students alike of the character-based goals of the course. It can also be a way of helping students absorb which virtues are being focused on and what each virtue looks like in practice.

A third possibility is to integrate direct instruction into your existing units. This will be easier in some subject areas than others. If you're an English teacher, for example, you might use reflection on particular literary characters as a basis for helping students better understand what certain intellectual virtues look like or don't look like. One English teacher I'm aware of assigned

a series of papers in which her students were required to analyze the character strengths and weaknesses of the characters in the novels and short stories they were reading. Similarly, if you're a history teacher, you can help your students better understand what intellectual virtues are by drawing attention to the intellectual character strengths or weaknesses manifested by the historical figures they're studying. A similar approach can be taken in science, especially where the curriculum involves learning about different scientists or about their inventions or discoveries (many

"[E]xamining the closed-minded or dogmatic thinking of a particular person or group of people in history, or the way that intellectual vanity or arrogance has impeded scientific progress at various points, can be a way of bolstering students' opposition to intellectual vices and increasing their commitment practicing intellectual virtues."

of which happened in part because the scientists practiced certain intellectual virtues). (See Tishman et al 1995: 46-48 for a nice example of what this might look like.) Similarly, in these or other subject areas, one can incorporate reflection on intellectual virtues by addressing the kind of *thinking* that the subject area demands: e.g. what's involved in thinking like a scientist, historian, or mathematician.

A fourth and closely related possibility involves calling attention to cases in which a student clearly manifests one of the target virtues. Suppose open-mindedness is one of the main virtues I'm attempting to help my students grow in. And suppose that midway through a class discussion I see a student change her mind after listening carefully to what one of her classmates has to say. This can serve as a concrete example of what open-mindedness looks like in the context of the material and level at which I'm teaching. Thus, upon seeing the student, whom we'll call Roberta, give serious consideration to an alternative point of view and change her mind based on what she found, I might say: "Notice what Roberta just did. She was firmly convinced of her view. But after listening to the arguments on the other side, she was able and willing to change her mind. That's an excellent example of open-mindedness." In this way, events that occur in one's classroom can serve as spontaneous opportunities for direct instruction—they can illuminate what important virtues look like in a very "real life" setting.

A fifth possibility might be to create virtue-based resources (e.g. a thoughtful packet or short online videos) that students can engage with outside of regular class time. To encourage students to take these opportunities seriously, you could develop one or more assignments corresponding to this material. For instance, suppose you are trying to foster curiosity. You could send students home with useful resources for understanding what curiosity is and why it's important. Combining this strategy with the one immediately

above, you could devote a limited amount of class time to discussing their responses to these resources. Finally, you could have each of them engage in a creative exercise (e.g. drawing a comic strip or making a video) that would demonstrate to you that they have a good handle on what curiosity is and why it's valuable.

While these are a few classroom-based examples of how teachers might go about incorporating direct instruction in intellectual virtues into their teaching, you are probably in the best position to know what will work best for you and your students. In the previous section, I provided an idea, at least in broad outline, of the kind of content that would be appropriate to convey. Thus it really is up to each of us to consider: "Given the various constraints and limitations I face, how can I most effectively incorporate some of this content into my teaching? What 'windows' or opportunities do I have to do this? How might I create some opportunities?"

Before moving on, I'll also quickly identify three other occasions on which direct instruction might take place. The difference between these and the occasions discussed above is that they are school-based rather than classroom-based. First, schools can incorporate a significant amount of direct instruction at every fall orientation meeting, where all students (and sometimes their family members) will be present. Second, administrators can schedule assemblies throughout the year substantial parts of which are devoted to helping students deepen their understanding of intellectual virtues. Third, schools can build a strong emphasis on

intellectual character development into their advisory programs, including a substantial amount of direct instruction. These are a few of a wide range of ways in which a school as a whole might go about trying to help students acquire the relevant understanding (see Chapter 15 for more on this topic).

GUIDING PRINCIPLES

In this final section, I will touch briefly on several principles and pointers intended to capture the way in which one might go about trying to conduct direct instruction in intellectual virtues via one or more of the channels noted above:

Keep it simple. It's important to pitch the relevant content and ideas at a developmentally appropriate level. For instance, definitions of key virtues written for adults or high school students are unlikely to be as comprehensible to elementary students. This is part of what led us at IVA to supplement our definitions of the school's "master virtues" with pithy slogans for each virtue. The definitions, shared above, are pitched at a fairly high level. While, in our experience, middle school students can understand them well enough, the slogans provide an even simpler way of conveying what each virtue is about.

Make it vivid and attractive. For intellectual character education to be successful, a certain amount of buy-in from students is essential. While they may not always be excited about practicing virtues that make them think deeply and hard, it's important that students have a favorable view of intellectual virtues. As the label suggests, direct instruction is one of the most direct and explicit ways in which we can share with students about an intellectual virtues educational model. For this reason, it's important that we think very carefully

about how this information is formulated. This is partly a matter of making it developmentally appropriate. But it's also a matter of making it engaging, compelling, and fun. Dry, boring, or overly serious explanations are unlikely to captivate students' imaginations or compel their interest.

Exploit the power of intellectual vices. Our focus so far has been on providing students with information and examples of intellectual virtues. However, a further powerful tool in the context of direct instruction is a focus on intellectual vices, which are defects of intellectual character like narrow-mindedness, small-mindedness, closed-mindedness, and intellectual arrogance, vanity, apathy, sloppiness, and superficiality. Reflecting on these qualities—or seeing them "in action" in books or films or current events—can deepen and enrich our understanding of what intellectual virtues are by vividly illustrating their opposite. Further, because these qualities generally are personally unattractive and frequently lead to negative outcomes, reflection on intellectual virtues can also have an impact on students at a motivational level. For instance, examining the closed-minded or dogmatic thinking of a particular person or group of people in history, or the way that intellectual vanity or arrogance has impeded scientific progress at various points, can be a way of bolstering students' opposition to intellectual vices and increasing their commitment to practicing intellectual virtues.

Make the process active and collaborative. The immediate goal of direct instruction is for students to acquire knowledge of intellectual virtues and related concepts. For this reason it can be tempting to try to impart this knowledge by simply telling students about intellectual virtues. However, the ultimate aim is for students to internalize the knowledge in question—for them to make it their own. Thus it's not enough that we simply lodge new facts or beliefs about intellectual virtues in our students' minds. They need to participate in and "own" the knowledge in question. This places constraints on how this knowledge should be conveyed. It means that when undertak-

ing direct instruction in intellectual virtues, our approach should be marked by active participation and collaboration. Students need to get involved and invested in learning about the virtues. They can't be left to simply sit back and absorb the relevant information.

I'll briefly share an example of what this might look like. During an IVA advisory session at the beginning of the year, we had students get into small groups and create short videos on iPads for one or more of the school's "master virtues." Each group was asked to take the definition of a given virtue, think of a realistic scenario calling for an exercise of the virtue, and write a short script and make a short animated video illustrating the value of practicing the virtue (or the perils of failing to do so). This exercise was fun for the students and it required them to apply a virtue concept to a real life situation and to think about the difference this virtue might make in that context.

Avoid trivializing the material. Attempts to adhere to the three principles just noted can lead to a problem of a different kind, which I'll refer to as the "problem of trivialization." Specifically, when trying to describe intellectual virtues in an engaging and age-appropriate manner, some of us may have an inclination to treat the subject matter in ways that are overly simplistic or cute. Admittedly, such ap-

"[W]hen trying to describe intellectual virtues in an engaging and age-appropriate manner, some of us may have an inclination to treat the subject matter in ways that are overly simplistic or cute."

proaches can work reasonably well in the short term. However, we don't want students getting the idea that "this intellectual virtues stuff is just for kids." Nor do we want to give them the impression that a complete understanding of intellectual virtues is easy to ob-

tain or that it is easy to practice or grow in intellectual virtues. The reality is that every virtue is complex and, on close scrutiny, gives rise to difficult questions about what the virtue does and doesn't involve, how it's connected with other virtues, and when it might be appropriate *not* to practice it. Therefore, while we need to explain intellectual virtues to students in ways that are understandable and compelling, we shouldn't obscure their depth and complexity. Ideally, students would get the impression that, on the one hand, they can understand what curiosity, open-mindedness, intellectual courage, and so on, are and why these traits are important, but also that there is much more to these traits than they presently grasp. So, in thinking about how to formulate the content for direct instruction, we'd do well to enter into the tension between these two questions: "How can I make these ideas understandable and compelling for my students? How can I avoid making these ideas seem trivial or simpler than they really are?"

Ongoing exposure and reinforcement—but without oversaturation. Because knowing about intellectual virtues is instrumental to the success of other methods for fostering intellectual character growth, it's important that a significant amount of direct instruction take place at the beginning of the year. Once this has been accomplished, it can be tempting to let such instruction be a thing of the past, that is, to not continue to reinforce and deepen this knowledge. As with most knowledge, however, knowledge of intellectual virtues will fade if it's not regularly returned to and reflected on. Thus the direct instruction component of intellectual character education shouldn't be viewed as a one-time investment; rather it should be an ongoing process. We must continue to talk with our students and to reflect with them about what intellectual virtues are and why they're important. Fortunately, once the foundation has been laid, this can be done in fun and creative ways—e.g. by reflecting on "character studies" of persons or characters who exemplify particular virtues especially well (or poorly) or by watching videos or listening to podcasts that feature particular virtues (e.g. curiosity or creativity).

But here as well we walk a fine line: while maintaining a conversation about intellectual virtues is essential, it's also possible for us to talk about these things so much that our words begin to fall on deaf ears. Thus we must always be mindful of how students seem to be receiving and responding to these discussions. Are they growing in their understanding and interest in intellectual virtues? Do they seem to be growing tired of intellectual virtues talk? If the latter, we may need to pull back a bit, relying on other means of helping them to grow and mature intellectually.

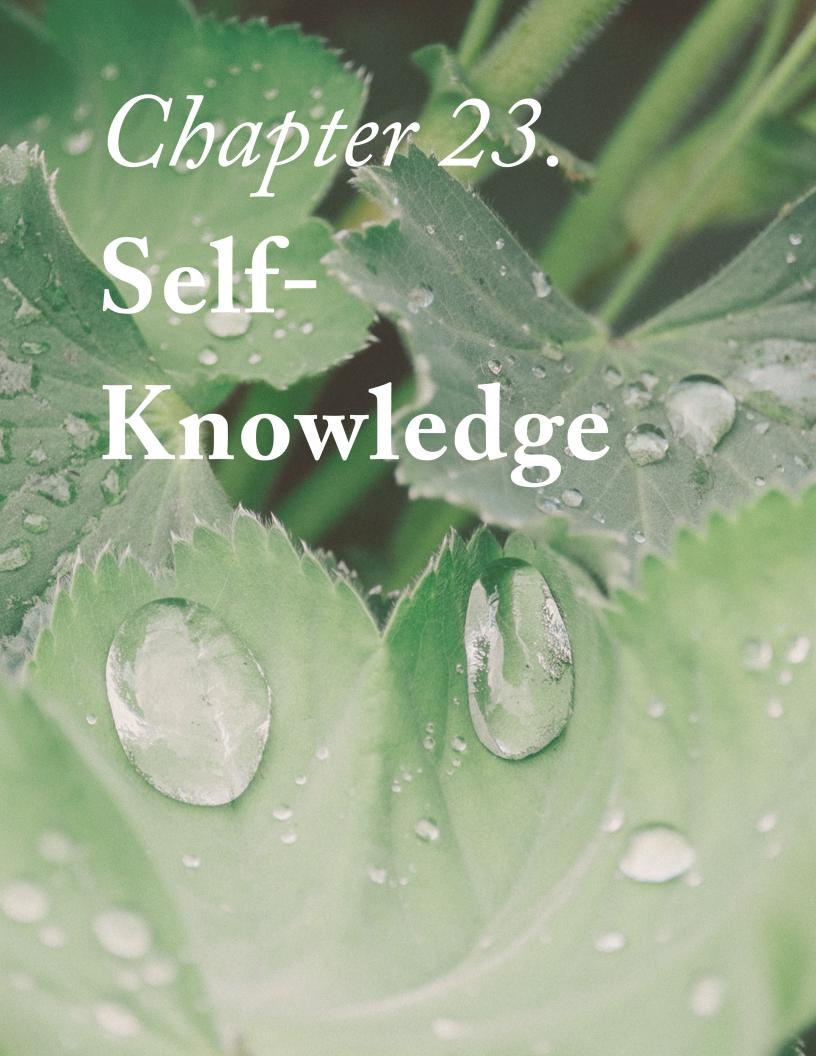
Don't make direct instruction the primary effort. This leads to a final point. If direct instruction is your only or even your primary way of trying to help your students grow in intellectual virtues, then you're very likely to find yourself frustrated and disappointed. For most people, learning about intellectual virtues is no guarantee whatsoever that they will thereby become more intellectually virtuous. If it were, then intellectual character education would be a relatively simple, cut-and-dried endeavor. However, personal growth and change are complex, demanding processes that are best facilitated by a wide range of different factors and influences (hence the 22 chapters in this guide identifying particular steps and strategies). Direct instruction is best understood as one essential but relatively straightforward and minor element in an overall approach to intellectual character education.

DISCUSSION QUESTIONS

- Based on your reading of the guide thus far, how would you be inclined to define or explain intellectual virtues to your students? Which specific virtues would you likely focus on? How would you define or explain these specific qualities?
- 2. When you think about intellectual *vices*, which qualities immediately come to mind? Where do you tend to encounter these qualities?

What sort of effects—positive or negative—do they tend to have? Which virtues might serve as correctives or antidotes to these vices?

3. What might be some creative methods for helping your students get a better understanding of intellectual virtues in general or of certain specific virtues in particular?



In the previous chapter, we examined the importance of helping students develop an understanding of intellectual virtues and the various ways that these qualities are valuable or worth pursuing. One reason this is important is that it puts students in a position to begin thinking about their own intellectual character strengths and weaknesses. It positions them to develop an important kind of self-understanding.

At the Intellectual Virtues Academy (IVA), we often say that a central goal of the school is to help students understand "how their minds work," that is, the ways they tend to think, observe, remember, wonder, and so on. Put another way, the goal is that students will develop a rich, honest, and detailed understanding of their own intellectual character strengths and weaknesses. This involves taking what they know *about* intellectual virtues and applying it to how they think about, understand, and experience themselves. Ideally, students would begin to see their intellectual character as something that partly defines who they are—as part of their very *identity* (see Ch. 34 for more on this topic).

None of this comes easily. While you might think that each of us can just "introspect" and identify, say, our top three intellectual

character strengths and weaknesses, the actual nature or character of the self generally is too elusive for this. We are prone, for instance, to think a bit too highly of ourselves and our abilities; and we are inclined to attribute our own shortcomings and failures to factors outside of our control, while viewing others' shortcomings and failures as a reflection of their abilities and character (this is called the "fundamental attribution error"; see Ross and Nisbett 1991). In short, we often deceive ourselves about ourselves. As a result, certain fundamental aspects of our character lie beyond our immediate awareness.

While a deep and accurate understanding of our intellectual character is difficult to come by, it remains very important.

"Socrates famously said that one of the most important things in life is to 'Know thyself.' Knowing yourself—not being deceived about or out of touch with yourself—seems like a fundamental human good."

Self-knowledge is something that many of us prize for its own sake. We don't want to be out of touch with ourselves—with who we really are, with what we care about, with what we're feeling, or with how or what we think or believe. Socrates famously said that one of the most important things in life is to "Know thyself." Knowing yourself—not being deceived about or out of touch with yourself—seems like a fundamental human good. And part

of what this involves, of course, is knowing your own intellectual character strengths and weaknesses (Tishman, Perkins, and Jay 1995: Chs. 6, 7).

Knowledge of one's intellectual character is also important for other reasons, including that it can play an important facilitating role in our attempts to grow in intellectual virtues. First, it can help us identify areas in which we can improve. If you pursue growth in intellectual virtues but without a sense of your current intellectual strengths and weaknesses, your efforts are likely to be inefficient at best and fundamentally misguided at worst. We need to be aware of where we're starting from in order to know where to head and how best to get there. Second, having a rich and accurate understanding of our intellectual character can help us negotiate challenges and seize opportunities along the way to intellectual growth and maturity. For instance, if a student knows she struggles with intellectual tenacity and perseverance, then when she is assigned a significant project for class, she might take pains to get started on the assignment sooner than later, giving herself an opportunity to work hard and keep trying without the threat of an imminent deadline. If a student is aware that he tends to succumb to a fear of contributing to class discussions, he might set a goal to ask a certain number of questions in his classes over the course of a given week. If a student struggles with intellectual humility, being prone to correct or talk over other students' comments, he might choose to allot himself a limited number of comments in a particular class period. In each of these

examples, a student takes certain measures to try to foster his or her intellectual character growth. And in each case, the student's ability to do so depends on the possession an important bit of self-knowledge.

We've seen that self-knowledge is simultaneously very valuable but also very hard to come by. So where does this leave us? Are we bound to a state of frustrated self-ignorance? If our goal is perfect and complete self-knowledge, then the answer is probably "yes." However, nothing about the challenge of acquiring self-knowledge implies that we can't make reasonable progress in arriving at a more accurate and informative picture of our intellectual strengths and weaknesses.

Indeed, in the remainder of this chapter, I'll discuss three main strategies teachers can use to help their students develop a richer and more accurate understanding of who they are as thinkers and learners.

MODELING

We want our students to be aware of and attentive to how their minds work, including the "habits of mind" that shape and govern their thinking. Most students aren't automatically going to have this kind of self-awareness. Indeed many are likely to have very little if any idea of what this actually means or looks like. Therefore one of the most powerful and informative things we can do is

to model self-reflection and self-awareness for our students. This means showing—not telling—them that we're in touch with, think about, and are responsive to the detailed operations of our own minds.

How might intellectual self-knowledge, provided that we have some, be conveyed to our students? The fairly obvious answer is that it will be conveyed in what we share with them about our own thinking. This might include, first, being forthright about our intellectual limitations or weaknesses. For instance, a teacher might say to his students something like: "I tend to have a diffi-

"[H]aving a rich and accurate understanding of our intellectual character can help us negotiate challenges and seize opportunities along the way to intellectual growth and maturity."

cult time with this kind of problem. It requires a kind of thinking that I'm still trying to master" or "I don't know about you, but sometimes I get so excited about an idea that I tend to talk over other people when we're discussing it and don't pay very close attention to what they have to say about it. This is a real limitation, but it's something I'm working on." Alternatively, modeling self-awareness and self-knowledge might also involve being open about areas of intellectual strength. For instance: "I love learning about this type of subject matter. It gives my mind an opportu-

nity to explore, imagine, and think outside the box. Ever since I was your age, this is something that has excited me."

To gauge how well you are modeling intellectual self-awareness, you might consider periodically asking yourself how you think your students would respond to the following questions: "Does your teacher possess a good understanding of his or her intellectual character strengths and weaknesses? Does your teacher understand how his or her mind works? Or does he or she seem out of touch with these things?" The (honest) answers you come up with can serve to affirm what you're already doing or cause you to think more about the character of your own thinking or about how you can better share the self-knowledge that you do possess with your students.

OPPORTUNITIES FOR SELF-REFLECTION AND SELF-ASSESSMENT

Another approach is to provide students with ongoing opportunities to reflect on and learn more about their own intellectual character strengths and weaknesses. This can be done informally or formally.

For instance, the next time you get the sense that several of your students are struggling to understand an idea or concept that you're trying to convey, you might pause for a moment and invite them to reflect on how this struggle is affecting them: "I'd like to

stop for a moment and ask you to consider what you're thinking and feeling right now. It looks like several of you are struggling. What specific thoughts or feelings is this causing in your mind?"

You might even push your students a bit further, inviting them to consider what these thoughts and feelings say about their intellectual habits or about the things they tend to tell themselves about their intellectual abilities. Suppose, for example, that one of your students, Margaret, replies to the initial question by saying: "I feel stupid and hopeless. I'm never going to be able to understand this." You might respond to this by saying: "Margaret, it sounds like you're tempted to be kind of impatient with yourself? Does that sound right?" Assuming it does, you might continue: "Is this something you've experienced in previous classes? In those cases, have you always failed to understand? Or, over time, were you sometimes able to gain some clarity?" Again, assuming that her pessimistic predictions haven't always turned out to be true, this might be an occasion to say to her: "Okay, so it looks as though, when you're frustrated, you sometimes tend pretty quickly to make negative predictions about your ability to learn or understand—predictions that often enough turn out to be false. We've all got lots of room for intellectual growth. It looks like one area you could work on is having a little more intellectual patience with yourself and being a bit more intellectually hopeful and tenacious."

This is, of course, an idealized scenario in lots of ways: a real

student's answers might not be so positive; and this might be a conversation that couldn't really happen mid-instruction. Still, it may be a conversation that you are able to have with at least some of your struggling students before or after class. In any case, the example is intended primarily to illustrate a general way of interacting with students, whereby one helps direct their attention to certain specific features of their own thinking, and in doing so helps them grow in self-knowledge.

We can also give our students more formal and structured opportunities for self-reflection and self-assessment. Here are a few:

Self-report measures. Psychologists have designed reasonably reliable self-report measures or scales for qualities like grit and curiosity (see here for several grit scales and here for a curiosity scale; also see Duckworth and Quinn 2009). These consist of several brief statements (e.g. "When confronted with a problem I can't solve, I tend to give up") to which students respond with answers like "A lot like me" or "Very much unlike me." At IVA, we've come up with eightitem scales for each of our nine master virtues. While these scales are a work in progress, they are a way of providing students (and their teachers) with useful information about themselves. Their usefulness is predicated on the fact that while students might not be very reliable at answering questions like "Are you curious?" or "Are you intellectually tenacious?" they are much better at gauging the extent to which certain more specific and fine-grained statements accurately describe their thinking. Thus one way of helping students develop an understanding of their intellectual character strengths and weaknesses is to administer measures like these and to have students reflect on and discuss what they learn from them.

Self-reflection exercises. Some of the limitations just noted not with-

standing, it can also be productive to have students reflect in a more direct way on what they take to be their intellectual character strengths and weaknesses and on how they see these manifesting in their lives. You might, for instance, give your students a list of target virtues along with definitions and a brief example or two, and ask them to identify which virtue they think they're strongest in and which they think they're weakest in. You could then ask them to explain why they think this and to support their answers with specific examples of how they've practiced or failed to practice the virtues in question. Finally, you might ask them to explain, based on the specific examples they've just given, the value of the relevant strength and the disvalue of the relevant weakness. This could be a single exercise or it could be broken into several different exercises. It would likely be a good idea to have students share some of their reflections with each other. This could help them process their impressions at a deeper level and identify common experiences and struggles. The

"[W]ith a bit more lived experience and lacking their particular blind spots, we may be in an even better position than they are to arrive at a detailed and accurate understanding of their intellectual character."

primary goal would be to get students thinking in some detail about specific virtues or vices they see themselves practicing or failing to practice, how exactly these virtues or vices manifest in their lives, and the benefits and costs of each.

Self-reflection project. The kind of exercise just noted could be part of a larger self-reflection assignment in which students are asked to monitor their intellectual character for an entire semester or year. The project might begin with the kind of reflection exercise just described. Students could then be asked, in relation to the weakness

or "growth area" they've identified, to also identify and commit to taking some well-thought-out and realistic steps to develop the corresponding virtue. The next part of the project would involve having them report back on the relevant aspects of their thinking and the steps they've taken (or, as the case may be, failed to take) to try to improve in this area. Here they might answer questions like: "Did you take the steps you set out to take? If so, how often or frequently? Did you find this challenging? Why or why not? What effects, if any, did you see? Illustrate your responses with concrete examples. If you didn't follow through with the proposed steps, share a bit about that process. Why didn't you do it? What do you think got in the way? Importantly, what does this tell you about how your mind works? What can you learn about yourself from this experience?" In a third part of the project, students might take a step back and address some of the following, more general questions: "Explain at least three things you've learned about your intellectual character strengths or weaknesses over the course of this project. How do you (honestly) feel about them? Why? Looking forward, which trait do you now think you most need to grow in? In light of your recent experience, list three concrete steps you can take to try to cultivate this virtue." This is, of course, but one of many different approaches you might take to design a larger assignment or project aimed at helping your students develop a better understanding of their intellectual character strengths and weaknesses.

PROVIDING FEEDBACK

A third and final way we can help our students deepen their understanding of their intellectual character strengths and weaknesses is by providing them with relevant feedback. As their teachers, we should be in a good position to provide this kind of input. Indeed, with a bit more lived experience and lacking their particular blind spots, we may be in an even better position

than they are to arrive at a detailed and accurate understanding of their intellectual character. This could take a few different forms:

Feedback on the spot. One way of helping students better understand which intellectual virtues they possess is to call attention to these virtues when we see them manifested. Suppose, for example, that you know Augustine to be quite capable of thinking for himself (intellectual autonomy) but you wonder whether he is really aware of or has fully "owned" this ability. Then suppose that on a given occasion he shares a highly original and insightful thought in a class discussion. This might be a good opportunity for you to say: "Wow, Augustine. I've suspected that you're really good at coming up with your own ideas and that comment is a really good example of what I'm talking about. It's a really great example of intellectual autonomy." Though short and sweet, it's not difficult to imagine that this kind of timely and specific praise might have a powerful effect—that your words might settle favorably into how Augustine thinks and feels about himself.

Written comments. Feedback on exams and papers is another way that we can help students to better understand and appreciate their intellectual character strengths and weaknesses. To have the greatest impact, such feedback should have two qualities. First, it should be specific. We shouldn't merely tell a student that she has a particular strength or needs to improve in a particular area. We also need to make clear how or why this is the case. For instance, if you are praising a student's intellectual carefulness on an exam, it would be better (time permitting) if you didn't just write "good carefulness" on the exam but instead pointed out how the student has demonstrated this virtue, for example: "This material is very difficult. And it's very easy to make small mistakes when dealing with it. You didn't make a single error. Good carefulness!" Second, as this example suggests, while explaining how or why a student has demonstrated a particular virtue (or vice), it's also important to use specific virtue terms

or labels (e.g. carefulness), especially if these labels will already be familiar to students and be associated with admirable qualities and with some of the overarching goals of your course. A related way to help students better understand their minds is in the "written comments" section one finds in many report cards. Such feedback can be especially powerful if it comes from multiple sources and hits on certain common themes. Here, for instance, are some comments on the report card of a student at IVA from two teachers neither of whom had seen the other's comments:

"[The student] works thoroughly and carefully (and efficiently!). I would love to see him participate even more in class discussions. I know that he has great thoughts in there! I want to hear more of his 'wonders'!"

"[The student] is extremely thorough in his work, particularly in his writing. He is often able to think through the third, fourth, and fifth angle of a question, whereas many students are tempted to stop at the first or second. ... [The student] seems to be a highly curious person, especially when it comes to books. I often see him reading outside of class. I would like to see that curiosity more in the classroom ... I would like to see him 'wonder' more about the subject matter, asking more open-ended questions."

There are some clear messages in this feedback that could, if listened to and received, sink into the student's understanding of himself as a thinker and a learner. First, both teachers comment on the student's intellectual thoroughness, with the second teacher describing this thoroughness in some detail. Second, while acknowledging that the student shows some signs of being a curious person, both teachers also suggest that this is something he could practice—perhaps along with a little intellectual courage—in a classroom context more often. Together, they paint a compelling picture of his intellectual character as exhibiting a particular strength as well as some room for improvement.

HUMILITY AND SAFETY

The foregoing discussion of how to foster self-knowledge illustrates the importance of *intellectual humility* to this process. One obstacle to such knowledge is that most students simply haven't thought much about how their minds work. To some extent, this can be overcome through the kind of feedback and self-reflection strategies noted above. However, part of why our students (and the rest of us!) lack self-knowledge is that the truth about their intellectual habits isn't always very pleasant. Again, growing in self-knowledge is partly a matter of coming to understand where one is weak and needs to improve. These facts can be difficult to face. Accordingly, the process of growing in knowledge of one's

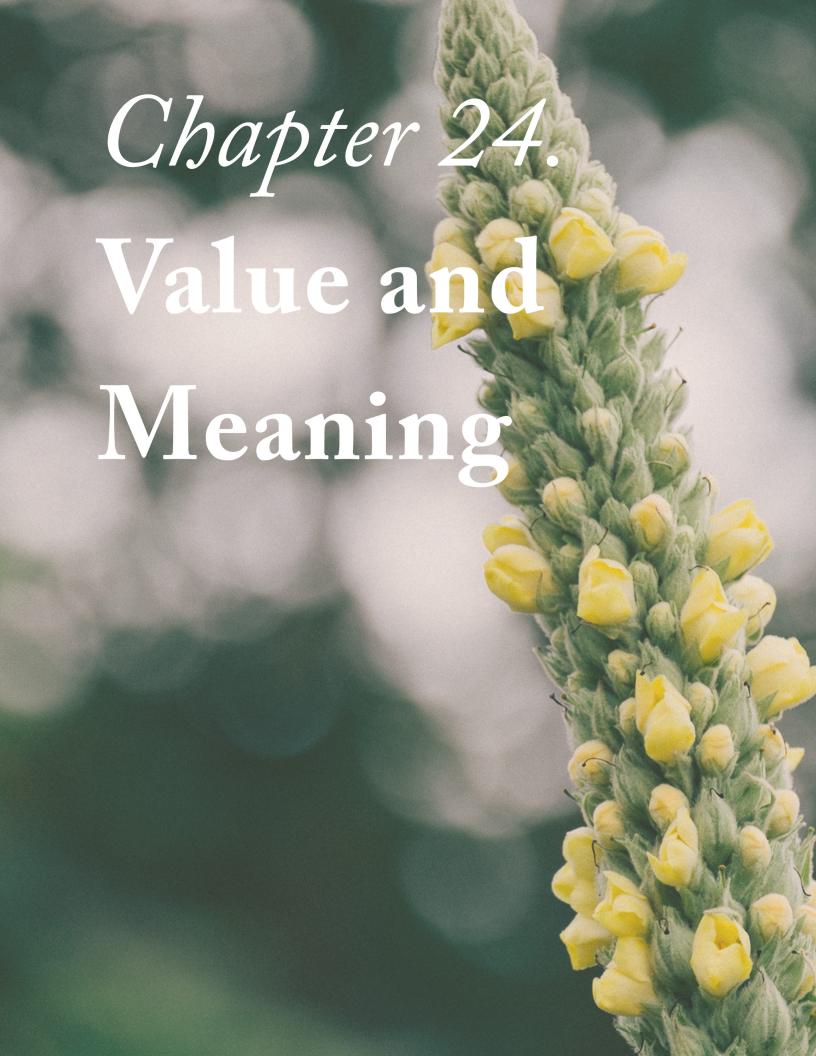
"[I]t can be useful to frame self-reflection and self-assessment exercises as opportunities to practice and grow in intellectual humility."

intellectual character strengths and weaknesses will be greatly facilitated by a willingness to attend to and "own" (rather than avoid or rationalize) one's intellectual limitations, weaknesses, and mistakes. In other words it will be greatly facilitated by intellectual humility. Given this connection, it can be useful to frame self-reflection and self-assessment exercises as opportunities to practice and grow in intellectual humility.

Second, whether a student is willing to "own" his intellectual limitations and weaknesses often will depend in no small part on how "safe" he feels in letting down his guard. If he doesn't feel respected or cared for by his teachers or if he fears getting made fun of by his peers, the odds of his seriously acknowledging the areas in which he's weak and needs to grow will be slim. This, then, should serve as a further reminder of the importance of making our classrooms spaces in which students feel supported and cared for by their teachers and can count on a certain level of respect and support from their peers (see Ch. 20). Without this assurance, their growth in self-knowledge will be stunted.

DISCUSSION QUESTIONS

- I. Take a moment to list your own top two or three intellectual character strengths and weaknesses, citing at least one example for each answer.
- 2. Given your current approach to teaching, what do you see as the most effective and realistic ways of helping your students develop a better understanding of their own intellectual character strengths and weaknesses?
- 3. Aside from (or perhaps building on) the points above, what do you think are the most important benefits of knowing how your mind works? And what are the greatest costs of being *ignorant* about this matter?



CHAPTER 24

Value and Meaning

In this chapter we'll examine the importance of drawing attention to issues of value and meaning in a pedagogical context. Specifically, we'll look at how regularly highlighting the value or significance of what is being learned can lead to deeper engagement with the subject matter, and how this in turn can contribute to intellectual character growth. The upshot is that if we hope to educate for intellectual virtues, we must give ongoing attention to the kinds of value and meaning embedded in the learning process.

WHY VALUE MATTERS

Why should this be the case? Why should making regular attempts to help students see why what they're learning or being asked to do has some kind of greater value or significance? One reason is that asking and reflecting on questions like this is an expression of the very virtues that intellectual character education aims to foster. We want our students to wonder and ask questions. We want them to probe for deeper meaning. Given that school is likely to be the most demanding and time-consuming activity in the lives of most of our students, if we're successfully practicing intellectual character education, we should expect our students to

ask questions like: "What's the point of education?" or "Why is it important for us to learn these things when it's unclear what relevance they have to life outside the classroom?" This isn't to deny that these questions are sometimes asked more out of frustration

"[W]hen it comes to helping our students see value in the learning process, our primary focus shouldn't be on its purely external or instrumental value."

or apathy than out of curiosity. Nor is it to deny that there are compelling answers to them. The point is rather that they involve a kind of reflectiveness and thoughtfulness that should be valued and encouraged.

A second important reason concerns student *motivation*. As suggested above, growing in intellectual virtues requires being intellectually active and engaged. Therefore, if we want to help our students achieve this goal, we need to think about ways of getting them interested in and engaged in learning. One way of doing so is to help them see the value or importance of education in general and of the specific things they're learning or doing in our classes (Newmann et al 2001). Moreover, recall that intellectual virtues involve an element of *intrinsic* motivation. An intellectually virtuous person enjoys learning and cares about truth, knowledge, and understanding at least party for their own sake. Therefore, when it comes to helping our students see value in the learning

process, our primary focus shouldn't be on its purely external or instrumental value (Deci et al 2001; Ryan and Deci 2000). When trying to get our students interested in math or history, for example, our primary strategy shouldn't be to emphasize to them that if they do so, they're likely to get better grades, where the latter is what they really care about. Rather, our focus should be on the value of thinking and learning considered in their own right or on the ways in which good thinking and learning are an important component of other worthy pursuits. This doesn't mean that appeals to the purely instrumental value of learning can't sometimes be effective or worthwhile. However, again, if our desire for our students really is that they experience growth in intellectual virtues, including the kind of motivation that is characteristic of these traits, then such appeals should be relatively rare and take a back seat to reflections on the intrinsic or deeper value of learning.

EMPHASIZING VALUE

What, then, might this look like? I'll describe a few examples that can be adapted to various subject matters and grade levels:

Reflecting on the value of education (in general). One useful strategy is to engage students in a conversation about the value of education—not about learning any particular thing, but about learning or education in general. You might, for instance, brainstorm a list of responses to the question "What are the benefits of education?" Students will likely generate a long and diverse list of goods. Next you could attempt to rank these benefits from most important to

least important. Finally, in the spirit of open and honest inquiry, you might also consider: "What are downsides or costs of getting an education?"

If you have the time and your students have the capacity for it, you could center this discussion around a classic but readable text on the value of education, for instance, a selection from Mary Wollstonecraft's *A Vindication of the Rights of Women* (2009) or from John Stuart Mill's *Utilitarianism* (1998: Ch. 2). In the latter work, Mill draws a distinction between two kinds of pleasure pursued by human beings: "lower pleasures" and "higher pleasures," the latter being pleasures that contribute most to human fulfillment and happiness. Among the higher pleasures Mill discusses are "intellectual pleasures," which are the pleasures involved with intellectual activities like learning, discovery, and insight. Mill deftly explains how our capacity for higher pleasures is extremely fragile and in need of careful cultivation from a very young age. The upshot is that if a

"Good doctors, psychologists, lawyers, educators, and other professionals need to know how to think well. Likewise for artists, journalists, entrepreneurs, and video game designers."

person wants to be as happy as possible and to get the most out of life, she must, from very early on, work to cultivate her capacity for intellectual pleasures. This in turn requires being personally invested in the learning process.

Reflection on issues and questions like these presents a good opportunity for students to think about and discuss the many valuable aspects of thinking and learning. As such, it can have an energizing effect. It can help students see and feel the importance of a dom-

inant feature of their lives (namely, school). Of course, it's worth remembering that if conversations like these aren't part of a broader invitation to reflect on (even to question) the value of the learning process or are unaccompanied by other attempts to help students see the significance of and be engaged in this process, their effect will be fleeting. But when part of a broader set of efforts to help students grow as thinkers and learners, they can have a powerful effect.

Making connections with students' immediate interests. Another strategy is to make connections between the value of what's being learned in class and other things that students care about (Russell 1926: 154). In doing so, we walk a fine line. We don't want to pander to our students. Nor do we want to make crass appeals to the strictly instrumental value of what we're asking them to learn. Nevertheless, with a little "outside the box" thinking, we should be able to connect much of what we're asking them to learn with goals or ends that are valuable and that our students already care about.

Take, for instance, many of the things that students are asked to master in math classes from algebra on. While they may not go on to use this specific knowledge in other areas of their lives, a good case can be made for thinking that learning these subject matters builds up their "cognitive hardware," so to speak, making them stronger and more analytical thinkers. And the latter is important to many things that students care about. Good doctors, psychologists, lawyers, educators, and other professionals need to know how to think well. Likewise for artists, journalists, entrepreneurs, and video game designers. When framed in a certain way, certain seemingly "meaningless" activities can be connected in significant ways to things that students care about.

A similar point applies to topics in history or geography that students might initially see as irrelevant to their "real lives." For instance, even at a relatively young age, many students are interested in traveling and seeing other parts of the world. What many of them don't

realize, but what we can make clear to them, is that the amount of enjoyment a person gets out of traveling to different places is directly related to what the student knows about the history, geography, politics, and related aspects of the place. Similarly, if a student hopes to excel in some area of life (whether sports or business or journalism), the student would do well to know the history of these fields, if for no other reason than to avoid repeating past errors. While you may not be teaching these specific histories, helping students grasp their importance can be a way of helping them develop a broader appreciation for the discipline.

Individual teachers know their subject matter and students the best. They are ultimately in the best position to identify connections between the specific things they teach and the specific interests of their students. And yet many of these connections aren't especially trans-

"In my conversations with other teachers, I've found that what draws teachers into the profession is very often the intellectual passion of one of their own teachers. Such passion can be contagious, especially when it is manifested in the context of a caring and supportive relationship between the teacher and the student."

parent. Therefore, it's up to each of us to think seriously about the following questions: "What do my students care about? What do they love? How can I build bridges between what I need to teach them and what they care about? Even if these two things aren't immediately or obviously connected, how might they be *indirectly* connected? And how can I most effectively communicate these connections to my students?" In thinking through and acting on questions

like these, we will be taking steps to increase the motivation and the hence the engagement of our students.

Making connections with students' ultimate interests. The previous strategy focused on connections between the curriculum and certain more or less immediate or tangible interests of students. A related approach involves making connections with some of the deeper, more ultimate concerns that students have. In the present context, a natural thing to focus on is students' interest in being and becoming certain types of people. Here again imagine that you're a math teacher trying to get your students to care about some mathematical concept that you think is fascinating—even beautiful—but that admittedly has little or no "real world application." Sensing waning engagement and interest, you might try to recapture their attention as follows: "Wondering, puzzling, and asking questions are among the things that make us human. Indeed, wouldn't you rather be a person who wonders and puzzles vs. a person who is unthinking, uncurious, and unreflective? Wouldn't you prefer to have friends who are this way too? The concept we're learning about may seem abstract, and it is, but as I'm going to try to show you, it's also truly fascinating. Thinking and puzzling about it together is an opportunity for all of us to become more thoughtful and reflective people."

Fostering new interests. So far we've considered ways of connecting education in general or the specific things we want students to learn to interests that our students already possess at one level or another. However, another way to underscore the value of these things is to help students develop new cares and concerns—cares and concerns that align with what is expected of them as students. This can involve helping them grow in a passion for learning or increasing their level of intrinsic motivation. One way to do this is to tell students how valuable these things are. But this is unlikely to be very effective. We aren't usually argued or explained into caring about new things. A more powerful approach is to model these qualities for our students. In my conversations with other teachers, I've found that

what draws teachers into the profession is very often the intellectual passion of one of their own teachers. Such passion can be contagious, especially when it is manifested in the context of a caring and supportive relationship between the teacher and the student (see Ch. 20). Thus one of the ways that we can get students to care about and become engaged with what we're trying to teach them is to model a deep and genuine enthusiasm for it ourselves.

TWO OBJECTIONS

My suggestion thus far has been that if we're interested in helping our students experience meaningful growth in intellectual virtues, we would do well to take deliberate and explicit steps to situate education in general and the specific things we're asking students to learn about within a broader framework of meaning and value—and to do so with an eye to increasing their motivation to engage in the learning process. Again, such engagement is critical to their practice and subsequent cultivation of good habits of mind. In the present section, I turn to address two possible objections or concerns about this proposal.

First, as the examples above suggest, initiating conversations about the value of the learning process is bound to consume precious instructional minutes, and some teachers may feel like they don't have any instructional minutes to spare. This point is well taken. The discussions in question are digressions of a sort (albeit digressions that typically will be very relevant and connected to what's going on in the class). Thus my suggestion is to do what you can, within the limits you face, to introduce considerations

of meaning and value at various points throughout the semester or year. However, this is a further reason to a take a step back and conduct an inventory of how you're allotting your instructional minutes overall. As we saw in Chapter 21, becoming more efficient in all areas of instruction can free up additional time to devote to practices aimed specifically at intellectual character growth.

Second, while you might buy the idea that with a sufficient amount of forethought and reflection we can sometimes—maybe often—make genuine connections between what we're asking students to think about or learn and other things that matter to them in an

"[W]e need to develop the habit of reflecting on and communicating with our students about the value and meaning of what they're learning in our classes."

immediate or ultimate way, you might still wonder whether there are *some* subjects or topics that are important to teach but that *cannot* reasonably or convincingly be tied to the (actual or potential) values of our students. This may be right—though I suspect that often we are quicker than we should be to draw this conclusion. In any case, here again the point is to be vigilant about the connections that do exist and to call attention to them as they emerge and when one can afford to do so.

Such vigilance bears emphasis. As suggested above, if you only very occasionally draw attention to the broader significance of education or of what students are learning in your classes, this is likely to have a minimal effect. It could even be counterproductive. For instance, if we convince students at the beginning of the year that there is a kind of higher significance or value to education, but fail to remind them of this throughout the year or in the context of the specific things they're learning, they may end up feeling like our initial message to them was disingenuous, which in turn might make them feel even less connected to us or the subject matter. All of this to say: we need to develop the habit of reflecting on and communicating with our students about the value and meaning of what they're learning in our classes.

DISCUSSION QUESTIONS

- I. If a student were to ask you today, "Why should I care about the subject you teach?" what would your (non-sarcastic!) response likely be? Try to be as specific as possible.
- 2. What are some new ways in which you could try to connect some of the specific content you teach to the (actual or potential) interests or values of your students?
- What initially got you interested in the subject or subjects you teach? What does this suggest about the value of these subjects? Do you already convey this value to your own students? If so, how? If not, what might it look like for you to do so?

CHAPTER 25

Integrating Virtues Language Into Instruction

It should be clear enough at this point that intellectual character education is a multi-faceted enterprise. It involves using a wide range of strategies and practices with the ultimate goal of helping students grow in virtues like curiosity, open-mindedness, attentiveness, fair-mindedness, and intellectual courage. These qualities are concrete and compelling. They can be understood and appreciated even by young students.

This is important to keep in mind as you interact with your students over the course of a semester or year. In particular, it underscores the importance of integrating intellectual virtues language and concepts into your teaching. My aim in this chapter is to identify and illustrate ways of doing this that can effectively draw students into deeper intellectual engagement and practice.

THINGS TO AVOID

However, I want to begin by sounding a couple of cautionary notes. First, it is important to keep in mind that words are cheap. If my primary means of trying to help my students grow in intellectual virtues is to talk them *about* intellectual virtues, or if I use the language of intellectual virtues in ways that are artificial

or as a way of trying cajole my students into paying attention ("If you don't start listening better, you'll never develop the virtue of attentiveness"), my use of this language may backfire. It may turn students off to the very idea of cultivating intellectual virtues. Therefore, the suggestions put forth below must be implemented along with complementary pedagogical practices and in a manner that is authentic (not forced) and positive (not critical or shaming).

This leads to a second caveat: namely, that we mustn't *overuse* the language of intellectual virtues. Students shouldn't grow weary of our talking about intellectual virtues. Sometimes such weariness may be due to the fact that other facets of our teaching don't align with the goal of intellectual character growth; in other cases it may be because we're using this language in inauthentic or negative ways. Nevertheless, it can also be a function of

"[I]t is important to keep in mind that words are cheap."

simple overexposure. Therefore it's important to regularly gauge how students are responding to our use of virtues language. Does making a connection between what's happening in the class and a particular virtue seem to gain their attention and interest? Or does it result in sighs or rolled eyes ("not *this* again")?

One way to avoid overexposure to intellectual virtues language is to vary your use of it. To see what this might look like, note that

we can talk about intellectual virtues at several different "levels of description." At the highest level, we can talk about "intellectual virtues," "good habits of mind," "thinking dispositions," or "the personal qualities or character traits of a good thinker or learner." At the next level down, we can employ the specific trait terms that pick out instances of these more general types, for example, intellectual tenacity, intellectual thoroughness, attentiveness, intellectual honesty, and intellectual humility.

However, these aren't the only two options. We can also talk about intellectual virtues by referring to the activities characteristic of these traits. One way of doing so is to employ slogans that describe these activities in a simplified way. Thus we might maintain a focus on open-mindedness or intellectual autonomy, say, by regularly encouraging students to "Think for yourself!" or "Think outside the box!" A related approach involves describing virtue-specific intellectual activities in slightly more subtle or nuanced ways. For instance, if I'm making efforts to help my students grow in curiosity, I might regularly say things like: "Now, remember that one of the primary goals of this course is to help us all become better at asking thoughtful and insightful questions. Therefore, let's stop and see how many good questions we can generate about this topic." Or, if my focus is intellectual courage, I might say something like: "Contributing to class discussions can be scary. You risk embarrassment and making a mistake. However, as we've talked about before, you can't become a good thinker unless you're willing to take risks. And this is a class in

which risk-taking is valued as much as getting the right answer. So let me encourage those of you who are feeling nervous about participating to view this as an opportunity to take a risk and therefore to grow as thinker." The latter comment highlights the importance of intellectual courage without making explicit mention of this trait. It is an example of how we can maintain a focus on intellectual character development without overusing the relevant trait terms or related language that students may be tired of hearing. (See Ritchhart 2002: Ch. 6 and Tishman et al 1995: Ch. 2 for related discussions of how the language of *thinking* can be used to foster intellectual character growth; also see Ritchhart 2015: 63-71.)

DIRECT INSTRUCTION

One way of introducing virtues language into classroom instruction is by way of the various approaches to "direct instruction" discussed in Chapter 22. The goal of direction instruction in intellectual virtues is to teach students *about* intellectual virtues—to deepen their understanding of what intellectual virtues are, of how they're related to similar cognitive and moral excellences, and of why they're important for learning and living well. As we've seen, direct instruction can take various forms: it can involve mini-units devoted explicitly to the themes just noted, calling attention to student behavior that exemplifies particular virtues, a virtues-based advisory program, and more. Teaching students about intellectual virtues in these or related ways is one

way of keeping the language and concepts of intellectual virtues at the center of what's happening in the classroom.

STATEMENTS OF COURSE GOALS AND OBJECTIVES

Virtue concepts and language can also be integrated into statements of *course goals and objectives*. Some such statements will be relatively formal. For instance, you might consider introducing intellectual virtues language into course goals or outcomes that will be shared with students on the first day of class or incorporated into syllabi or similar documents.

At my university, we're asked to include outcomes in each of our syllabi that address three topics: *knowledge* to be learned in the course, *skills* to be gained, and *values* that will be promoted. The

"We can also talk about intellectual virtues by referring to the activities characteristic of these traits."

last category is the most nebulous. I treat it as an opportunity to formally state one or more character-based objectives. Typically, I'll say something to the effect of: "Students will grow in their understanding of the nature and importance of 'intellectual character virtues,' develop a richer and more accurate understanding of their own intellectual character strengths and weaknesses, and practice a wide range of intellectual virtues in classroom activities and course assignments." Note that this statement does not say

anything about the specific virtues I'll be asking them to practice. This is something I share with them in a brief mini-unit during the first week of the semester. Also, note that the goal here is relatively modest. I don't propose that in the course of a 16-week semester students will experience major growth in several intellectual virtues. While I do hope that many students will begin to experience at least some growth in some virtues, I take pains to ensure that my objectives are realistic and achievable by all students in the course.

Obviously, every instructor must formulate goals that are developmentally appropriate and that she or he can realistically hope to achieve in the allotted time. The point at present is that the formulation and statement of course goals—whether formal or informal—can be a good way of incorporating the language of intellectual virtues into classroom activities.

A related practice involves formulating a class *mission statement* that refers to intellectual virtues. For one of my recent introduction to philosophy courses, I formulated the following mission statement: "We are a community of inquirers tasked with philosophical learning and reflection. As your instructor, my primary aim is not to impart a body of knowledge; rather, it is to nurture your relationship to learning by providing ongoing opportunities to practice intellectual virtues." Because the course met only once a week, I began each class period by quickly reviewing this statement (which I projected on a PowerPoint slide). Doing so

was a nice way to remind my students and myself of the "higher purpose" of the course and to keep the language and concepts of intellectual virtues at the forefront of our minds.

IDENTIFYING OPPORTUNITIES TO PRACTICE INTELLECTUAL VIRTUES

There are other, less formal ways of incorporating intellectual virtues language into classroom instruction and interactions. In the chapter that follows, we'll examine what it might look like to design classroom activities and assignments that give students opportunities to *practice* various intellectual virtues. For now, I'll note that *calling attention to these opportunities* is a further way of giving virtues language a salient role. So, for instance, suppose you've designed a lesson that will give students an opportunity

"While I do hope that many students will begin to experience at least some growth in some virtues, I take pains to ensure that my objectives are realistic and achievable by all students in the course."

to practice curiosity and intellectual thoroughness. And suppose that you are introducing the lesson to your students by writing an outline of it on the board. In addition to writing down the main steps or parts of the lesson, you might also make a note of which virtues will be practiced with each step (writing each virtue in

parentheses after the corresponding step). Again, this is a way of helping students grasp the connection between specific events in the class and the broader goal of helping them grow in intellectual virtues.

Similarly, if you're teaching and suddenly recognize an opportunity for students to practice a particular virtue, it can be useful to spontaneously note this opportunity. Suppose, for instance, that you're trying to lead students into conceiving of a particular explanation of something (e.g. of the results of an experiment or an unexpected turn in a novel). At first, all of the students' conjectures are off the mark—they involve thinking too narrowly about the subject in question. You might at this moment pause and say: "We're all struggling here. I think we need to be a bit more imaginative in our thinking. It's time for us all to set aside our usual ways of thinking and to try hard to 'think outside the box." Though not making explicit mention of open-mindedness, this is an indirect way of drawing attention to the relevance of this virtue to what is going on in the class at the moment. (See Tishman et al 1005: 52-54 for a related discussion.)

VIRTUES-BASED FEEDBACK

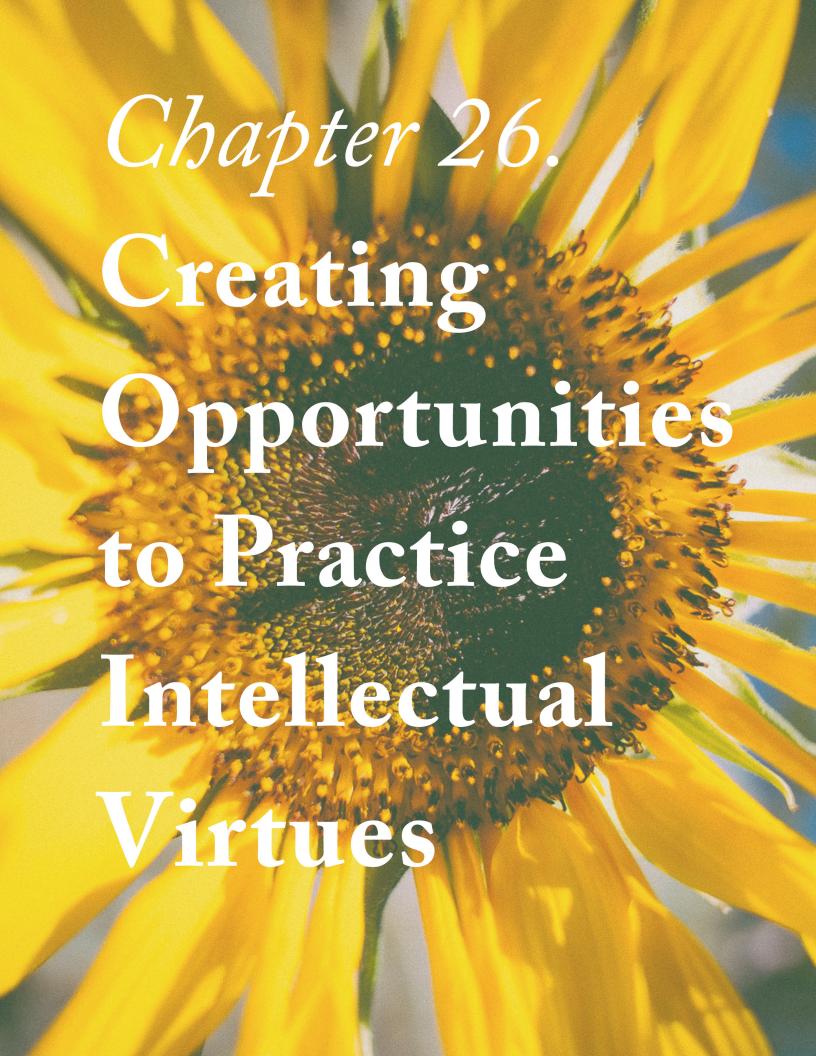
Finally, as discussed briefly in a previous chapter and as we will examine in even greater detail in Chapter 28, a further way of integrating intellectual virtues language into classroom instruction and activities is in the kind of feedback we give to students

regarding their performance in our classes. If I see an ordinarily very shy and quiet student take a risk and share an insightful remark, I might—if I'm confident that doing so won't embarrass the student—say something like: "Great comment and great job taking a risk." Again, if I have laid the relevant groundwork in the course, my students will grasp the connection between this observation and the goal of helping them cultivate intellectual courage. Similarly, when I come across a part of a student paper or exam that addresses a topic in a particularly *careful* or *thorough* way, I might explicitly draw attention to this and to the virtues it expresses in my written comments on the work. This is a further way of keeping virtue concepts salient.

As suggested above, the use of virtues language in class is not by itself likely to have a significant impact on the intellectual character of our students. Rather, the idea is that using such language is a way of keeping students focused on the meaningful and compelling goal of intellectual character growth. It can also play a helpful role in creating an overall classroom culture that is defined by a shared commitment to such growth. Finally, a commitment to using virtues language is a way of keeping ourselves as teachers accountable to this goal. It can have the effect of reorienting our own thinking and teaching and inspiring us to think of more ways in which we can align our pedagogical practices with the intellectual well-being of our students.

DISCUSSION QUESTIONS

- I. Do you have stated goals for each of the courses or subjects you teach? If so, how might you be able to integrate intellectual virtues language into these goals? If not, try to come up with at least one carefully formulated virtue-based goal for each course or subject you teach.
- 2. Identify two or three intellectual virtues that your students need to practice in order to do well on an assignment on which you ordinarily provide written feedback. Next, write several sample comments—comments that you could imagine making on the student work in question—that mention, at one level of description or another, the virtues you've just identified. (In other words, *practice* giving some specific virtue-based feedback.)
- 3. What feels like the greatest challenge to integrating intellectual virtues terms and concepts into your teaching? What, then, are some specific things you might do to try to overcome this challenge?



CHAPTER 26

Creating Opportunities to Practice Intellectual Virtues

A ristotle famously argued that we become virtuous by performing virtuous actions (*Nicomachean Ethics*, Book II). That can sound puzzling: How can a person perform virtuous actions if he isn't *already* virtuous? However, what Aristotle understood is that it's possible to perform actions that are *characteristic* of virtues without actually having the virtues themselves, that is, without possessing a settled *habit* or *disposition* to act in virtuous ways (not to mention having certain appropriate *feelings* and proper *judgment*—see Ch. 1). On Aristotle's view, we develop virtues by practicing virtuous actions, and by practicing them at the right time, in the right amount, in the right way, and so on. Eventually, he thought, such actions will become a matter of habit and virtues will be formed.

Aristotle applied these principles to *moral* virtues; however, they apply equally well to the intellectual virtues we are concerned with in this guide—virtues like open-mindedness, intellectual autonomy, intellectual carefulness, and intellectual courage. Author Philip Dow (2013) describes the habitual nature of intellectual character, and its practical significance, as follows:

We tend to think of our choices as isolated moments of decision in which we reason through the pros and cons before making the best

choice we can based on the information that we have. In reality, most of the choices we make are not the result of conscious and deliberate reasoning. Whether it is a product of the flood of mental distractions and the frenetic busyness of our modern lives, or simply exhaustion, we end up making most of our choices on mental auto-pilot. We don't reason so much as react, and in this haste we are usually forced to rely on the mental ruts our thinking patterns have produced. These mental ruts that our thinking naturally slips into are our intellectual character. If we have trained our minds in the direction of good thinking habits, our mental auto-pilot will generally produce good choices, and good choices generally produce good outcomes. If we have not actively sought to develop the character of our minds then the prognosis is less encouraging. If these little decisions never amounted to much it wouldn't really matter, but the problem is that it is in the accumulation of these little choices that the trajectory of our lives is set. In other words, the quality of our mental auto-pilot matters a great deal. (22-23)

PRACTICING VIRTUES

How exactly does this process of "habituation" work? For every intellectual virtue—whether intellectual carefulness, open-mindedness, intellectual autonomy, etc.—there is a certain kind of activity that is characteristic of this virtue, an activity that allows us to distinguish it from other virtues. So, for example, intellectual carefulness (but not open-mindedness or intellectual autonomy) involves looking out for and avoiding errors; open-mindedness (but not intellectual autonomy or intellectual carefulness) involves perspective-switching; and intellectual autonomy (but not intellectual carefulness or open-mindedness) involves thinking for oneself. Moreover, these virtue-specific activities can be prac-

ticed and improved upon. With practice a person can get better at spotting and avoiding potential mistakes, taking up alternative points of view, and coming up with his own opinions about things. This is the "skill dimension" of an intellectual virtue dis-

"How can a person perform virtuous actions if he isn't already virtuous?"

cussed in Chapter 1. Again, to possess an intellectual virtue is (in part) to be skilled at doing something—at engaging in a certain kind of cognitive activity (error-avoidance, perspective-switching, etc.). The idea, then, is that we develop specific virtues by repeatedly practicing the activities characteristic of these virtues. As the activities become sufficiently internalized or ingrained in our character, we eventually come to possess the virtues in question.

In some ways this is a misleading picture. Sometimes we practice a certain activity repeatedly but the activity doesn't "take"—it isn't appropriately internalized and so no habit is formed. This underscores, yet again, the point that no single strategy for cultivating an intellectual virtue is guaranteed to work. Rather, virtues are formed most reliably when several different factors or influences converge, for example, when a person repeatedly practices a virtuous activity in the context of supportive relationships, with suitable role models, and with ongoing and helpful feedback (for more on this issue, see Porter forthcoming).

While this is an accurate and important qualification, "practicing virtues" remains among the most important and powerful steps we can take to cultivate virtues. While we can sometimes develop virtues in the absence of role models or "exemplars," or without an especially supportive community, we rarely if ever do so in the absence of virtuous practice. For this reason, practicing virtues is perhaps the most important means of developing virtues.

IMPLICATIONS FOR TEACHING

Thus far I've been focusing on how virtues are formed in general, without specific reference to education. So we should consider: what implications does this general account have for the teacher who is interested in helping her students grow in open-mindedness, intellectual carefulness, intellectual autonomy, and similar qualities?

If I am such a teacher, then the first thing I need to do is identify which virtues I'd like to focus on. This focus should be relatively limited. My objective should not be to help my students become more intellectually virtuous in general; nor should it be to help them grow in *all* the intellectual virtues (of which there are dozens). Instead, I should limit my focus to a manageable subset of intellectual virtues (two to five is a reasonable starting point).

Second, I'll want to get very clear on the *behaviors* and *actions* characteristic of these virtues. I might begin by describing them

at a fairly general level, as we did above when we noted that open-mindedness is about perspective-switching, intellectual autonomy about thinking for oneself, and so on. However, I won't stop here. Rather, I'll go on to formulate more precise and finegrained descriptions. In doing so I will ask myself questions like: "For each of the target virtues, what would it look like for one of my students to manifest this virtue in one of my classes?" More specifically, I might reflect on one of my regular lessons, group exercises, or assignments, and then consider: "If a student were to practice the virtue in question in this context, what exactly would this look like? What exactly would the student do, say, or think?" The purpose of this reflective exercise would be to develop a very clear picture in my mind of the sort of activities my students might engage in on the way to developing the virtues in question. As the scenario just described suggests, the activities should be, among other things, developmentally appropriate. They should

"While we can sometimes develop virtues in the absence of role models or 'exemplars,' or without an especially supportive community, we rarely if ever do so in the absence of virtuous practice."

also be reflective of the kind of thinking required in the specific subject or subjects I teach and the specific activities and assignments I tend to use.

Third, once I have thought carefully about these things, I'll then be in a position to ask myself: "How can I go about building opportunities to practice the relevant virtue-specific activities into my classes? For example, how can I provide my students with opportunities to identify and avoid possible errors (carefulness), to consider multiple perspectives (open-mindedness), and to think for themselves (intellectual autonomy)?" Given the more specific thinking I will already have engaged in, these questions shouldn't be too difficult to answer.

Nevertheless, it may be helpful for me to dwell on the following four questions:

1. WHEN IT COMES LECTURING OR DIRECT INSTRUCTION, HOW CAN
I GIVE MY STUDENTS OPPORTUNITIES TO PRACTICE THE VIRTUES IN
QUESTION?

Because the practice of virtues is always active (vs. passive), this may mean rethinking my overall approach to lecturing. In any case, it will require grappling with questions like: "How can my students become active participants in the process of direct instruction? How can I build opportunities for thoughtful engagement and participation into this process?"

2. WHAT SORTS OF SMALL GROUP ACTIVITIES CAN I USE TO GIVE MY
STUDENTS STRUCTURED OPPORTUNITIES TO PRACTICE THE
RELEVANT VIRTUES?

In my experience as a student and teacher, small group work often doesn't involve a very efficient or effective use of class time. Nor does it always demand very deep or engaged thinking. Nevertheless, small groups can be an excellent context in which to practice intellectual virtues. Therefore, here as well I may need to rethink some of my typical pedagogical practices.

3. HOW CAN I BUILD OPPORTUNITIES TO PRACTICE TARGET VIRTUES
INTO THE ASSIGNMENTS I GIVE MY STUDENTS?

For example, instead of simply assigning a certain number of pages of reading for homework, I might consider: "How can I add to or structure a reading assignment in such a way that it gives my students a clear opportunity to think for themselves, consider alternative standpoints, avoid mistakes, and so on?" Alternatively: "How can I ensure that the papers or projects I assign also provide my students with opportunities to practice intellectual virtues?" In response to the latter question, this will require, at a minimum, making sure that the papers or projects can't be completed in an effortless or thoughtless manner. They'll need to require deep, careful thinking and imagination. More specifically, it will require dwelling on the specific kinds of actions that are characteristic of the virtues I'm concerned with and building

opportunities to perform these actions into the relevant assignments.

4. FINALLY, WHEN IT COMES TO TESTS OR EXAMS, HOW CAN I DESIGN
THESE ACTIVITIES IN SUCH A WAY THAT THEY REQUIRE VIRTUOUS
THINKING?

For many of us, our exams already require practicing virtues like carefulness and thoroughness. If an answer contains several mistakes or if it fails to demonstrate a genuine understanding of the material or to offer a rich and independent explanation of it, this will be reflected in how the answer is graded. But suppose one is also interested in trying to foster curiosity, intellectual autonomy, or open-mindedness. How might we design tests and exams that require students to formulate thoughtful and insightful questions, to come up with their own ideas or opinions, or to give an honest and fair hearing to an alternative point of view?

THINKING ROUTINES

The discussion in the previous section focused largely on questions we should ask ourselves when trying to create opportunities for our students to practice intellectual virtues. In this section I'd like to get a bit more specific and concrete. My focus will be on "thinking routines" understood as a pedagogical tool for facilitating the practice of intellectual virtues. Thinking routines are structured opportunities to practice the virtues of good thinking

that "have only a few steps, are easy to learn and teach, can easily be scaffolded, and are used over and over again" (Ritchhart 2002: 88). To provide an idea of what they involve and of how they are related to intellectual character development, I'll describe a few specific routines. (For an excellent overview of thinking routines and for helpful advice and examples of how they can be effectively used in a classroom setting, see *Making Thinking Visible* by Ron Ritchhart, Mark Church, and Karin Morrison. See also Ritchhart 2002: Ch. 5. A useful online resource is available here.)

"See-Think-Wonder" is a routine "designed to draw on students' close looking and intent observation as the foundation for greater insights, grounded interpretations, evidence-based theory building, and broad-reaching curiosity" (Ritchhart et al 2011: 55). This routine involves the following steps:

First, the teacher presents an object for students to attend to or reflect on in a focused way, ensuring that the immediate environmental conditions (e.g. light, noise, arrangement of furniture) are conducive to reflection. The object could be a painting, photograph, artifact, video clip, excerpt of a text, political cartoon, map, chart, graph, or other object.

Second, the teacher asks the students to describe, in careful detail, what they "see." Their responses to this question should be strictly *descriptive*. They are to look intently at the object and to describe, as specifically as possible, what they see. They should not attempt to explain or interpret their observations.

Third, the teacher then asks students to begin explaining or inter-

preting the "data" they have collected. Suppose, for example, that the object is a painting. Students would begin, in the previous step, by describing as many details of the painting as possible. Then, in the present step, they would begin to offer explanations of these details. Here the aim would be to understand what exactly might be going on in the painting. It is critical, however, that these two steps be undertaken separately, for students' interpretations of the painting (or other object) may vary significantly depending on the number and variety of details they have observed.

Finally, the teacher asks students to pose additional questions about the object, e.g. "What remains unclear?" or "What else does this painting (or other object) make you think of?" or "Why do you think the artist made it the way he or she did?"

Think for a moment about how differently this exercise would go if the teacher were simply to show the painting to the students and ask: "What do you think about this?" There's a good

"What Makes You Say That?' is a routine that helps students identify the basis of their beliefs or impressions by asking them to reflect on and articulate their underlying reasoning."

chance that their answers would be all over the map and that they would engage in very little focused, careful, or attentive thinking. Furthermore, the students' experience and understanding of the painting would likely reflect these features of their engagement with it. By contrast, when viewing the painting from within the

framework of the "See-Think-Wonder" routine, students are given an opportunity to stop, look carefully, reflect, make conjectures, and ask questions. They engage with it in a more intelligent and meaningful way.

"See-Think-Wonder" provides students with an opportunity to practice at least five intellectual virtues. First, it provides an opportunity to practice attentiveness. Students must focus on the object in question, looking closely and seeking to identify important details. Second, it provides an opportunity to practice intellectual carefulness. Students are asked to look at or reflect on the object carefully, not jumping to conclusions and not missing out on important details. Third, the routine provides an opportunity to practice intellectual autonomy, as students are asked to come up with their own ideas about what might be happening or going on with the object. Fourth, because the routine invites probing for deeper meaning and working hard to identify an explanation of the object, it also requires intellectual thoroughness. Fifth, the routine also provides a structured opportunity to practice curiosity because it requires students to identify questions for further reflection or inquiry.

"What Makes You Say That?" is a routine that helps students identify the basis of their beliefs or impressions by asking them to reflect on and articulate their underlying reasoning. By contrast with "See-Think-Wonder," it need not amount to a separate event or exercise within the flow of a lesson. Instead, it is a routine that

can and should pervade classroom interactions and discussion. "What Makes You Say That?" has a simple structure: it consists of pausing to ask students *why* they have a particular belief of impression. This could be a belief about why a particular physical phenomenon occurs, how a character in a book should respond in a particular situation, why a certain historical event unfolded as it did, or whether a given mathematical conjecture is true. Because it gets at the basis of students' beliefs, this routine encourages "evidential reasoning," an important cognitive skill (Ritchhart et al 2011: 165).

However, note that the question "What makes you say that?" is not identical to "What's your evidence for that?" or "Do you have good reasons for what you've said?" For, the question also invites reflection on any *non*-rational or *non*-evidential forces that might be at work in students' thinking. By reflecting on this question, a student might be led to realize, "I guess I made that remark largely out of fear" or "I believe this because that's what my parents believe" or "I said I couldn't succeed at this because when I've tried in the past I've always failed." These are answers to the question "What makes you say that?" but they may not be good reasons or evidence for the statements in question.

Thus the goal of the "What Makes You Say That?" routine isn't primarily to *challenge* students' beliefs (though it will have that effect in certain cases). It is rather to help students develop a habit of self-reflection, in particular, a habit of reflection on the rea-

sons, motives, or other causes of their impressions or beliefs. In doing so, it provides students with opportunities to practice several intellectual virtues.

First, because of how it requires students to think deeply, and to seek explanations for why they believe what they believe, it provides an opportunity to practice intellectual thoroughness. Second, to the extent that we are naturally inclined to misunderstand or misconstrue the basis of our thinking, it requires intellectual carefulness. Third, to the extent that developing an accurate understanding of the basis of our thinking involves recognizing that this basis isn't as good or as reasonable as we might have thought, this routine also serves as an invitation to practice intellectual humility. Fourth, and similarly, since we often fear having the shaky or irrational basis of one of our beliefs exposed, being careful and humble in our assessment of this basis can also be an opportunity to practice intellectual courage.

"What Makes You Say That?" is a good example of a routine the practice of which can and should be initiated, not just by teachers, but also by students. In the context of a (respectful) classroom discussion or debate, students can regularly ask each other "What makes you say that?" Lastly, this question can also be posed by students to their teachers, for example, when a student doesn't understand the point the teacher is making or when he finds himself intrigued by something the teacher has said. In this respect, it can also be an opportunity to practice *curiosity*. Ideally,

it would be part of the very culture of the classroom that teachers regularly use this routine with their students, that students use it with each other, and that they use it with the teacher.

"Circle of Viewpoints" is a routine that "focuses on perspective

"Thinking routines are structured opportunities to practice the virtues of good thinking that 'have only a few steps, are easy to learn and teach, can easily be scaffolded, and are used over and over again."

taking ... This process creates a greater awareness of how others may be thinking and feeling and reinforces that people can and do think differently about the same things ... The ultimate goal of this process is to gain a broader and more complete understanding of the topic, event, or issue through this process" (Ritchhart et al 2011: 171). This routine can be done with larger or smaller groups of students. It can be used at the beginning of a unit to introduce a new topic or within a unit or after the study of a book or event to foster deeper reflection. The immediate focus of the routine can be anything that admits of multiple perspectives or standpoints—from a controversial topic, to an historical event, an image, a physical object, or a story. This routine involves the following steps:

First, students identify the various points of view. Here as well they should stick exclusively to this task, not moving on to the next step

until the teacher has prompted them to do so. This can be done by asking questions like: "Who's involved?" or "Who might be affected by what's happening?" or "What are the different points of view represented in this story, event, or object?" These viewpoints needn't be limited to the viewpoints of *persons*—they can also be the viewpoints of, say, animals or of inanimate objects.

Second, students are asked (individually or in small groups) to explore one particular viewpoint, addressing questions like, "How do things look or feel from this viewpoint? What's happening?" or "What's good or bad from this standpoint?" The goal of this part of the routine is for students to enter into the "psychology" or the felt and lived experience of the person, animal, or thing inhabiting the perspective in question.

Third, students are asked to "wonder something" or to raise a question from the perspective they have taken up.

Finally, students share their thinking with the rest of class, discussing the questions that have been raised.

"Circle of Viewpoints" provides an obvious opportunity to practice open-mindedness, for the crux of the routine is to identify and give sympathetic consideration to a range of different standpoints. Notice, however, that as with open-mindedness itself, the goal of the routine isn't to consider alternative perspectives simply for their own sake; rather, the goal is to develop a deeper understanding of the event or object under consideration. "Circle of Viewpoints" also provides a ready opportunity to practice intellectual humility. As students take up foreign or unexpected perspectives, they learn that their natural—or the most obvious—way of looking at things is often quite limited and incomplete. The third

step of the routine provides an opportunity to practice *curiosity* as students generate questions that might arise from the standpoint they are considering. This process, along with that of entering sympathetically into the different perspectives, also requires students to be "present" and focused on important details. Thus it also gives them an opportunity to practice *attentiveness*. Finally, because the routine requires students to share their answers with the rest of the group or class, it provides those who are nervous about doing so an opportunity to practice intellectual *courage*.

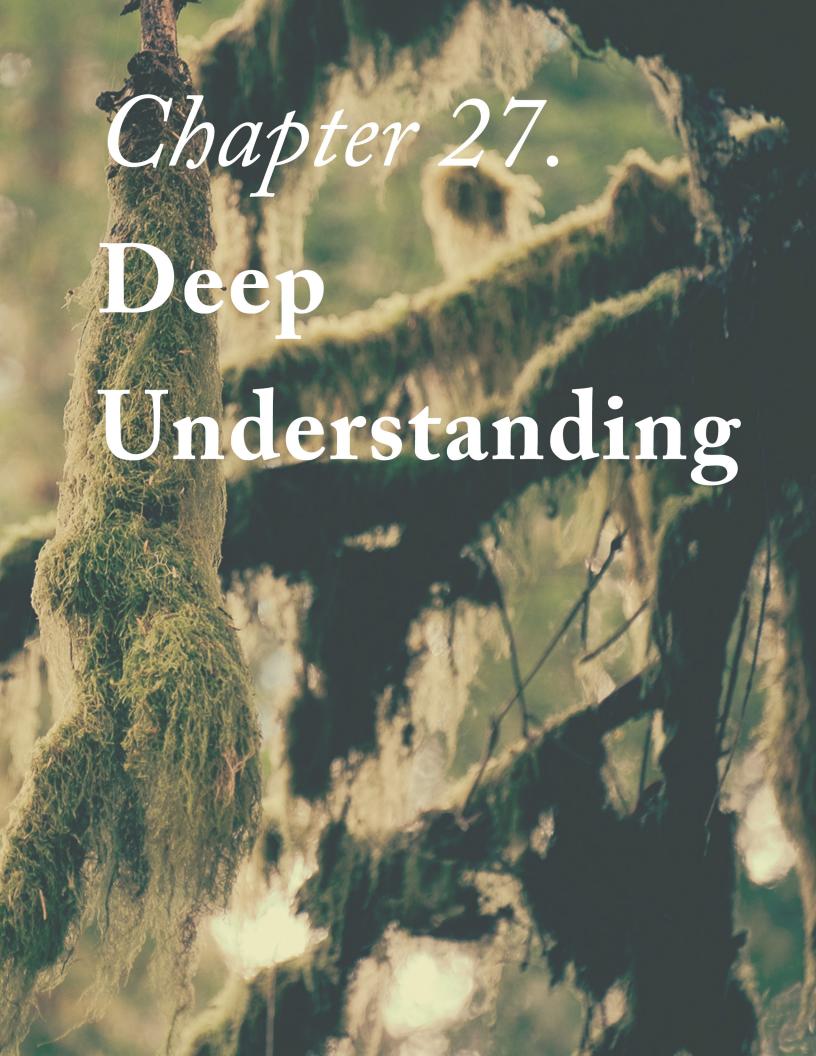
SELECTING ROUTINES

The above are just a few of dozens of thinking routines that have been developed by experienced teachers and researchers interested in helping their students grow in the habits of good thinking. Before closing, it is worth considering in a little more detail how you might approach the use of thinking routines in your classroom. Again, a good first step is to identify a limited number of target virtues. Next, you will want to develop a very specific and developmentally appropriate conception of the specific cognitive behaviors or activities that distinguish your target virtues from other virtues. Once you've done this, the natural next step is to ask yourself: "Which thinking routines will provide my students with opportunities to engage in these specific activities?" There are at least two different ways you might go about answering this question. First, you might examine a range of existing thinking routines (e.g. those in *Making Thinking Visible*), looking for those

with built-in opportunities to practice the activities in question. Alternatively, you might seek to create your own routines based on exercises you've previously conducted or on specific things you know about your students' abilities or interests. Each approach has its merits. And, of course, the two approaches can be combined.

DISCUSSION QUESTIONS

- I. When you think about the various assignments and exercises you use in your classes, which virtues do you regularly give your students opportunities to practice? How exactly do these assignments or exercises demand the practice of the virtues in question?
- 2. Identify an intellectual virtue you'd be interested in focusing on with your students. Next, describe three to four behaviors or activities that you think are characteristic of this virtue. Be sure that your descriptions are specific, developmentally realistic, and relevant to the subject matter you teach. Finally, identify some new ways (e.g. assignments or in-class exercises) in which you could incorporate opportunities to practice this virtue into one or more of your classes. Try to be as specific as possible.
- 3. Of the three thinking routines described above, which seems most relevant to your own teaching? Why? What are some specific occasions on which you might use this routine?



In many schools and classrooms, what goes on isn't very well aligned with the goal of helping students develop a deep understanding of important academic subjects. It isn't aimed at helping them see how or why various claims or theories are true. It shows no special concern for helping them "connect the dots" between important events or concepts. Nor does it leave them in a good position to explain what they've learned to others.

Rather, education often stresses breadth over depth and quantity of knowledge over quality. It exposes students to a vast array of facts and ideas without touching on any of them for long or at a very deep level. Hence the familiar critique that many academic standards and curricula today are "a mile wide and an inch deep."

A similar point applies to the familiar focus on memorization and rote problem solving. Taken as ends in themselves, these activities are at odds with the promotion of deep understanding, for a student can memorize a vast quantity of information without actually understanding what she has memorized. Likewise, a student can become very skilled at solving equations without ever pausing to ask herself: "How do these equations or functions work? Why do they generate correct solutions? What's the

underlying explanation?" And, certainly, she can do so without actually having *answers* to these questions, that is, without actually understanding the work she's doing. (Of course, where the goal is deep understanding, memorization and problem solving will have a place; however, they will not be the *end* or *goal* of the learning process.)

INTELLECTUAL VIRTUES AND DEEP UNDERSTANDING

Approaches that stress quantity over quality, memorization, and rote-problem solving are no less antithetical to the practice of educating for intellectual virtues than they are to the practice of educating for deep understanding. While this may seem like a vaguely plausible observation, it is worth considering why it is true. That is, what is it about these approaches and emphases that conflicts with the goal of trying to help students grow in qualities

"[A] student can memorize a vast quantity of information without actually understanding what she has memorized."

like intellectual autonomy, attentiveness, curiosity, and intellectual courage? Or, what is it about the latter goal that invites or even requires an emphasis on deep understanding?

There are at least three answers to this question. First, the type of learning that goes along with prioritizing quantity over quality,

memorization, and so on, often treats students as passive receptacles of information. This is problematic given that intellectual virtues manifest in *active* intellectual engagement. And, as we saw in Chapter 26, we develop virtues largely through practicing the intellectual activities and behaviors that are characteristic of these virtues. For this reason, pedagogical approaches and academic curricula that cover a vast amount of material at a superficial level or that stress memorization over deep understanding make for a poor environment in which to foster intellectual character growth.

Second, possessing deep understanding of an important subject matter is a rewarding and pleasurable experience. Compare this with the state of having crammed numerous facts and definitions into one's short-term memory. While the latter might be useful on various occasions, it's not a very enticing end. Nor, then, is it likely to be a source of much intellectual motivation for students. By contrast, suppose your aim as a teacher is for each of your students to develop a rich personal understanding of the subject matter. This *can* have a significant and favorable impact on their intellectual motivation. You can assure your students, in good conscience, that if they work hard and succeed in the course, they can expect to experience a kind of intellectual satisfaction and sense of genuine accomplishment. This is a further way of encouraging them to engage with the course content in intellectually virtuous ways.

A third reason concerns the *aim* of intellectual virtues. Perhaps surprisingly, the main focus of an intellectually virtuous person is not to grow in or to preserve her intellectual virtues. Rather, as we've seen in previous chapters, intellectual virtues are character traits that "flow from" a love of "epistemic goods" like truth, knowledge, and understanding (Baehr 2011: Ch. 6; Zagzebski 1996; Roberts and Wood 2007). In fact, it can be argued that the aim of intellectual virtues is best conceived of in terms of

"[A]n inquiry-based curriculum in subjects like science, math, or history can provide a good foundation for teaching for deep understanding."

understanding in particular. For, a person can have a lot of true beliefs (e.g. by memorizing a lot of isolated facts) and even a great deal of knowledge (e.g. if these factual beliefs are well supported) without seeing how or why the various parts of her knowledge fit together or without an ability to explain her knowledge to others. Intuitively, this does not describe the thinking or mental states of people we identify as role models or exemplars of intellectual virtue. These people desire, not just true belief or even mere knowledge, but rather deep understanding. Again, they want to understand how or why things are the way they are, how various bits of knowledge fit together, how things work, and so on.

Accordingly, if we want to help our students grow in intellectual

virtues, we must place a premium on teaching for deep understanding. Even if by the prevailing standards at our school site we are "performing well," to the extent that our students aren't demonstrating a firm personal grasp of the main concepts and standards we are charged with teaching them we must be willing to critique ourselves and to look for ways to improve. This has important implications for what we teach and how we teach it, that is, for both curriculum and instruction.

UNDERSTANDING-BASED CURRICULUM

By an "understanding-based curriculum" I mean a curriculum that is clearly and systematically aimed at helping students develop a deep understanding of the material, which again involves making connections between ideas or facts, grasping how things work or why things are the way they are, being able to consider the subject matter from multiple perspectives, and being in a position to explain the subject matter to others. It amounts to a deep and sophisticated form of "cognitive mastery" (Ritchhart 2002: 224; Leithwood et al 2006: Chs. 1-4; Blythe et al 1998: Ch. 2).

In the present section, I will discuss five features of an understanding-based curriculum. This list is by no means exhaustive; there are other ways in which a curriculum can be oriented toward deep understanding. Nor must every understanding-based curriculum possess all of these features. Nevertheless, my hope is that the discussion will provide a helpful general account of

what an understanding-based curriculum might look like. (For more on an understanding-based curriculum, see Wiggins and McTighe 2005, Leithwood et al 2006, esp. Chs. 5-15, Blythe et al 1998, esp. Chs. 3-7, and Ritchhart et al 2011: Ch. 1.)

Depth vs. breadth. As already suggested, an understanding-based curriculum is more likely to cover fewer topics or concepts than a curriculum that is not aimed at deep understanding. However, it will cover these topics in greater detail and with an eye to questions about how things came to be, why things are the way they are, how things work, why they're true, and so on.

Inquiry. "Inquiry-based" programs in disciplines like science, math, and history provide good opportunities to educate for deep understanding. Such programs often aim at teaching students to think scientifically or to think like a mathematician or historian. As such, one of their core goals is—or at least should be—deep understanding of the respective subject matters. After all, deep understanding is precisely what most scientists, mathematicians, and historians are after. They are not after mere knowledge, let alone a collection of isolated bits of information. Instead, they want to know how the world really is in some respect, how various principles or concepts are related to each other, or why certain events unfolded the way they did. They want to know how things "hang together" in their respective domains. They want to understand. For this reason, an inquiry-based curriculum in subjects like science, math, or history can provide a good foundation for teaching for deep understanding.

Essential questions. In a literature course, structuring the curriculum around certain universal themes or "essential questions" (e.g. questions about life, death, mystery, the future, free will, etc.) can also be an effective way of promoting deep understanding (Ritchhart 2002: 58-59, 75-77). Provided that the themes and questions are gripping and meaningful, they can attract students' attention and help them

make connections between what they're learning in class and some of their more fundamental or deeply human concerns. Accordingly, a literature teacher might identify one or more essential questions that

"A math curriculum can invite students to reflect on why certain concepts or rules work or get the results they do, to think through multiple ways of solving a problem, to experiment or 'play' with mathematical concepts, or to creatively apply mathematical knowledge."

he and his students can use to analyze all of the literary works they study over the course of a semester or year. Such questions might include: What's the meaning of life? What is it to be a good person? Do human beings have free will? How should we think about death? Not only is reading the works through this lens likely to capture the interest of students, it can also provide a framework within they can more easily think about and understand several important literary devices like plot, theme, and character. It can also provide a framework that allows students to make connections among the various works they're studying. In these and related ways it can facilitate deep understanding.

Explanation. As suggested above, there's a close and important connection between understanding and explanation. We can't truly (or deeply) understand something if we don't possess any kind of explanation of it. Further, if someone tells you she understands something, you can reasonably expect that she'll be able to explain it to you (of course, whether you'll understand her explanation may depend on what's being explained). Thus an understanding-based curriculum will also be an explanation-based curriculum.

There are at least two ways in which this is so. First, the curricular materials themselves will provide good explanations of the relevant subjects. They will not treat the subject matter in superficial or cursory ways. Again, they won't be "a mile wide and an inch deep." Instead of focusing exclusively on the "who, what, and when," they will also include a major emphasis on the "why and how." Second, an understanding-based curriculum will provide students with ongoing opportunities to seek and provide explanations. It will do this by regularly posing thought-provoking questions and with assignments and exercises that require students to justify their answers and make connections between various topics and ideas.

This is true even in mathematics. While mathematics curricula often focus on rote problem solving instead of mathematical understanding, this needn't be the case. A math curriculum can invite students to reflect on *why* certain concepts or rules work or get the results they do, to think through multiple ways of solving a problem, to experiment or "play" with mathematical concepts, or to creatively apply mathematical knowledge (see, for example, the <u>Connected Math Project</u>).

Indeed, the new Common Core State Standards in mathematics are intended to promote mathematical understanding. The following is an excerpt from a CCSS document that emphasizes the importance of having students *justify* their mathematical beliefs, which requires a grasp of how or why these beliefs are true:

But one hallmark of mathematical understanding is the ability to justify, in a way appropriate to the student's mathematical maturity, why a particular mathematical statement is true or where a mathematical rule comes from. There is a world of difference between a student who can summon a mnemonic device to expand a product such as (a + b)(x + y) and a student who can explain where the mnemonic comes from. The student who can explain the rule understands the mathematics,

and may have a better chance to succeed at a less familiar task such as expanding (a + b + c)(x + y). (4)

This also underscores a related but important point: namely, that because we typically explain things using words and sentences, we can expect any explanation-based—and thus any understanding-based curriculum—to place a heavy emphasis on *writing*, including writing about mathematical concepts and ideas.

Multiple perspectives. Part of deep understanding is being able to think about an issue from multiple perspectives or angles. Therefore, regardless of the discipline, an understanding-based curriculum will approach its subject matter from various points of view. And its exercises, assignments, and assessments will encourage students to do the same. In history, this might look like examining a single series of events from the standpoints of multiple groups who were affected differently by these events (e.g. the "winners" and the "losers"). In math, it might look like producing different ways of solving a single problem. Incorporating multiple perspectives is also likely to involve the use of various media, including media that cut across different disciplines. In science, for instance, a unit on human evolution might involve studying this topic via a combination of a science textbook, selections from a primary source, a video, one or more pieces of artwork, a relevant work of fiction, and so on. By learning about or experiencing a topic from multiple angles, students will develop a better grasp of its various facets and of how these facets "hang together." In doing so they will develop a more comprehensive understanding.

The foregoing description of an understanding-based curriculum highlights a special connection between educating for deep understanding and certain intellectual virtues. The point just made about approaching a topic from multiple angles suggests that an understanding-based curriculum will give students frequent op-

portunities to practice *open-mindedness*. The connection between understanding and explanation suggest that it will also place a heavy emphasis on *intellectual thoroughness*. Again, an intellectually thorough person is one who seeks and gives explanations. She is not content with superficial or cursory knowledge. She wants to understand how or why things are the way they are.

UNDERSTANDING-BASED PEDAGOGY

So far the primary focus has been on the qualities of an understanding-based curriculum. However, educating for deep understanding isn't just a matter of what curriculum we use; it's also a matter of *how* we teach—of our pedagogical approach and practices. (For more on this topic, see Leithwood et al 2006, esp. Chs. 17-20 and Blythe et al 1998 esp. Ch. 8.)

"A class in which asking thoughtful questions is expected and rewarded is a class that is ripe for the achievement of deep understanding. ... Similarly, if I am trying to teach for deep understanding, I will be sure to leave space—in my lessons but also in my own 'heart and mind'—for relevant digressions and explorations."

If you're fortunate enough to be using a curriculum that is understanding-based, then of course one of your primary aims should

simply be to faithfully implement this curriculum. This will look like *not* oversimplifying key concepts, rushing through the material, or stifling student reflection or thinking. But what else might it involve? In the remainder of this chapter, I'll briefly discuss a few additional understanding-based pedagogical practices.

We can come at these practices by considering two additional ways in which a teacher might *fail* to promote deep understanding: first, she might fail to leave adequate room for students to acquire such understanding in how she structures her lessons or how she allots class time; second, while leaving room for the promotion of deep understanding, she might fail to positively encourage or foster it. These possibilities underscore several positive suggestions. If we want to ensure that we're creating space in our lessons for the promotion of deep understanding, we should consider adopting the following principles and practices:

Less is more. If I am committed to helping my students develop a firm personal grasp of the subject matter, then to the extent that I have control over what I teach or when, I will structure my classes in such a way that my students have an opportunity to "go deep" with the relevant topics and concepts. This is likely to involve covering fewer topics and concepts. However, it will create an opportunity for my students to develop a firm personal understanding of the topics and concepts that are covered.

Wondering and asking thoughtful questions. I will also create opportunities for my students to wonder and ask questions. These intellectual activities are importantly related to understanding insofar as wondering or asking questions about a topic is often a way of "going"

deeper" with it, of probing the why or how of the topic. A class in which asking thoughtful questions is expected and rewarded is a class that is ripe for the achievement of deep understanding.

Digressions and explorations. Similarly, if I am trying to teach for deep understanding, I will be sure to leave space—in my lessons but also in my own "heart and mind"—for relevant digressions and explorations. Students often ask questions about topics that are not immediately related to the topic at hand. Sometimes these questions are "red herrings" and taking the time to pursue them would be pedagogically unwise. However, often enough the connections students are asking about or calling attention to have at least a grain of insight or relevance (even if they are somewhat off topic). Again, if I'm interested in facilitating deep understanding, I'll be on the look out for and will often be open to pursuing these connections. This is because part of what is involved with developing a deep understanding of something is grasping connections between it and other things one knows or is curious about. Here as well, then, a classroom in which the teacher and students feel the freedom to pursue relevant digressions or to explore spontaneous questions will be primed for the pursuit of deep understanding.

Creating *room* for teaching for deep understanding is only the half the battle. If we want this approach to have a positive impact on the intellectual character of our students, other more direct steps will need to be taken:

Modeling. One such step is modeling deep understanding for our students. This can take many forms, but one example of what it might look like is as follows. Suppose I ask my students a question about something we've just been studying and suppose that one of them hazards an answer that is relevant but not quite right. I could reply by saying something like, "No, that isn't quite correct. Anybody else have an answer?" Or, I could proceed to explain how or why the an-

swer is relevant but not quite accurate. In doing so, I'd most likely be displaying my understanding of the relevant concept. I'd be modeling my grasp of how it works or of how its various parts fit together. This kind of understanding can be impressive and illuminating. Exposure to it can contribute to students' own understanding; and, even where it doesn't, it can encourage students to *want* to understand. It can make them interested in having the kind of masterful grasp I've just demonstrated. As this suggests, the main idea here is that, like intellectual virtues, deep understanding is a good and attractive achievement. By modeling it for our students in how we explain a topic, how we respond to them, or just by "thinking out loud," we can improve their grasp of what deep understanding looks like and help motivate them to pursue it.

Expectations. Every teacher has certain expectations when it comes to the kind of thinking and learning that is manifested or practiced by her students. And students generally are aware of these expectations. If students admire and feel supported by their teacher, these

"By learning about or experiencing a topic from multiple angles, students will develop a better grasp of its various facets and of how these facets 'hang together."

expectations can have a powerful effect as students rise to the occasion to meet them.

Accordingly, if I'm interested in teaching for deep understanding, I will expect my students to pursue such understanding and to demonstrate it in their activity and work. This expectation will show itself in a variety of ways. It might, for instance, be evident in my frequent use of the thinking routine "What Makes You Say That?" (see Ch. 26). Regular use of this routine is a way of establishing an expectation of understanding because it requires students to probe

the basis of their beliefs. This expectation should also be evident in the assessments I give. These assessments will demand that students demonstrate a firm personal understanding of the material.

In my own classes, I make fairly heavy weather of this by saying that on their exams and related assignments, students must distinguish themselves from the "mere regurgitator," that is, from the student who has simply memorized the material as it was presented in the relevant text or handouts or PowerPoint slides. I explain to students that if a person who doesn't have a deep understanding of the material could possibly have given the answer they have given, then their answer is bound to receive a low score. Another way of expressing this expectation is as an ongoing call to intellectual thoroughness. Thus we would do well to ask ourselves: "Would my students agree that there is an expectation of intellectual thoroughness throughout my classes? What would they point to in support of their answers?"

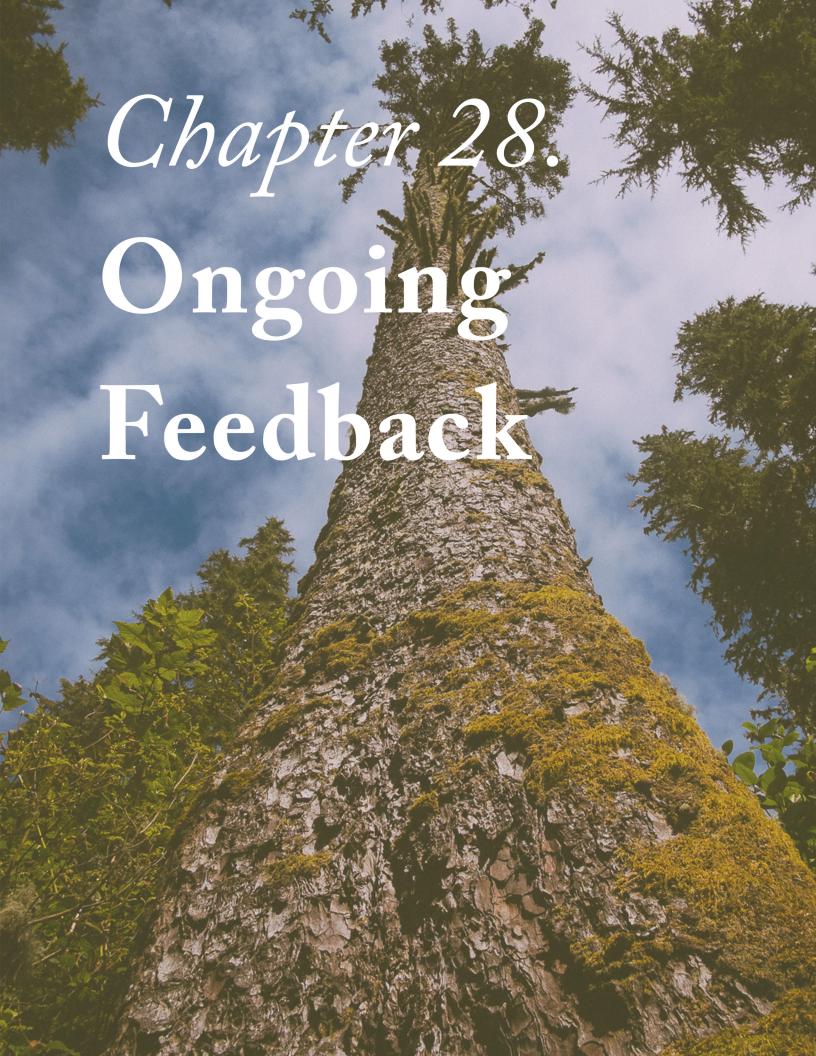
Objections and replies. If I want to understand a new topic, one helpful strategy is to *interrogate* it—to ask as many challenging and probing questions about the topic as possible. I can also proceed to consider how these questions might or should be answered. This will help me begin to grasp the "ins and outs" of the topic and thus to develop a deep understanding of it.

This point can be translated into an advisable pedagogical practice. An effective way of helpings students acquire deep understanding of a particular theory, claim, or conjecture (whether in math, science, history, or any other discipline) is to encourage them to *scrutinize* it—to "kick the tires," so to speak. This can look like routinely posing the following sorts of questions: "How could this be objected to?" or "What are some possible problems with this view?" or "Can anyone think of any counterexamples to this claim?" However, the questions shouldn't end here, as the goal is to *understand*, not to demolish or tear down. Thus it's also important to reflect on questions like: "How could a defender of this view get around this objections."

tion?" or "What might a possible solution to this problem look like?" Through the interrogative process of objections and replies, students are given a chance to develop a deeper, more complex, and more sophisticated grasp of the relevant content, that is, to acquire a deeper understanding of it.

DISCUSSION QUESTIONS

- 1. Think of a time when you, as a teacher or as a student, developed a deep understanding of something in school. How would you describe the change that took place in your mind? How was this change related to the notion of deep understanding as described in this chapter?
- 2. As noted above, rote memorization treated as *an end in itself* is sharply opposed to teaching for deep understanding. However, do you think there's an important role for memorization *within* a framework of teaching for understanding? If so, why? If not, why not?
- 3. When you reflect on your existing educational practices, what are a few ways (e.g. teaching methods or assignments) in which you feel like you already teach for deep understanding? What could you do to further strengthen or improve these efforts? Then list one additional thing you could do in each of the following areas: (a) helping your students develop a deep understanding of the material; (b) assessing whether or the extent to which they have acquired a deep understanding; and (c) helping your students develop a desire or motivation to pursue deep understanding.



CHAPTER 28

Ongoing Feedback

As with other forms of growth and development, intellectual character growth is facilitated by ongoing feedback, including feedback regarding one's intellectual character strengths and weaknesses. In this chapter, we'll look at the importance and process of giving character-based feedback within an intellectual virtues framework. Thus the discussion will revolve around two main questions: Why does character-based feedback matter? What are some ways that we can provide such feedback to our students?

WHY FEEDBACK MATTERS

Imagine a school that says it is committed to helping students grow in intellectual virtues and where teachers regularly talk about the importance of these traits, but where the students never receive any input about how they're doing relative to this goal. They're never told—or given any significant opportunities to discover for themselves—which virtues they regularly demonstrate in class or which virtues they need to work on. Given the lack of character-based feedback, the students begin to experience a frustrating disconnect between what the school and teachers *say* is important and what they're actually evaluated on in their class-

es. Over time, they grow cynical about and begin to dismiss the school's lofty mission.

This brief thought experiment underscores at least a couple of reasons why receiving ongoing virtue-based feedback is essential to the practice of intellectual character education:

Cultural impact. As discussed in Chapter 15, whether widespread intellectual character growth occurs in a school setting depends in no small part on whether the culture of the school supports such growth. We also saw that the culture of a school is defined largely in terms of its values. Therefore, for intellectual character education to be successful, schools must genuinely value the intellectual character growth of their students. If they do, their administrators, teachers, and other stakeholders will do what they can to provide students with feedback about their intellectual character strengths and weaknesses. In short, ongoing virtue-based feedback is central to creating the kind of school culture that supports growth in intellectual virtues.

Student buy-in. In the hypothetical scenario above, students eventually grow cynical about the goal of intellectual character growth as they fail to receive feedback regarding their performance or development with respect to this goal. This kind of disenfranchisement is lethal to the enterprise of intellectual character education. For this enterprise to work, students must be on board with it. One important way of bringing and keeping them on board is ongoing communication about the goals of this approach. It is critical, however, that this communication not be entirely impersonal, for example, that teachers don't talk merely about what intellectual virtues are and why they're important. They also need to help students understand themselves and their "real life" intellectual activity in relation to these ideas. They need ongoing and personalized virtue-based feedback.

Though not exactly illustrated by the above case, there are at least two other important ways in which such feedback can facilitate growth in intellectual virtues:

Self-understanding. Growth of any sort begins from a particular starting point. Intellectual character growth involves ongoing intentional efforts informed and guided by knowledge of this starting point. It involves engaging in certain intellectual activities (e.g. asking questions, focusing on details, not giving up, etc.) based on an understanding of what one's mind is like and of how it operates. It can be tempting to think that such knowledge is simply there for the taking: that we can know the terrain of our minds just by "introspecting" or by directly reflecting on its contents. As we saw in Ch. 23, however, this just isn't the case. When it comes to the detailed features of our own intellectual character strengths and weaknesses, identifying these things requires the assistance of others, including our teachers. This is another reason why providing ongoing virtue-based feedback

"[O]ngoing virtue-based feedback is central to creating the kind of school culture that supports growth in intellectual virtues."

is critical to helping our students experience intellectual character growth. It helps them identify their own intellectual tendencies and habits. This understanding forms a sound basis from which their own efforts to cultivate intellectual virtues are more likely to succeed. Without this kind of basis, our students' sense of where they can improve and of the sorts of practices or activities they might undertake to facilitate this improvement are bound to be impoverished, if not deeply misguided.

Positive reinforcement. Among the most obvious reasons why ongo-

ing virtue-based feedback is important in the context of intellectual character education is that it can serve as an opportunity for positive reinforcement. Suppose I have a student, Darrin, who, while very precocious, is also a bit of a "know it all." While not intending to be rude, he regularly interrupts or talks over the comments of other students and is quick to point out their mistakes. Imagine, however, that on a particular occasion, the tables are turned, and another student identifies a significant flaw in something Darrin has said. In response, Darrin chooses not to get defensive. He stops, thinks about the other student's comment, and responds: "Huh, I guess you're right. I hadn't thought about that." This is a clear opportunity for me to step in and praise what Darrin has done: "Darrin," I might say, "I want you to see what just happened there. You were confident about something. Then, another student pointed out a problem in what you were thinking. Instead of getting defensive or trying to justify your point of view, you showed an openness to your classmate's comment, you acknowledged your mistake, and you proceeded to change your mind. That is an excellent example of both open-mindedness and intellectual humility. Great thinking."

It isn't far-fetched to think that this encounter might have a significant impact on Darrin. It is likely to make him feel good about and proud of his decision to act in an intellectually virtuous way. This has special significance given Darrin's ongoing struggle with intellectual humility. The general point here is that ongoing virtue-based feedback can help students feel good about their practice of specific virtues, increase their intellectual confidence, and encourage similar actions in the future. This can be a powerful way of helping students develop the *habits* of good thinking.

Finally, it is worth noting that these efforts are likely to take on even greater significance in the context of a widely shared understanding of the *value* of intellectual virtues. If Darrin has never heard me speak of intellectual humility or open-mindedness before, my praise might not seem very significant. However, if he understands what

these qualities are, has spent time reflecting on their importance to learning and living well, and knows that they are prized in my class and at the school at large, my feedback is likely to have a much greater impact.

These, then, are some of the ways that providing ongoing virtue-based feedback to our students can facilitate their growth in intellectual virtues. Before turning to look at what form this feedback might take, two additional points are worth noting.

First, note that the general principle here is one that we already practice when it comes to other educational goals. We constantly provide students with feedback regarding their performance as it relates to goals like content mastery and skill proficiency. By way of informal feedback, grades, written comments, and report cards, students receive a great deal of input. Accordingly, if

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we want our students not merely to acquire knowledge and gain proficiency in certain skills, if we also want them to practice and grow in intellectual virtues, it only makes sense that we would provide them with substantial feedback in this area.

Second, we saw above that one goal of such feedback is to help students identify some of their own intellectual weaknesses. It is important, however, that we approach this in the right way. Specifically, it is critical that we not use the language or concepts of intellectual virtues as a way of shaming students into better intellectual conduct. If we use these tools as a form of personal critique, our efforts are bound to backfire. Students will not be receptive to growth in intellectual virtues if they associate these qualities with failure or embarrassment. Therefore, here, as at many other points, we must proceed with caution, making sure that our motives and actions are marked by genuine care and concern for our students and that our students experience them as such.

WAYS OF PROVIDING VIRTUE-BASED FEEDBACK

We turn now to consider some concrete ways in which we can provide students with helpful and supportive character-based feedback. Several of the relevant activities and practices have been touched on here and there in other chapters. However, it may prove useful to consider these again in connection with the specific focus of this chapter.

I'll begin by identifying some informal ways of providing students with virtue-based feedback:

Mid-instruction "noticing and naming." The Darrin example above illustrates the practice of providing virtue-based feedback in the con-

text of teaching a lesson or facilitating a class discussion. It involves "naming and noticing" student behaviors that manifest intellectual virtues as these behaviors occur (Ritchhart 2002: 162, 166; Ritchhart et al 2011: 29). This kind of feedback can be directed to individuals with comments like: "Isabella, thank you for your willingness to express your opinion about that—I suspect that took real intellectual courage" or "Sam, that response, even though it was a little off target, was super imaginative; it was a good example of open-minded thinking" or "Rebecca, I'm very impressed that you picked up on that detail. You must have really been paying attention to what you were reading. Nice attentiveness."

Virtue-based feedback can also be directed to an entire class, for example, when the students have just completed a demanding exercise or assignment: "I want to pause briefly to acknowledge what you've accomplished. That assignment was hard. It demanded some very complex thinking. You knew that, but you persevered and showed great tenacity. Congratulations and well done." As these examples illustrate, virtue-based feedback can help deepen and solidify students' understanding of the kinds of activities or behaviors involved with exercising various virtues. They can also serve as an opportunity to praise students and thereby to increase their confidence and commitment to practicing these virtues.

Discrete feedback before or after class. In my experience, one of the virtues that students struggle with most is intellectual courage. And the struggle often looks like a reluctance to speak up in class to share an opinion or to answer a teacher's question. Therefore, when our more inhibited students do take a risk by speaking up, it can be tempting to want to single them out and praise their intellectual courage. But here as well we need to exercise caution, as singling out shy students for their courageous behavior can cause them to feel embarrassed. Therefore, in cases like this, a better approach might be to stop the student before or after class and to make a discrete but supportive comment like: "Diego, I want to mention very quickly that I no-

ticed the intellectual courage you showed by speaking up today and I think it's terrific." Of course, this approach needn't apply only to intellectual courage. Any time we think a bit of feedback would be better received if it were shared privately (vs. in front of the rest of the class), we should proceed to share it in this manner.

Written feedback on student work. Another opportunity to provide students with input about their intellectual character strengths and weaknesses comes with making comments on their work (e.g. tests, quizzes, and papers). We can do so by using virtues terminology in

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our evaluation of this work. If a student completes a math quiz without any mistakes "Nice carefulness" would be an apt remark; or "great curiosity" when a student raises an insightful question; or "a model of thoroughness" when a student gives an excellent explanation of an important concept. Similarly, if you know that a particular student has had to work especially hard to complete an assignment, then "You've shown a lot of tenacity" would be a fitting comment. The basic idea here is straightforward: provided that students understand the relevant terms and have some sense of their significance, using intellectual virtues language in our evaluation of their work can be a useful way of providing them with character-based feedback.

Other venues. The classroom is the most natural place in which to offer students the kind of feedback we're concerned with. However, it is worth considering whether you or your school's schedule or routines might allow for additional opportunities to give students useful information about their intellectual character strengths and weaknesses. In an earlier chapter (Ch. 19), we examined the possibility of a virtue-based advisory program. While it may not be realistic to implement an entire program of this sort at your school, a less ambitious undertaking would be to introduce a minor focus on intellectual virtues with your advisees. Once a basic structure like this is in place, advisory can be a very natural context in which to reflect on and provide students with meaningful feedback about their intellectual character traits.

In addition to these informal and relatively spontaneous ways of supplying virtue-based feedback, there are other ways of doing so that are a bit more planned and formal:

Rubrics. One more formal way of providing regular feedback to students about their practice of intellectual virtues is to build virtue concepts into rubrics that are used to assess student work like tests, papers, and projects. For this to be feasible, it is important, of course, that the assignments be designed in such a way that they actually require the practice of intellectual virtues (see Ch. 26). If they do, then it should be entirely natural to include virtue concepts and language in the criteria used to assess this work.

This approach may seem novel, but in several ways, many of us already include some virtues language in our scoring rubrics for activities like papers and essay exams. As suggested above, we expect students' work to be *careful* (not sloppy) and *thorough* (not superficial).

Some corresponding rubric items might look like:

Thoroughness: "the work demonstrates a firm personal understanding of the material; includes detailed explanations of key concepts; does not simply repeat what was stated in class or the text."

Carefulness: "the work is free from mistakes and errors; it isn't hasty or sloppy."

Given the different types of errors that might be relevant to assessing a student's work, one might consider subdividing the carefulness criterion so as to track factual errors, logical errors, spelling/grammar/mechanics errors, typos, and so on.

Especially in higher grades, assignments of various sorts and across several subject areas often ask students to come up with their own ideas, for example, to formulate a hypothesis or conjecture or to articulate and defend a thesis. These familiar activities demand an exercise of intellectual autonomy. A corresponding rubric item might be:

Autonomy: "the work demonstrates the student's ability to formulate his/her own ideas and to think independently."

Additional virtue terms and concepts can be integrated into evaluation rubrics when the assignments are intentionally designed to get students to practice particular virtues. For example, a project that requires students to pose a guiding question and to conduct ongoing research about that question might be scored in part via the following criteria:

Curiosity: "the student's guiding question is thoughtful and insightful; the student clearly spent time wondering about the topic."

Intellectual tenacity: "the project has a strong finish; it doesn't 'peter out' toward the end."

Alternatively, suppose an assignment requires students to take up alternative or foreign perspectives or to consider possible objections to the student's thesis:

Open-mindedness: "the student identifies relevant alternative perspectives and formulates reasonable objections."

Fair-mindedness: "the student represents opposing views and objections in a fair and reasonable manner."

By evaluating student work according to these and related criteria, we kill two birds with one stone: we provide them with grades or related marks and we give them feedback about their intellectual character strengths and weaknesses.

Self-reflection and self-assessment. A further way of providing students with feedback about their intellectual character traits is to give them opportunities to engage in self-reflection and self-assessment. One

"[M]any of us already include some virtues language in our scoring rubrics for activities like papers and essay exams."

approach here is to have students reflect periodically on their intellectual character strengths and weaknesses and how these qualities tend to manifest in positive or negative ways in various areas of their lives. Alternatively, if you are in a position to give an assignment like this on a relatively frequent basis, you might consider having students reflect on the following kinds of questions: "In the past week or two, which virtues have you found yourself practicing? What did

this involve? Which virtues did you fail to practice? What were the consequences?" Because many students will have given relatively little attention to their intellectual activity prior to being asked such questions, simple self-reflection exercises like this can be illuminating.

A different approach involves using self-report measures that are aimed at assessing a person's possession of a particular trait (e.g. grit or curiosity). These measures consist of several first-person statements corresponding to the virtue in question (e.g. "I wonder a lot," "I notice important details," or "I enjoy learning about different points of view"). Participants are asked to rate to what extent these statements describe their own thinking. Particularly where the measures have been properly validated, having students take these assessments and discussing the results with them can be a useful way of helping them better understand their own minds. (See Ch. 23 for more on this topic.)

Report cards. Another natural way of providing students with feed-back about their intellectual character is in the "teacher comments" section of their report cards. As we discussed in Chapter 23, given how interested many students are in their report cards, this can be an excellent opportunity to provide supportive input and constructive suggestions. To illustrate, here are some additional excerpts from three different student reports cards at the Intellectual Virtues Academy:

"It has been wonderful to see you grow in tenacity this year. You have often come in to see me on quizzes and tests when you received a low grade, and rather than being discouraged, you used these occasions as opportunities to understand more fully. Your writing has especially reflected this. One area where you need to grow is in thoroughness. Particularly in your writing, your teachers will continue to challenge you in years to come to explain and support your answers clearly and

thoroughly. As you are writing you can try asking yourself, 'What more is needed to support my answer?'"

"You have really grown this year in curiosity. I have been so impressed with the quality of your questions and comments in response to each week's reading. I want to encourage you to continue growing in intellectual courage by sharing out in class more often. You have some truly wonderful ideas, and our class can benefit from hearing those ideas."

"I enjoy all the questions and deep thoughts that you share with the class. You have great insight. You regularly demonstrate thoroughness in our discussion in class. I think you can focus on carefulness and attentiveness as you do your math. I've noticed that your tests and quizzes often have careless errors on problems that I know you know how to do. I'm looking forward to having you for another year in math!"

As these examples show, virtue-based feedback can be an opportunity to gently and supportively provide students with constructive feedback about where they can improve. It can also be an opportunity to provide powerful praise and affirmation.

Assemblies and ceremonies. While occurring outside the classroom, another way of providing students with meaningful feedback about their practice of intellectual virtues is in the context of assemblies or ceremonies. At IVA, the principal leads a weekly "virtues ceremony" in which each teacher recognizes at least one student for practicing a particular virtue that week. This is a way of "building culture" at the school, but it is also a way of providing students with meaningful and concrete input about their

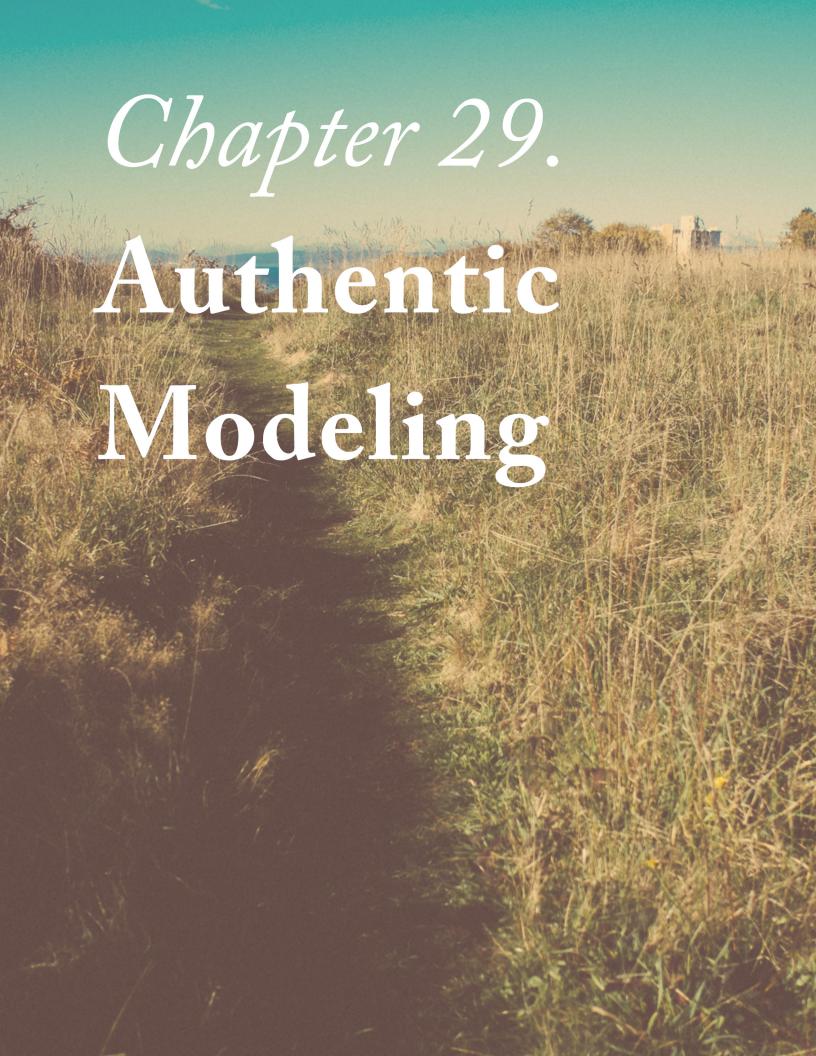
intellectual character traits. Given the context, it can have a powerful effect.

Character files. While somewhat ambitious, a final way of providing students with feedback about their intellectual character strengths and weaknesses is by creating a "character file" for each student. This is a place in which several of the items of feedback noted above can be collected and stored. The contents of the file can then be shared with students (and their parents) at the end of the year or upon graduation. At IVA, each student has a character file. This file contains samples of student work that illustrates their practice of particular virtues and copies of self-reflection exercises from advisory, self-assessments, assessments of the student's understanding of the virtues, and more. One nice feature of this practice is that it can provide students with a sense of how their intellectual character has developed over time.

DISCUSSION QUESTIONS

- I. Are there certain ways in which you already (directly or indirectly) give students feedback about their intellectual character strengths or weaknesses? If so, what are they? And how do they fit with the ways noted above?
- 2. Recall a time when a teacher gave you feedback—whether positive or negative—pertaining to your intellectual character. What was this feedback? How was it conveyed? What kind of impact did it have on your subsequent intellectual activity or beliefs?
- 3. Try to identify two to three ways in which you could incorporate

intellectual virtues language or concepts into a rubric you regularly use to evaluate student work. Take a moment to formulate the specific statements that could be added to the rubric (see above for some examples). Be sure the statements are developmentally informed and realistic.



CHAPTER 29

Authentic Modeling

In many respects, the enterprise of educating for intellectual virtues is nothing new. After all, good education has always fostered growth in curiosity, open-mindedness, intellectual tenacity, and similar virtues. How does this happen? Often, it happens through a process of *modeling*. Great teachers model great thinking and other aspects of intellectual virtue for their students, inspiring them to wonder, think outside the box, take intellectual risks, and more.

As teachers interested in helping our students grow in intellectual virtues, this is something we must not forget. If we fail to model intellectual virtues in our interactions with our students, all of our other efforts to help them grow in intellectual virtues will amount to very little. Ritchhart et al (2011) underscore the importance of modeling good thinking for our students as follows:

When we learn anything, we rely on models. We attend to what and how others are doing things, and we imitate them. This is as true and important for learning to learn and learning to think as it is for learning to dance or to play baseball. Imagine aspiring to be a great dancer without ever having seen great dancing ... Consequently, the students in our charge need to see an image of us as thinkers and learners that they can imitate and learn from. (29)

While this is a relatively obvious and straightforward point, it is worth thinking about in a little more detail.

THE POWER OF AUTHENTIC MODELING

Why is modeling intellectual virtues for our students so important? And why, if we fail to do so, is this likely to undermine our other attempts to make a positive impact on the intellectual character of our students?

One reason modeling intellectual virtues is so powerful is that it provides our students with a living and breathing example of the qualities in question. It's one thing to read about what open-mindedness is, or even to see it manifested in a character in a book or movie; it's quite another to see the virtue play out in "real life" or in the actions of someone you know. Modeling intellectual vir-

"It's one thing to read about what open-mindedness is, or even to see it manifested in a character in a book or movie; it's quite another to see the virtue play out in 'real life' or in the actions of someone you know."

tues also has a way of powerfully manifesting the *value* of these traits. As we've observed at many points in this guide, intellectual virtues are attractive and compelling qualities—they're qualities that most of us would like to have and that we'd like our friends

and loved ones to posses as well. The goodness or attractiveness of these traits can be especially motiving when they are exercised before our very eyes, and especially if they are exercised in relation to us. Thus, by modeling intellectual virtues, we help our students better understand what these virtues are and why they are so important.

Modeling intellectual virtues, especially in the context of intellectual character education, is also a matter of practicing what we preach. It's a way of showing students that we really mean and live out the various things we say to them about intellectual virtues. This is an important aspect of personal integrity. It can play an important enhancing and supporting role in connection with our other efforts to help our students grow in intellectual virtues.

These brief remarks suggest a certain pattern or dynamic that appears to capture why modeling intellectual virtues is so important. Consider what we tend to *feel* in the presence of someone whose mind or thinking we are impressed or moved by. These are occasions of *admiration*. Admiration is a natural and appropriate psychological response to living exemplars of intellectual virtue. Note, however, that admiration is not an "inert" psychological state. It is by its very nature *inspiring*. It makes us want to act or live in a different way. Moreover, if the inspiration is strong enough or of the right sort, it has a further effect: it compels us to *emulate* or *imitate* the person or qualities in question. And this, of course, is where transformation can begin.

The overall pattern here is: admiration \rightarrow inspiration \rightarrow emulation/imitation \rightarrow transformation. Of course, things often don't go this way. (If they did, intellectual character education would require little more than hiring intellectually virtuous teachers!) Nevertheless, my suggestion is that the pattern just noted is one that many of us have experienced and that it goes at least some way toward explaining why authentic modeling is so important and powerful.

For our modeling of intellectual virtues to be effective, it must be *authentic*. It needs to be expressive of who we are intellectually, of how our minds really work. We can't effectively *fake* being curious, attentive, or intellectually careful. If we don't possess these virtues, then chances are we won't say, think, or do the things that are characteristic of them; or, in the event that we happen to do so, our words, thoughts, and actions aren't likely to be very convincing or compelling. (See Ritchhart 2002: 162 for a helpful distinction between "authentic modeling" and "demonstration modeling.")

Authentic modeling, by contrast, requires knowing what our intellectual character strengths are and playing to them. It may even involve creating opportunities for ourselves to practice and manifest these strengths. Accordingly, to say that our modeling of virtues should be authentic isn't to say that it has to be totally *spontaneous*. We can deliberately and intentionally model these traits for our students. (See Tishman et al 1995: pp. 56-59 for an

example of what this might look like.)

A PROBLEM?

The idea that our modeling of intellectual virtues must be authentic, that it must be expressive of our actual habits of mind, poses a daunting question: What if we aren't very intellectually virtuous? Does authentic modeling of intellectual virtues require us to be more or less perfect? If so, given that intellectual character education hinges on authentic modeling, how could it ever be successful?

There are several things to be said in response to this question. First, it is important to be honest about the fact that if a person really doesn't have much in the way of intellectual virtues, if her intellectual character really is mediocre (or worse) through and through, then the kind of impact she is likely to have on the intellectual character of her students may be pretty limited. Second, it doesn't follow that to have a significant impact, a teacher needs to be perfectly virtuous. If I, as a teacher, am reasonably strong in a few virtues, this can be enough to inspire students to begin thinking differently and developing new intellectual habits. Third, our intellectual *limitations*—characterological and otherwise—can be an opportunity to practice one extremely important virtue: namely, *intellectual humility*. Suppose I tend to struggle with intellectual carefulness and that on a particular occasion this weaknesses manifests itself in something I do or say to my

students. Instead of ignoring or trying to justify or cover up my mistake, I might say something like: "Oops. Well, class, this is another illustration of my intellectual carelessness. Thanks for helping me see this mistake." While it involves drawing attention to a particular intellectual character weakness of mine, this remark also manifests intellectual humility. By openly and comfortably acknowledging our intellectual foibles and mistakes, we communicate to our students that it's okay not to be intellectually perfect. Particularly for students with perfectionist tendencies, this can be a powerful and disarming message.

WHEN TO MODEL?

You might also wonder: when should we authentically model intellectual virtues to our students? The short answer is: always. In fact, any time we're actively thinking and communicating in the presence of our students, we're modeling intellectual character traits of one sort or another. This can't be escaped. Still, it is worth drawing attention to a few specific opportunities for authentic modeling:

Thinking out loud. Intellectual virtues express themselves in our thinking; primarily, they do so in the ways we think. Do we think carefully, thoroughly, openly, fairly, etc.? However, as a mental phenomenon, our thinking is essentially private. Unless we choose to reveal what or how we're thinking to our students, they'll know very little about these things. Therefore, if we are trying to model intellectual virtues, we would do well to make a habit of thinking out loud. Specifically, we should think out loud about the material

we're teaching. A big part of this involves audibly wondering and asking questions (e.g. "So, that makes me wonder ..." or "Have you ever thought about ..."). In this way, thinking out loud is a good opportunity to model curiosity. But it can be a good opportunity to model other virtues as well. For example, I might model intellectual carefulness by talking through a particular point very slowly, choosing my words very carefully, and clearly taking pains to avoid any missteps. Or I might model attentiveness by being especially engrossed in and attentive to the details of what I'm speaking about. The suggestion is that we seize opportunities to think out loud as a way of modeling intellectual virtues for our students.

Explaining material. As teachers, most of us spend no small part of our time explaining ideas and concepts. And we all know the difference between explaining a concept or other chunk of material in a way that is cursory and superficial, on the one hand, and in a way that is deep and thorough, on the other. When we do the latter, we tend to probe underlying causal principles or mechanisms, for example, getting at how a particular mathematical function works or why a particular historical event occurred. We also tend to make connections between the material we're discussing and other important concepts, principles, or events. The latter approach is aimed at helping students acquire a deep understanding of the material. As such, it is a good opportunity to model virtues like intellectual thor-

"Admiration is a natural and appropriate psychological response to living exemplars of intellectual virtue."

oughness and curiosity (see Ch. 27). An intellectually thorough person seeks and provides *explanations*—rather than mere statements or assertions. And the kind of question-asking characteristic of curiosity can lead a person in the direction of deep understanding. In short, then, we should avoid covering material in cursory or superficial ways; whenever possible, we should aim to "go deep" with the

material and in doing so practice the intellectual virtues necessary for doing this well.

Responding to students' comments and questions. Another familiar pedagogical activity is responding to student comments and questions. This activity also presents an important opportunity to model intellectual virtues for our students. Indeed, I think we can learn a lot about the intellectual character of a teacher by observing how he responds to the kinds of questions students ask and to the comments they make in class. On the one hand, some teachers seem not to pay very close attention to what students are saying; they can be quick to cut students off; they can misunderstand what a student is trying to ask or say even when this meaning is clear to most of the other people in the class. Similarly, some teachers are dismissive or even sharply critical of or sarcastic about student contributions. Obviously, these responses represent missed opportunities to model intellectual virtues.

Other teachers, by contrast, give their clear and focused attention to students when they are speaking. They look for and find what is good or insightful or interesting in what the student has to say. They don't cut the student off—they allow the student to finish his or her thought. They show an interest in and respect for the student's thinking by sometimes asking further, probing questions. In exchanges with teachers of this sort, students feel intellectually dignified, not dismissed. As these brief examples suggest, our interactions with student comments and questions can manifest (or fail to manifest) virtues like attentiveness, intellectual humility, intellectual patience, and intellectual generosity. In doing so, they can serve as a model to our students of virtuous intellectual activity.

WHAT TO MODEL?

Though I have already touched on this to some extent, it may be

worth isolating and briefly commenting on several specific virtues that are especially relevant to the kind of authentic modeling we are concerned with.

Curiosity. This may seem like an obvious virtue for teachers to model—they're teachers after all, and so they must be pretty curious about the subject matter they've chosen to teach. However, this can't be taken for granted. The demands and constraints on many teachers leave little room for them to express, let alone nurture, their curiosity. Thus modeling curiosity can take significant effort. A curious person asks thoughtful and insightful questions. This captures well what many of our own best and favorite teachers did. Indeed, for many of us, it was the passionate curiosity of a particular teacher that drew us into the teaching profession. Similarly, modeling curiosity for our students can be a powerful way of jumpstarting their interest in what we are hoping to teach them. It can also serve as a compelling invitation to the life of the mind more generally.

Intellectual humility. As indicated earlier, I think intellectual humility is also one of the most important virtues a teacher can model for her students. Students have a tendency to view us as the experts and themselves as mere recipients and beneficiaries of our knowledge. This can lead to their adopting a passive stance in the learning process. By owning what we don't know or what our intellectual limitations and weaknesses are, we become more real and "human" to our students. This does something to bridge the gap between them and us. It can also lead to greater student engagement—it can bolster their sense that maybe they do have something significant to contribute to the discussion.

Of course, admitting when we don't know something or when we've made a mistake can feel risky. It may involve allowing a student to demonstrate mastery or an ability that we don't have. However, to the extent that we can, we should welcome these moments as oppor-

tunities to practice and grow in intellectual humility. We shouldn't pretend to be what we're not or to know what we don't. And it would be silly to think that in every way we're smarter or more capable than all of our students. Again, this is something we should gladly acknowledge. When we do, we'll be modeling a refreshing intellectual humility for our students.

Open-mindedness. Most of us have probably had an intellectually arrogant teacher or professor—one who seems to know it all, seizes every opportunity to flex his intellectual muscles, and looks down upon those who are less capable or less esteemed. An attitude of this sort has the opposite effect of intellectual humility: it is off-putting, alienating, and personally unattractive. It is also very bad modeling. By contrast, teachers who not only can admit their limitations but who are also ready and willing to take up competing points of view,

"For our modeling of intellectual virtues to be effective, it must be authentic. It needs to be expressive of who we are intellectually, of how our minds really work. We can't effectively fake being curious, attentive, or intellectually careful."

to enter into them, and to consider them fairly, honestly, and patiently are inspiring and attractive. Their open-mindedness helps us appreciate that the world is a complex and fascinating place, that no single person has it all figured out, and that there's something deeply rewarding about "thinking outside the box."

Intellectual thoroughness. As suggested by one of the examples above, any time we teach a body of material, we are faced with an opportunity to model either intellectual thoroughness or its contrary (e.g.

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intellectual hastiness and superficiality). When we do the former, we go deep; we attempt to help students understand the how and why of what we're teaching. We probe for deeper meaning, principles, and explanations. We don't rush. We take our time. We give examples. We stop to ask and respond to questions. Our goal in doing so is to help students develop a deep, rich, and firm understanding of the material. The goal is *not* mere memorization or the ability to reply or restate simple formulas or definitions.

Our modeling of intellectual thoroughness for our students may be one of the few times they are exposed to concrete examples of this virtue. Our students live in a world of sound bytes, Wikipedia entries, 140-character tweets, and six-second videos. In this world, intellectual thoroughness is a rare commodity. This underscores the urgency of modeling deep thinking for our students.

Attentiveness. The significance of modeling attentiveness for our students may not be quite as apparent. However, this virtue is no less important. Recall that an attentive individual is "personally present" in the learning process. She isn't distracted; her mind isn't somewhere else. She is engaged and focused. Modeling behavior like this is important in a couple of ways.

First, by modeling attentiveness in our thinking and engagement with our subject matter, we model an attractive and compelling personal quality. Teachers who seem merely to be going through the motions, or who seem distracted or preoccupied, are not very engaging. By contrast, a teacher who is captivated by what she is talking about, who focuses on and delights in important but subtle details, can in turn capture our attention. Thus, as with curiosity, modeling attentiveness has a way of drawing students into the learning process.

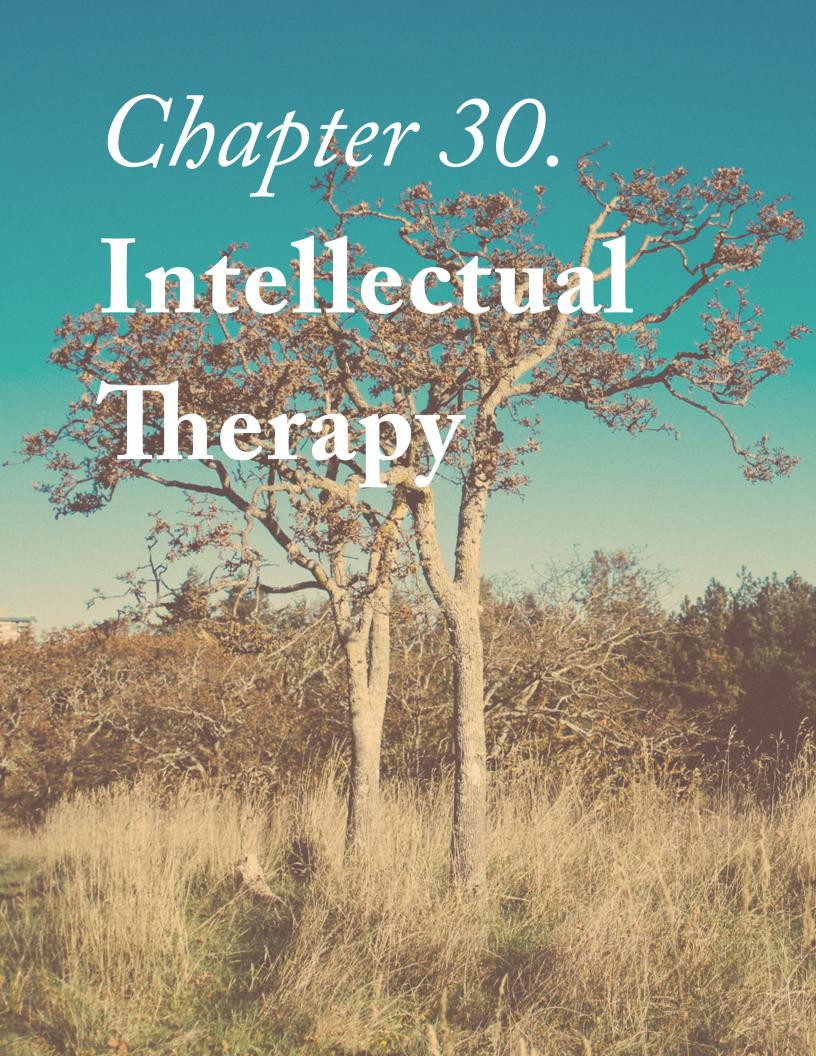
Second, attentiveness to *students*—to their thinking, comments, and overall well-being—can also have a powerful effect. When we

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are fully present with our students, when we attend thoughtfully to what they are thinking or saying, we send the message that we care about their thinking and thus about them. In this way, attentiveness is a *dignifying* virtue. As with intellectual humility, when we model attentiveness we can help give students the sense that what they have to say matters and that they can play an active and valuable role in their own learning and intellectual development.

DISCUSSION QUESTIONS

- I. Who's the most inspiring teacher you've had? Which specific intellectual virtues did this person display? What effect did this have on your own intellectual development?
- 2. When it comes to modeling intellectual virtues, can a teacher "fake it" and still be effective? Why or why not?
- 3. The chapter suggests that authentic modeling can lead to intellectual character growth via the following process: admiration → inspiration → emulation/imitation → transformation. Where do you think this process most often breaks down? Why? What can teachers do to remedy this problem? Should one of the steps in the sequence be modified or replaced? Does a further step need to be added?



We have examined several strategies and practices aimed at helping students grow in intellectual virtues. Given how these practices fit together and complement each other, I hope it is beginning to seem plausible that, if implemented in the right way and under the right conditions, these practices are capable of having a positive impact on the intellectual character of many students.

That said, we can also expect that the practices specified thus far—even when taken as a whole—won't work or make a significant difference for *every* student. Some students, we can safely assume, won't respond even to our best efforts. Some simply won't be ready or "primed" to accept our invitation to a more thoughtful and engaged approach to learning.

What can or should we do about this? One answer is: "We needn't do anything. After all, you can't please or reach everyone. So we should content ourselves with doing the best we can for the students who are receptive to our efforts." While something like this answer may eventually be in order, it is a bit premature. In the present chapter, I'll discuss an alternative, more constructive, and more hopeful response. The gist of the response is that when the

practices outlined in previous chapters seem not to be working, we should consider adopting what I'll call a "therapeutic mindset" toward the student or students in question. Once the nature of this mindset is clear, it should also be clear that in fact this is a useful orientation for us to have toward *all* of our students. One question we'll need to consider is whether most of us have the time—or indeed whether it is even our place—to engage with our students in the suggested way. This question will be taken up at end of the chapter.

INTELLECTUAL THERAPY

Many of the ideas discussed in this chapter are taken from a paper titled "A Therapeutic Approach to Intellectual Virtue Formation in the Classroom" by Steve Porter (2015, forthcoming). Porter identifies some possible limitations of the strategies we've identified here and offers an interesting and promising way of trying to overcome them. My discussion here will follow his discussion closely (unfortunately, because the paper hasn't yet been published, I'm unable to cite specific page numbers).

According to Porter, when more standard approaches to intellectual character education aren't working, this is often due to a student's having certain "internalized self-representations" that are preventing these approaches from taking effect:

For instance, a student who has internalized the notion that "If I fail, I will be shamed and rejected by others," will struggle mightily

to take on intellectual perseverance. Either she will persevere for fear of failure—not love of learning—or she will refuse to persevere in order to avoid the sense of failure. As one student said: "If I don't even try to get the answers right, then I haven't really failed." Or, a student who has internalized the notion that "Anything less than perfection means I am worthless," might be obsessively careful in her mathematics, but this carefulness is certainly not a virtue. Indeed, the formation of intellectual carefulness is impeded by this child's perfectionism. And lest we think that the distorted representations are always negative views of self, the internalized working model that "I am better than others because I know more," will stand as a barrier to intellectual open-mindedness, fair-mindedness, and humility.

As Porter explains, in situations like these, standard approaches to intellectual character formation like "direct instruction, expo-

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sure to exemplars, formative practices, and enculturation" are like "a shot in the dark." They are unlikely to have much of an effect.

Drawing on research in several areas of developmental and clinical psychology, Porter argues that (1) what students need in cases like this is to internalize corrective self-representations or messages that are realistic but that also support their intellectual en-

gagement and growth; and that (2) the best way to inculcate these alternative representations is through the initiation of "reparative relational experiences." For Porter, this amounts to a kind of "intellectual therapy," which he describes as follows:

By therapy, I do *not* mean the sort of work that can only be done by a professional, licensed counselor or psychologist. Though, certainly some professional, licensed counselors and psychologists are well trained to do the sort of work I will describe and perhaps at times it best happens within that sort of structured context. But, in general, intellectual therapy can be engaged in by anyone who cares about how a child's mind is working when it comes to the intellectual virtues. In this sense, then, intellectual therapy is *careful and sustained attention to another's mind in the attempt to understand this person's internalized representations of self that hinder virtue formation with the goal of providing a reparative relational experience that will help bring about virtue formation. (emphasis added)*

To illustrate his view, Porter discusses at length an imagined case of a student named Johnny who is disengaged from the learning process because somewhere along the way he has picked up the idea that "he is problematically inferior to his peers and always will be." Johnny makes no effort to succeed because he's convinced at some deep level that he never will succeed and thus that making any real effort simply isn't worth it. As Porter remarks, as long as Johnny's "internalized representation of his self to himself implicitly encodes the meaning that 'I'm always behind and I'll never catch up,' any spark of intellectual curiosity, or for that matter, intellectual carefulness, tenacity, humility, and so on, will be immediately suffocated by Johnny's internalized representation."

Fortunately for Johnny, he has a teacher who cares about him, has noticed his lack of engagement, and takes pains to try to identify some of the beliefs Johnny has about himself that are holding him back. In response to what she learns, Johnny's teacher carefully engineers some opportunities for Johnny to have an experience of being behind *and getting caught up*. Importantly, she is involved in these experiences as a supportive and guiding presence. Thus they are what Porter calls "reparative relational experiences." The initial effect of these encounters is as follows:

Johnny's former internalized representation of his self is being challenged by these new relational experiences and is, we might say, breaking down. In its place a new internalized representation is taking hold that communicates a different sense of self to Johnny. He is now representing his self to himself as competent to make progress in learning new things.

The story continues:

Then the day comes when a new unit in science is being introduced. It is a unit on the environment and how various elements of the natural world work together to create an eco-system. Johnny finds himself somewhat intrigued and he asks a question in class about the topic. He then reads the unit a little more carefully than he typically would and is even thinking about eco-systems as he walks home from school that day. At home he asks his mother about global warming and they find an informative video for kids on the problem. The next day at school Johnny is the first one to raise his hand when the class discusses eco-systems. He obviously knows more than some students but is also comfortable that others know things about the subject that he does not. This newly embedded view of his self allows Johnny's mind to be curious, engaged, and thoughtful.

The case of Johnny and his teacher is fictional and idealized. However, it is realistic enough to serve as an excellent springboard for imagining what it might look like to try to come alongside and support students for whom our other efforts at intellectual character education aren't really working.

THERAPEUTIC PRACTICES

What, then, are some concrete steps we can take to try to put these ideas into practice with our students? Three main practices are a good place to start:

Identify struggling students. In order to assist students with whom the standard practices of intellectual character education aren't "clicking," we first must be attentive to who our students are and to how they're doing in our classes. This requires paying attention to more than just their grades, for students can do well or well enough on assignments and tests while not being intellectually engaged in ways that lead to or are expressive of intellectual virtues. Rather, when we're with our students before, during, or after class, we need to be attentive to their words, actions, and body language, and to be on the lookout for what these things indicate about their level of engagement. We should ask ourselves: "Are they paying attention? Do they seem interested? Do they sometimes look puzzled? Do they occasionally smile with interest or delight? Are they quick to answer questions? Are they making eye contact with me or with others in the class?" While this sort of scanning won't necessarily reveal which of my students are experiencing positive intellectual character growth, it can be sufficient for identifying students who are "checked out" and whom I might want to begin thinking about with a "therapeutic mindset."

Getting to know students' minds. Once I've identified these students, the next step will be to try to get a feel for what's going on in their minds, and specifically, to try to identify any beliefs they have about themselves or others that might be obstructing their intellectual growth. This may not be easy. It may take some time and effort. For

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instance, it may require stopping a student after class to chat for a bit or sending an email inviting a student to talk with me during office hours. Once in conversation, I might say something like: "It seems like what we're doing in this class isn't especially interesting to you. I realize this course isn't for everyone, but it's important to me to try to help every student succeed. So I thought I'd just check in and see how you're thinking or feeling about the class." This rather direct route may not be successful, especially at first. But it can form the basis of a conversation that allows me to reach out to the student in other ways, for example, by asking about the student's background, interests, family, and so on. In short, it can provide an opportunity for me to begin to get to the know the student and how he thinks, which may presently or down the line reveal something important about the kinds of messages the student is telling himself that are obstructing his intellectual growth.

Creating "reparative relational experiences." Suppose it is midway through the semester in my logic class and that a particular student, Yolanda, seems checked out. She spends most of the class period

looking down at her notes rather than at me or at the board. And she no longer volunteers to do sample proofs in front of the rest of the class. After class one day, I stop her and say, "Yolanda, I hope you're doing all right. I see that your engagement and enthusiasm for this class has dropped quite a bit in recent weeks. I'm wondering if you can make it to office hours later this week to talk about how it's going. If you can't make my scheduled office hours, I'd be happy to schedule a separate appointment." Suppose Yolanda agrees to meet and that as we talk about how things are going in the class, I learn that while the course material made sense to her at the beginning of the semester, when we got to a new, more challenging unit, she found herself confused. This coincided with an especially busy part of her semester during which she wasn't getting much sleep. When I probe about why, once her schedule opened up a little bit, she didn't get the assistance she needed to get back on track, I learn that Yolanda considers herself "not a math person" and that the material we were covering in class was quite mathematical and therefore very intimidating. It sapped her confidence. Having taught this course many times, I explain to Yolanda that every semester I have several math-averse students who struggle with the material. I also point out that when these students buckle down, work hard, and get the assistance they need, they almost always do well in the course, and that some even excel. I also talk with Yolanda about where exactly she got lost with the material. I have her do several logic problems of the sort we were doing prior to the unit that caused her problems. She completes these skillfully, reminding herself (and me) that she does indeed have the ability to do logic. I then give her some relatively easy problems from the new unit, talking her through each one and guiding her to a suitable conclusion. We do this several times. Eventually she sees that she is capable of learning the new material.

In this example, I create for Yolanda an experience that suggests that she might in fact have what it takes to succeed; and I carefully support and guide her in overcoming what she was inclined to think was an insurmountable obstacle. If she is attending to this experi-

ence, she might derive something like the following message from it: "Maybe I'm more of a math person than I thought" or "Maybe 'being a math person' is something that can be learned with the right kind of support and practice." In this way, Yolanda's initial self-representation to the effect of "I'm worse than most other people at a certain kind of thinking or problem-solving" has been challenged. She's been told on good authority that many other students just like her are struggling as well. And she's tasted success in the context of the supportive presence of one of her teachers. As a result, her beliefs about what she is capable of or incapable of may begin to shift, compelling her to once again engage with the subject matter confidently and enthusiastically.

TOO DEMANDING?

Porter's Johnny example and my logic example give rise to a natural and understandable cluster of worries: Is it even a teacher's place to try to engage in this kind of "therapy"? Couldn't it lead a teacher into extremely personal territory that teachers aren't generally equipped or qualified to enter, for example, when the lack of intellectual engagement is due to troubling events in the student's personal life? Further, even if it is appropriate for teachers to practice "intellectual therapy" with struggling students, who really has the time to do this? Many of us have so many students and are already so hard-pressed for time that it may seem practically impossible to reach out to and address students in a "therapeutic" manner.

These are fair and reasonable questions. I have a few things to say in response:

First, it may indeed be the case that when trying to get at the underlying cause of a student's lack of engagement, we come across problems or issues that are too big or of the wrong sort for us to try to handle. In cases like this, our job is to refer students to people or services that are better equipped to address their needs, for example, to a school counselor or to a campus office that provides mental health or related services. However, this possibility

"In order to assist students with whom the standard practices of intellectual character education aren't 'clicking,' we first must be attentive to who our students are and to how they're doing in our classes."

is hardly a reason not to try to identify the obstacle in the first place. Indeed, our concern for our students should be broad, such that if we are in a position to direct them to services or resources they need, we ought to be ready and willing to do so, even if we can't personally be of much help.

The practical feasibility of this approach poses a more significant problem. One reasonable response is to remember that the fact that we can't engage in intellectual therapy with *all* of our students doesn't mean that we shouldn't try to do so with at least *some* of them. I might, for instance, decide to identify two or three struggling students each semester (or maybe just one) to approach in this way.

Porter offers two additional responses to this challenge, both of which are worth considering. The first is to recognize that caring and supportive teachers already practice many of the "methods" of intellectual therapy and thus that these methods needn't add substantially to a teacher's activities or responsibilities:

Teachers who care notice when little Johnnies or Susies are coming to school without adequate sleep, or are overly distracted by events at home, or are struggling with learning particular concepts, or are inordinately shy, and so on. These teachers come alongside their students in ways that are supportive given the particular issue with which the child is dealing. Intellectual therapy suggests nothing different, except that to go a step further in the attempt to identify how little Susie or Johnny views her or him self when it comes to learning. Some training on different ways persons tend to view themselves might be helpful (e.g. attachment styles), but often careful observation of a student's behavior can shed enough light to have a decent sense of at least a dimension of the child's internal working model. Once that is in place, the teacher can be on watch to avoid reinforcing a student's internalized representation and intentionally pursue interactions with the student that counteract that representation.

A further reply suggests an approach to intellectual therapy that does not require gathering individualized knowledge of one's students. It consists of communicating certain messages to *all* of one's students—messages that, if internalized, will make them more receptive to some of the other practices of intellectual character education:

But perhaps there is an even more modest approach to intellectual therapy that would make any sort of psychological analysis of the

child unnecessary so as to be unobtrusive and largely undemanding. On this even more modest approach, the teacher consistently relates to her students in such a manner that reparative relational interactions are the natural byproduct. In other words, in light of a general understanding of the internalized representations that make up a readiness for intellectual virtue formation and the sorts of internalized representations that impede virtue formation, teachers go about their relational interactions with their students in ways that embody what it would be good for their students to internalize and ways that counteract problematic views of self that some may have internalized already. So, for instance, some of the internalized representations of self that appear to prime the human mind for intellectual virtue formation are the following:

"I know some things, but I have a lot to learn."

"There is nothing shameful about not knowing things or getting an answer wrong."

"If I try hard to learn, I often succeed."

"If I don't succeed, I am still accepted by others and have worth."

"We all make mistakes sometimes and that's alright."

"What I have to offer or say is important."

"Others have valuable things to say and want to help me understand."

"When it comes to learning, I have both strengths and weaknesses."

"This is a safe place to take risks in my learning."

"People are there for me when I need help."

It is difficult to put language to these internalized messages since they are more felt emotionally than known propositionally. However, it seems we could get the gist of many of them and begin to see how teachers might intentionally relate to their class in such a way that these messages are powerfully and regularly present in the teacher's interactions with all of his or her students no matter what particular reparative relational experience a student is in need of. Since the teacher is consistently relating with his or her students in these sorts of attuned and supportive ways, reparative interactions occur without much focused effort on understanding a particular student's internalized representations. While fostering such a global, supportive relational environment is no simple task, it would not require the teacher to play the role of therapist for each and every student in the classroom.

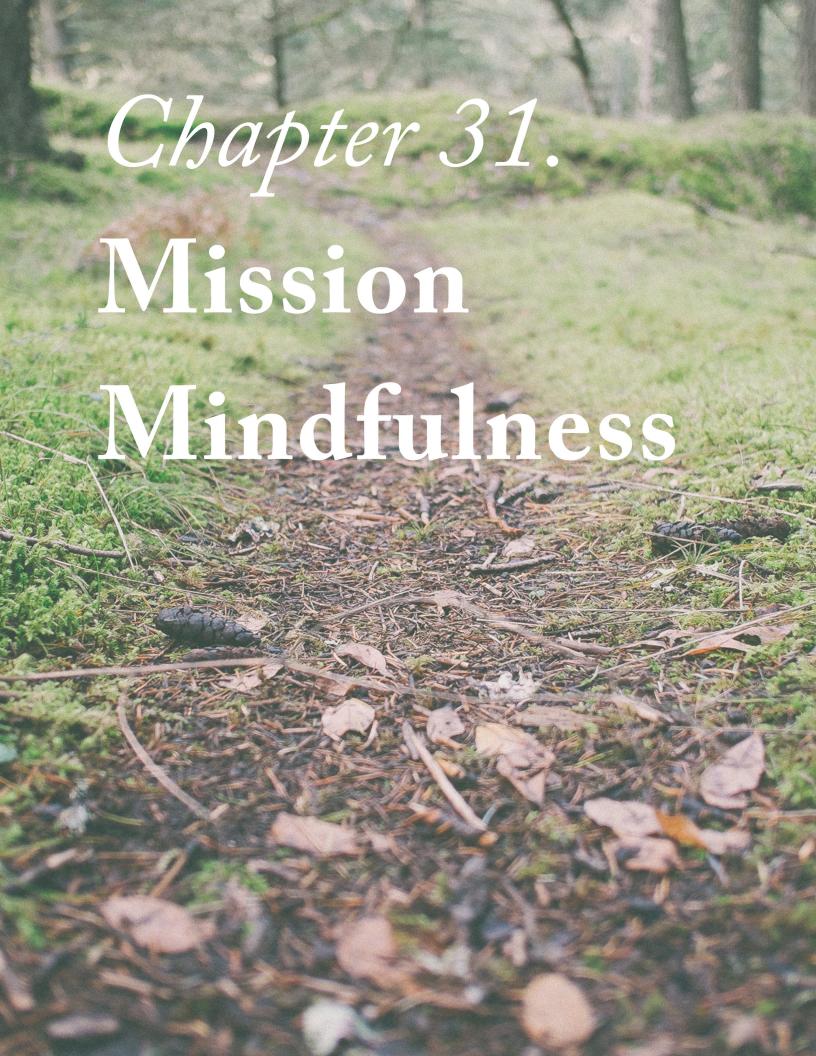
As Porter goes on to note, it is important that this latter approach doesn't end up amounting simply to a regular stating or reciting of the relevant messages:

It is important to remember, though, that it is not enough for the teacher to merely announce to his or her students: "Remember class, we all make mistakes sometimes and that's alright." This would be to go back to a sole reliance on a modified version of the direct instruction model. Rather, what is required is for the teacher to be emotionally attuned to her students in a manner that helps them *feel the truth* that even when a mistake is made in class, things are alright. Because our sense of self is developed through relational experiences, what is needed is a relational interaction between the teacher and student(s) that helps the student(s) emotionally experience that intended meaning.

Taken together, these replies are a forceful response to the objection that practicing what Porter calls intellectual therapy is too onerous. Therefore, given that this practice may be necessary for reaching many of our students, it is important for us to identify ways of practicing intellectual therapy that will benefit our students while also respecting our own constraints and limitations.

DISCUSSION QUESTIONS

- I. A main idea of this chapter is that when the "best practices" of intellectual character education aren't working for a particular student, the teacher would do well to adopt a "therapeutic stance" toward the student. Can you think of *other* practices that might be useful when the standard practices aren't working? What else can be done to help draw out students who appear to be disengaged from the learning process?
- 2. Think of one student you've had who, like Johnny above, seems to be doing poorly in school at least partly because of certain internalized "self-representations." How, if at all, did you respond to this student? In light of what you've read in this chapter, how might you have responded differently? What are some specific things you might have done to challenge the student's belief about herself or himself?
- 3. What are some messages you tell yourself about yourself (or about teaching or your students) that you think might inhibit your own practice of intellectual character education? Do you know with *certainty* that these messages are true? If not, identify an *alterative* message for each one, and specifically, a message that you think is reasonable and that you believe might help facilitate or improve your own efforts at intellectual character education.



The plurality of pedagogical practices discussed in preceding chapters, while shedding light on what it looks like to educate for intellectual virtues, also underscores some significant challenges. For instance, how are even well meaning and motivated teachers supposed to keep track of and integrate all of the relevant suggestions and methods? Further, most of us come to the enterprise of intellectual character education, not at the very outset of our careers, but rather after we have already been trained and formed as teachers in significant ways. Hopefully some of these ways have prepared us to educate for intellectual virtues. But it is possible that others have had the opposite effect. In short, learning to educate for intellectual virtues is likely, for many of us, to involve unlearning old habits and letting go of old assumptions.

Accordingly, even if out of initial enthusiasm you begin implementing several of the practices outlined in this guide, you may find sticking with these practices to be very difficult. How, then, might you orient yourself in such a way that the task of educating for intellectual virtues doesn't seem too daunting or overwhelming? And, once you've undertaken this task, how can you keep the process going despite a temptation to lapse back into the pedagogical status quo?

These questions merit a longer and more comprehensive answer than I can provide in this space. However, what I'd like to do in this chapter is spend some time reflecting on a certain mental attitude or frame of mind that provides at least a partial answer to them. My suggestion is that by "practicing" this frame of mind, which I will refer to as "mission mindfulness," we can orient ourselves in such a way that the kind of pedagogical approach sketched in preceding chapters will seem like the natural path

"[M]ost of us come to the enterprise of intellectual character education, not at the very outset of our careers, but rather after we have already been trained and formed as teachers in significant ways."

to follow. As such, mission mindfulness is a way of combatting the tendency to get drawn off course in our attempts to educate for intellectual character growth. (For a different, but not totally unrelated, discussion of "mindfulness" and education, see Langer 1997.)

The following are several specific practices aimed at cultivating this mindset:

Attending to deep value. Reverting to older, less transformational ways of teaching can be tempting when the alternative doesn't seem very rewarding or fulfilling. Suppose, then, that I'm thinking about how to structure a particular lesson. I find myself with two choices: (1) I

can do what I'd normally do, which, let's imagine, is to spend most of the class explaining core concepts to students and subsequently answering any questions they might have had along the way. In this situation, my primary function is to share and explain important information as clearly and efficiently as possible and my students' job is to absorb and comprehend it. (2) Alternatively, I can try to practice several of the strategies we have been considering: for example, I can identify a few key virtues I'd like my students to practice, build specific opportunities for such practice into the lesson, call attention to these opportunities as they arise, praise students for thinking or acting virtuously, and so on.

If I don't have a lively sense of the *value* of what is to be gained by pursuing option (2), this option is likely to seem too onerous. I'm likely to follow the path of least resistance and proceed as I normally would. This illustrates the importance of keeping present before our minds the *value of the intellectual activity we're encouraging students to engage in and the deep personal qualities we're trying to help them cultivate.*

Relevant here is Aristotle's famous remark in Book I of his *Meta-physics* that all human beings "by nature desire to know." We are unique among other species in the kind or degree of rationality that we possess. We have complex minds—minds fit to think, wonder, inquire, and learn. This is a deeply natural part of who we are. Regrettably, these natural desires and abilities aren't always very well tended to. Indeed, there's something to the familiar idea that schooling today often extinguishes them.

What we need to remember, then, is that the kind of thoughtful intellectual engagement at the heart of intellectual character education and the kind of thoughtfulness that can result from such engagement are profound human goods. In asking our students to think, wonder, notice important details, take risks, persevere, and so on, we aren't selling them a "false bill of goods" or asking them to commit

to arduous, unrewarding intellectual labor. Rather, we are inviting them to enter into a vital form of life—the "life of the mind." Like anything worth doing, this requires hard work. But with the right kind of support and role models, such work can be experienced as good, and its effects as even better. So, again, as I'm facing the dilemma outlined above, one thing I can do is attend to and dwell on the deep value at stake in option (2).

Remembering the goal. This relates to a second practice. In my attempts to align my pedagogical habits with the goal of helping my students make progress in intellectual virtues, I have found it useful, as I'm preparing for or walking to class, to close my eyes and briefly meditate on this goal for the coming class period. Often this involves saying something silently to myself along the lines of:

My aim in the coming class is to address "who my students are" as thinkers and learners. It is to have an impact—even if just a very small one—on their fundamental attitudes, beliefs, and feelings about thinking and learning. My students are not mere cognitive receptacles in which it is my responsibility to deposit knowledge. They are whole persons, each one with a relationship to learning. My goal is to meet them at this level and to help bring alive in them a love of learning and an interest in the life of the mind.

While this may seem like a fairly trivial mental exercise, I have found it to have a very significant impact on my overall countenance and frame of mind as I enter the classroom. Instead of thinking primarily about what I'm going to say or the content I intend to cover, it allows me to meet and be present with my students in a deeper and more personal way. Moreover, certain good outcomes tend to follow from this countenance: I feel less concerned about getting through as much material as possible, I'm more open to opportunities to ponder important questions even if doing so might take us a bit off track, and it makes me more aware of and sensitive to the minds of my stu-

dents; not just to what they are understanding or not understanding, but to them as whole persons—again, as persons who have an overall relationship to learning, a relationship that I care about and want to nurture.

Class mission statement. The practice just noted involves reminding myself of my objective for a particular class period, expanding my concern to include the intellectual character development of my students. A corresponding practice involves formulating a class mission statement that I rehearse on a regular basis at the beginning of class. Here the primary focus in on helping my *students* be mindful of the broader aims and goals of our time together. In Chapter 25, I shared the following mission statement, which I recently used in a freshman philosophy course: "We are a community of inquirers tasked with philosophical learning and reflection. As your instructor, my primary aim is *not* to impart a body of knowledge; rather, it is to nurture

"We have complex minds—minds fit to think, wonder, inquire, and learn. This is a deeply natural part of who we are."

your relationship to learning by providing ongoing opportunities to *practice* intellectual virtues." Because the course met only once per week, I began nearly every class period by reading this statement aloud to my students. I did so slowly and thoughtfully, occasionally pausing to elaborate on some part of it.

The impact of an exercise like this is difficult to gauge. However, in my experience, it has seemed to have a reorienting effect on my students. It makes sense that it would. For the statement conveys some meaningful and appealing messages: first, that we're in this together—that we are a "community of learners" and not a mere collection of individuals pursuing disparate goals; second, that my

goal for them is personal and supportive—that I hope to nurture their "relationship to learning" and not merely to fill their heads with knowledge; and, third, that their role in this process is an *active* one—that they are not passive participants in their own education. This statement is, of course, but one of many possible class mission statements. Teachers at different levels and in different subject areas will need to work out for themselves how best to integrate the goals of intellectual character education into a mission statement that has the desired reorienting effect on their students.

Visual reminders. Another way of facilitating mindfulness of our commitment to intellectual character education is to place visual reminders of this goal in our classrooms. As noted in an earlier chapter, at the Intellectual Virtues Academy, classrooms are adorned

"[M]ission mindfulness can provide a kind of 'metaperspective' on our other pedagogical efforts and activities—a perspective that can keep us closely attuned to their function and ultimate purpose."

with large vinyl renderings of the name and definition of the school's nine "master virtues." Each classroom also has at least one large quotation on a wall that serves as a reminder of the personal or characterological aims of education. Simple visual reminders like these are another way of reminding ourselves of our deeper and more significant pedagogical goals. They are also a way of communicating these goals to our students.

Collaboration. The practice of intellectual character education is rewarding in and of itself. Again, it involves thinking, wondering, and risk-taking. It also involves building up and giving expression to certain natural desires and abilities. While intrinsically rewarding, ed-

ucating for intellectual virtues can be difficult to practice alone. This is especially likely if you are teaching in an educational climate or "system" that is unsupportive of—or perhaps even inadvertently hostile to—helping students grow in intellectual virtues. Thus in order to retain a focus on this goal, you might do well to find a colleague or two (or three or four!) who is also willing to experiment with some of the practices central to this approach. Having regular meetings to reflect on and discuss pedagogical practices aimed at fostering intellectual character growth can be a profoundly reorienting and rejuvenating experience. Likewise for being able to share and talk with others about your successes and failures with these practices.

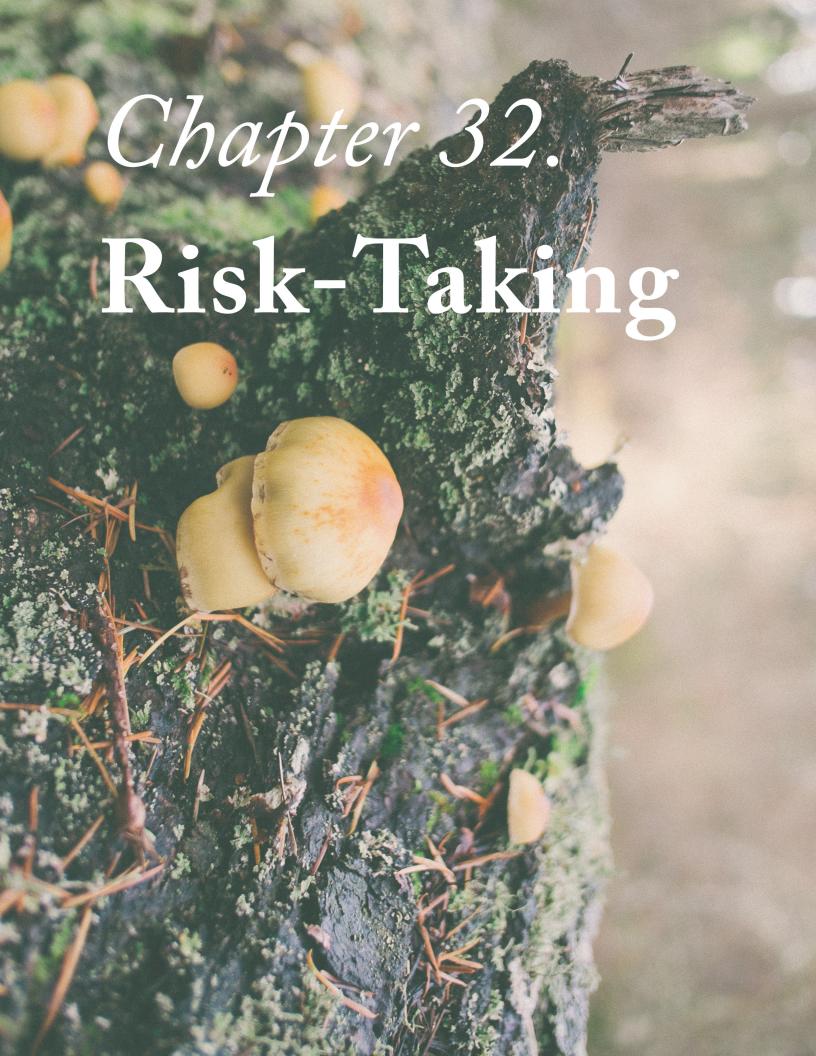
While, for most of us, the most convenient way of doing this is likely to involve teaming up with other teachers at our respective school sites, we should be prepared, if necessary, to think outside the box. If I am at a school with a culture that is not very favorable to educating for intellectual virtues, and if I don't feel like any of my colleagues would be interested in learning about this approach with me, I might ask myself: "Do I know other teachers or people interested in education who might be willing to read and discuss some of the literature in intellectual character education with me (e.g. Ron Ritchhart's *Intellectual Character* or his recent *Creating Cultures of Thinking*)? Are there conferences or other professional development opportunities that might allow me to learn more about this approach and meet some like-minded educators? Are there online communities of educators who are already discussing some of these things or who might be willing to do so? If not, could I start a small group of this sort?"

The aim of this chapter has been to identify some practices and exercises that we can engage in that will help us become more *attentive* and *receptive* to the goals of an intellectual virtues approach, that is, that will help us become more "mission-minded." This mindset plays a critical role in the overall enterprise of in-

tellectual character education. It can help us identify which practices are relevant to which situations and bolster our motivation to engage in the practices we deem most effective. Finally, by cultivating a mindset of this sort, we will be less prone to lapse into our old ways of teaching. In this way, mission mindfulness can provide a kind of "meta-perspective" on our other pedagogical efforts and activities—a perspective that can keep us closely attuned to their function and ultimate purpose.

DISCUSSION QUESTIONS

- I. Compose a brief but thoughtful statement you can reflect on just prior to class that will remind you of your commitment to helping your students grow in intellectual virtues (see above for an example). Consider memorizing this statement or posting it in a visible location in your office, car, classroom, etc.
- 2. Compose a mission statement that incorporates the character-based goals of the course or courses in question (again, see above for an example). Spend some time carefully crafting and revising the statement. Then identify an effective way to share this statement with your students on an ongoing basis (e.g. by posting it in your room, putting it on a PPT slide, etc.).
- 3. Think of three other educators, whether at your school site or elsewhere, who you think would be interested in learning about and experimenting with some of the practices of intellectual character education. What are some specific ways in which you could facilitate this type of interaction? Could you start a monthly (or semesterly) reading group? Could you create an online forum (e.g. via Google Groups) that would allow you to share your ideas and experiences with others?



Having examined a wide range of educational practices aimed at fostering intellectual character growth, we turn in the remaining chapters to address some core *themes* and *principles* of intellectual character education. Some of these have been touched on in previous chapters but are important enough to merit further and deeper consideration here. The focus of the present chapter is on creating a classroom culture or climate that is conducive to intellectual *risk-taking*.

INTELLECTUAL FEAR AND ITS CONSEQUENCES

When I survey students in my classes or talk with students at the Intellectual Virtues Academy (IVA) about which virtues they think they need to work on most, the response I hear most often is *intellectual courage*. Students regularly talk about not engaging in class discussion or sharing their opinions on account of fear, especially fear of being wrong or looking foolish in front of their peers. Many elaborate on this by saying things like: "Often I'll think of something I want to say in response to a question the teacher has asked. But I won't do it. Then, a minute later, another student will say exactly what I had in mind, and it will turn out to be exactly right. I'll kick myself for not speaking up."

While this fear-based lack of engagement may seem relatively benign, it is not. The student who never speaks up remains on the sidelines of her own education. Like an athlete who is always on the bench and never in the game, her intellectual development will be stymied. She won't gain the vital experience and practice she would have if she had regularly been "in the game," actively communicating, discussing, asking questions, and so on.

This is especially the case when it comes to intellectual character development. We've seen that one way in which virtues come about is through the practice of actions that are characteristic of them (e.g. practicing conceiving of thoughtful and insightful questions, perspective-switching, attending to important details, etc.). In this respect, intellectual character development is an *ac*-

"The student who never speaks up remains on the sidelines of her own education. Like an athlete who is always on the bench and never in the game, her intellectual development will be stymied."

tive process. By contrast, the student who avoids speaking in class or taking other intellectual risks for fear of failure or of how she might be perceived by others is a picture of intellectual passivity. She isn't in the game and so isn't going to get the experience, practice, and habits that she might have otherwise. Indeed, it doesn't seem like an exaggeration to say that fear is one of the

greatest obstacles to robust intellectual growth and maturity for many students.

CREATING A CULTURE OF RISK-TAKING

What does this mean for us as teachers? Is this really our problem? I think it is; or, in any case, I think it is a problem that we can and should try to do something about. Specifically, I think it underscores the need to educate for intellectual courage and especially to create a classroom culture that is conducive to the practice of intellectual courage. While it is natural to associate intellectual courage with figures like Galileo or the journalist Edward R. Murrow (both of whom took life-threatening risks in order to discover or communicate the truth), this virtue is no less relevant to everyday classroom learning (see Baehr 2011: Ch. 9 for a philosophical exploration of intellectual courage). In this section, I'll briefly describe several things we can do as teachers to create a classroom atmosphere that mitigates fear and facilitates risk-taking:

Safety. Risk-taking by its very nature is an exercise in vulnerability. However, students are unlikely to take risks and be vulnerable if they think the costs of doing so will be too severe. One such cost is personal critique: if a student has reason to think that he will be criticized or made fun of by his peers for offering up a wrong answer, chances are he will remain silent. Thus our classrooms must be marked by an absolute expectation of respect (see Ch. 20 for more on this point). It must be very clear to our students that disrespectful or humiliating treatment is off limits. Establishing such expectations

won't eliminate all opportunities for students to face and conquer their fears. But it will make certain risky situations seem a bit less threatening. In this respect, creating a "safe" classroom environment is critical to the promotion of intellectual risk-taking.

Humor. Another way to help students feel safe and at ease in our classrooms is to display of a good sense of humor (Garner 2006; Ziv 1988). If I am willing to laugh, to make (appropriately) humorous observations, and to poke fun at myself, I thereby signal to my students that my classroom isn't an excessively serious or high stakes environment. I introduce a degree of levity into the situation. This can have a way of relaxing my students' defenses and inhibitions and empowering them to take intellectual risks.

Modeling. If we want our students to take intellectual risks but are highly intellectually guarded or fearful of making mistakes ourselves, then our own intellectual character is likely to undermine our messages about the value of intellectual risk-taking. Therefore, it is equally important for us as teachers to take intellectual risks as well.

In some contexts, this might look like spontaneously taking on an intellectual challenge (e.g. solving a difficult math or problem or answering a challenging question) that you aren't sure you can overcome, one that may even leave some of your students thinking, "Wow, the teacher isn't as smart as I thought." In fact, such recognition can be a very good thing, especially if your students hold you in such high regard or think of you as so immune to errors and mistakes that your very presence discourages them from taking risks. Similarly, you might engage in intellectual risk-taking by trying out or testing a hypothesis or theory that has spontaneously occurred to you (in a science class, say; or when interpreting a fictional narrative in an English class). Indeed, you might even challenge your students to try to disprove your hypothesis. In doing so, you would be opening yourself up to the possibility that one of your students might manifest a strength that you don't have or identify a possibility that

you failed to think of. You might even run the risk of appearing foolish to your students. Nevertheless, you would also be giving them something valuable: a concrete example of intellectual risk-taking.

Values. Another important practice is to demonstrate that we value intellectual risk-taking as much or more than other goals like getting the right answer or getting it quickly (Ritchhart 2002: 13). If we encourage our students to take risks, but reserve our highest praise for students who give right answers, then we're implicitly devaluing risk-taking. Similarly, if we unthinkingly call on the first student who raises his or her hand, or when we praise a student who finishes an exam quickly, we communicate a misplaced value. Therefore, we need to be mindful of what our words and actions suggest about what we really value in the classroom. And we need to make clear—in explicit and implicit ways—that we truly value intellectual risk-taking.

Opportunities to practice intellectual courage. We also need to deliberately create ongoing opportunities for our students to practice intellectual risk-taking, that is, to practice the virtue of intellectual courage. This can happen by deliberately calling on students who have, say, expressed an interest in becoming more intellectually courageous to answer questions in class or to write or do work on the board. This means rejecting the idea that our primary job is to dispense infor-

"[I]t doesn't seem like an exaggeration to say that fear is one of the greatest obstacles to robust intellectual growth and maturity for many students."

mation and that our students' job is to passively and anonymously receive it. Such an approach offers almost no opportunity for the practice of intellectual courage. By contrast, exercises that demand participation, conversation, and original thinking provide opportunities for students to step into the intellectual fray and take a risk.

A related practice I've used for years involves calling on students randomly to "check for understanding." I keep a notecard for each of my students that I primarily use for taking attendance. When I want to see how well my students are following or understanding a particular point, instead of posing a question to the class at large, I pull a card from the deck and call on the relevant student. I have found this to be a positive and relatively gentle way of giving students an opportunity to practice intellectual courage. This is especially so when my students have already reflected on the value of intellectual courage and when I have framed the exercise as an opportunity to practice a virtue that most of them have expressed a need to work on.

Willingness to struggle. Intellectual risk-taking is closely connected with intellectual struggle. Struggling itself can feel like a risky affair. Conversely, taking intellectual risks often means being willing to struggle with a puzzle or challenge. This is problematic given that many students have a strong negative association with intellectual struggle. As we will examine in more detail shortly, they think that if they have to struggle to learn something, they must not be very "smart." Fearful of seeming to themselves or their peers as less than smart, they end up avoiding intellectual challenges, taking fewer intellectual risks. Therefore, if we are concerned with getting our students to take more intellectual risks and to practice intellectual courage, we also need to think seriously about their experiences of and attitudes toward intellectual struggle. Specifically, we need to create opportunities for them to struggle. And we need to support and encourage them in the midst of these opportunities. Our aim should be for them to begin to feel comfortable with intellectual struggle and to see it as an opportunity to learn and grow rather than as a potential threat to their self-esteem (for a recent news story on this topic, see <u>here</u>).

A premium on intellectual humility. Also central here is the practice of valuing and promoting intellectual humility. The connection between intellectual humility, on the one hand, and intellectual cour-

age or intellectual risk-taking, on the other, may not be obvious. However, consider how the way in which a student thinks and feels about her intellectual limitations and weakness might bear on her willingness to take risks in the classroom. If a student is uncomfortable with, ashamed of, or defensive about these limitations, then she will probably have a vested interest in *concealing* them from others. And the best way to do this will be to avoid taking intellectual risks—to lie low and be silent, with the hope that she slips by unnoticed. This can be an intellectually debilitating mindset. And it is rooted in a lack of intellectual humility.

As we saw in Chapter 6, intellectual humility involves "owning" your intellectual limitations and weaknesses. Sometimes (e.g. when nothing can be done about them) this will look like simply accepting that you have these limitations. In other cases it will involve doing something to improve or eliminate them. In either case, if you have owned your intellectual limitations, the possibility that others might find out about them won't feel like a debilitating threat. Having "owned" your intellectual limitations, you'll be comfortable, or comfortable enough, revealing them in the company of others, particularly when doing so may facilitate your own intellectual growth. In this way, a student who naturally struggles with math but has accepted this fact will be much more likely to take risks to improve his math skills than someone who struggles in a similar way but hasn't owned this fact. Accordingly, if we're interested in helping our students take more intellectual risks, we also need to place a premium on and give them regular opportunities to practice intellectual humility.

These, then, are several things we can do to make our classrooms conducive to intellectual risk-taking (for some additional, very practical suggestions on this topic, see Simister 2009: Chs. 9-10). If taking intellectual risks is essential to active and engaged learn-

ing, and if active and engaged learning is central to growing in intellectual virtues, these practices have an important role to play within intellectual character education.

"ZONE OF PROXIMAL DEVELOPMENT"

In this section and that one that follows, I will touch briefly on concepts in educational psychology that, while not pertaining immediately or explicitly to intellectual virtues, can prove extremely useful to anyone trying to educate for intellectual virtues, particularly to the educator interested in helping her students become more intellectually courageous.

The idea of a "zone of proximal development" was developed by the psychologist Lev Vygotsky (1896-1934). He defined this idea as "the distance between the actual developmental level as deter-

"Having 'owned' your intellectual limitations, you'll be comfortable, or comfortable enough, revealing them in the company of others, particularly when doing so may facilitate your own intellectual growth."

mined by independent problem solving and the level of potential development as determined through problem solving under adult guidance, or in collaboration with more capable peers" (1978: 86). In somewhat simpler terms, a person's zone of proximal develop-

ment concerns what this person is *potentially* capable of within a certain domain, including an intellectual or educational domain. Specifically, it picks out the "gap" between what a person can presently do in this domain while working by himself and what he could do with the assistance of others who are more competent.

This bears on our attempts to help students grow in their capacity for intellectual risk-taking. A student's zone of proximal development includes activity that is, in some sense, within the student's reach but that the student has not yet mastered. As such, it represents both an opportunity for growth but also the possibility of failure, for the student might try but fail to meet his potential. Further, because the potential that is part of a student's zone of proximal development is something that must be socially realized—it is achievable only with the assistance or guidance of others who are more advanced—this concept helps highlight the "scaffolding" or supporting role that we as teachers can play in the intellectual risks taken by our students.

Accordingly, one helpful way to encourage our students to take more risks is to familiarize them with the idea of a zone of proximal development, to help them identify their own zones of proximate development (especially as these relate to the work they're doing in our class), and to encourage them to see these zones as opportunities to extend themselves and to take intellectual risks (Ritchhart 2002: 45-46). We should also be mindful of how we

can support our students—and how they can support each other—in these efforts. Thus the concept of a zone of proximal development can provide a useful framework that both teachers and students can use to facilitate greater intellectual risk-taking.

GROWTH VS. FIXED MINDSET

At IVA, we have found the distinction between a "growth mindset" and "fixed mindset" (Dweck 2006, 2010) to be highly relevant to how we think about and try to foster intellectual character growth. It is especially relevant to the activity of intellectual risk-taking and the practice of intellectual courage.

Fixed and growth mindsets differ from each other in two main ways: first, in terms of the beliefs they involve about whether a capacity for success in a particular area is something that can be learned and developed through effort; and, second, in terms

"If students don't believe they can improve—if they see their intellectual abilities as fixed—then they will have little incentive to take any intellectual risks."

of corresponding beliefs, attitudes, and feelings about struggle and failure. If I have a fixed mindset about what it takes to be "smart," say, then I'll believe that people are either born (more or less) smart or not. I will not view smartness as something that a

person can grow in over time and through personal effort. This belief in turn will result in a certain orientation toward intellectual struggle and failure. If I have to struggle in order to do well in algebra class, for instance, or if I try to do well but fail, I will interpret this experience as an indication that I don't have what it takes to succeed in this area—that, for instance, I'm "not a math person." Consequently, I may develop a fear of math and avoid the subject matter at all costs.

By contrast, if I have a growth mindset, then I will believe that how smart I am is at least partly under my control—that through thoughtful and sustained effort I can become smarter. This is likely to make for a very different experience of struggle and failure. If I find myself struggling at algebra, I won't immediately conclude that I don't have what it takes to succeed. Instead, I will believe that while algebra may not presently be among my intellectual strengths, I can grow and become better at it through effort and practice. Accordingly, when I do poorly on a test or find myself struggling with a particular concept or problem, I won't feel ashamed or compelled to give up. Instead, I will view this experience of struggle or failure as an opportunity to learn and grow.

This distinction has special bearing on helping students become intellectual risk-takers. If students don't believe they can improve—if they see their intellectual abilities as *fixed*—then they will have little incentive to take any intellectual risks. After all,

what would be the point of doing so? By contrast, if students believe that their capacity for intellectual success is something they can develop and improve through effort, this can have a significant impact on their willingness to take risks and to struggle. Instead of shying away from these things for fear of what they might reveal, students will see and experience struggle and risk-taking as an opportunity for intellectual improvement.

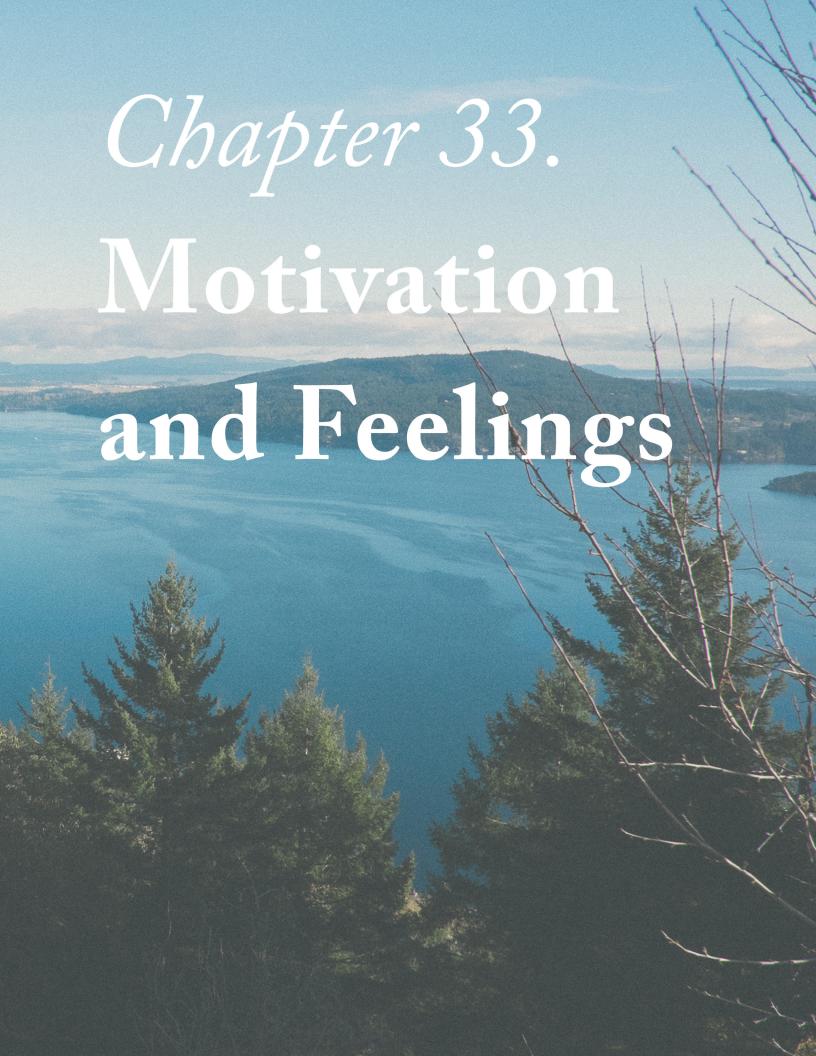
Therefore, if we are interested in increasing our students' willingness to take intellectual risks, we would do well to equip them with an understanding of the distinction between a growth mindset and a fixed mindset and to help them see that success in our courses is—to a significant extent—something that is under their control. These rather simple steps can help them begin to reframe their intellectual activity, giving them the extra nudge they need to practice greater intellectual courage. (For more on how to educate for a growth mindset, see Ricci 2013.)

DISCUSSION QUESTIONS

- I. Do you take intellectual risks as a teacher? If so, what does this look like? To the extent that you refrain from taking intellectual risks, why is this the case? What fears might be preventing you from doing so? Finally, try to identify three new ways in which you could practice intellectual risk-taking as a teacher.
- 2. Identify a new exercise or assignment that would give your students a thoughtful, well-supported opportunity to struggle. How might you frame or introduce this exercise? What message or messages

would you want your students to take away from it? How would you support them as they struggle?

3. Based on the description above of a growth vs. a fixed mindset, which concept more accurately characterizes your own beliefs and attitudes about success and failure? How so? Try to think of several concrete examples that support your answer.



In this chapter we will examine the role of motivation and feelings in attempts to educate for intellectual virtues. The notion of intellectual motivation has already been touched on several times in preceding chapters. For instance, we noted in Chapter 1 and elsewhere that intellectual virtues have their "motivational basis" in something like a "love" of knowledge or understanding.

While we haven't said as much about feelings or emotions, it shouldn't be too surprising that these are also an important part of intellectual virtue. An intellectually virtuous person delights in discovery, receives pleasure from thinking and exercising his mind, feels uncomfortable with ignorance, and so on (Scheffler 1991). Therefore, if we are trying to educate for intellectual virtues, we should regularly ask ourselves: "What sort of effect might my teaching methods and other interactions with students have on their intellectual motives and feelings? What can I do to adjust these methods and interactions so that they're more likely to increase students' motivation to learn as well as their positive feelings and emotions about learning?"

For many of us, this is likely to feel like a challenging question. When teaching, it can be easy to view what we're doing through

a purely cognitive lens—as if our chief goal is to transmit knowledge from our own minds into the minds of our students. In fact, some of the things we do to try to impart knowledge to our students can actually have a *detrimental* effect on their intellectual motives and feelings. This is true of rote memorization and tedious problem-solving. While these and related activities can be successful at helping our students retain information for a brief period or acquire certain intellectual skills, they generally do not foster intellectual delight or enjoyment; nor are they likely to foster an intrinsic motivation to learn.

We will consider three questions aimed at shedding some light on the role of motivation and feelings in the context of intellectual character education: (1) How are motivation and feelings related to intellectual virtues? (2) Why are intellectual motivation and feelings important? (3) What can we do in the classroom to be sensitive to and to cultivate these aspects of intellectual virtues?

FEELINGS, MOTIVATION, AND INTELLECTUAL VIRTUES

As suggested above, an intellectually virtuous person enjoys thinking and learning: he enjoys wondering, asking questions, probing for deeper meaning, paying attention to important details, and coming up with his own ideas. He even takes some delight in doing these things when they're challenging or demand considerable effort. Put simply, an intellectually virtuous person takes pleasure in the *process* of learning. (For more on the affective

dimension of intellectual virtues, see Baehr 2015b, forthcoming.)

However, he also has certain feelings and motivations related to the *product* of learning, that is, to knowledge and understanding. In short, an intellectually virtuous person is *motivated* to get to the fact of the matter, to acquire knowledge, and to develop a deep understanding of important ideas and concepts. In general, this motivation takes the form of a *desire*. However, an intellectually virtuous person also has a firm *commitment* to acquiring knowledge and understanding—a commitment that outstrips his

"[I]ntellectual virtues involve certain feelings and motivations. An intellectually virtuous person enjoys and delights in the learning process. And he is motivated—he desires or is committed—to bringing this process to completion."

desire. Thus even when acquiring a deep understanding of something requires tedious and undesirable work, an intellectually virtuous person perseveres. She retains her commitment even when she doesn't feel like doing so, even when her desire for understanding momentarily wanes (Baehr 2011: 108-110).

Further, an intellectually virtuous person is motivated to acquire knowledge and understanding at least partly for their own sake—

not merely for practical reasons. Thus while an intellectually virtuous person might acquire various kinds of practical knowledge that help him at work or with getting around in the world, this doesn't exhaust his intellectual interests or activities. He is interested in learning about certain things simply because he's curious about them or because he finds them fascinating. He might also be interested in acquiring certain kinds of knowledge because knowing these things is part and parcel to being an educated person, which is something he values for its own sake. Again, in these and related ways, the intellectually virtuous person's motivation to learn is at least partly *intrinsic* (Baehr 2011: 100-102).

The overall picture here is one according to which intellectual virtues involve certain feelings and motivations. An intellectually virtuous person *enjoys* and *delights* in the learning process. And he is *motivated*—he desires or is committed—to bringing this process to completion.

LIFELONG LEARNING

The foregoing characterization may seem to pick out a rather lofty and idealistic goal. It may seem relevant to the intellectual life of a scientist or philosopher but not to the average student or person. However, this isn't quite right. To see why, note that a very commonly talked about educational goal is "lifelong learning." We'd like all of our students to become lifelong learners. We'd like them to keep learning and expanding their minds even after

their formal education is complete and regardless of what career paths they might choose. And we often view ourselves, as their teachers, as playing a significant role in this process.

Now consider: What are the qualities of a lifelong learner? Among these qualities are the very feelings and motivation just noted. A lifelong learner enjoys learning. She has a wide range of intellectual interests. And she pursues them with gusto. She isn't intellectually lazy. Even when doing so doesn't serve any immediate practical interests, she keeps on learning and expanding her mind. She is intrinsically motivated. Therefore, while the intellectual feelings and motivation in question may be somewhat rare, they are a suitable educational goal, especially in the context of intellectual character education.

FOSTERING PLEASURE AND MOTIVATION

Having seen the importance of attending to students' intellectual feelings and motivation in the context of intellectual character education, I turn now to discuss several things that we as teachers can do to live out this priority (for more on the "centrality of wonder" in education, see Egan et al 2014):

A pleasure/motivation filter. For many of us, affective and motivational considerations are rarely on our "mental radars" when we are creating lesson plans or teaching a particular lesson. Therefore, one of the first things we can do is develop a habit of bringing these considerations to mind. That is, we can make a practice, when thinking

about what we will do in a given class period or as we reflectively monitor our teaching, of asking ourselves questions like: "How is what I'm doing or planning to do likely to affect the extent to which my students enjoy learning? How is it likely to affect their desire or commitment to growing as thinkers and learners?" Similarly, we can ask: "What opportunities do I have to help nurture a delight in

"A lifelong learner enjoys learning. She has a wide range of intellectual interests. And she pursues them with gusto. She isn't intellectually lazy. Even when doing so doesn't serve any immediate practical interests, she keeps on learning and expanding her mind."

or commitment to learning?" If considered on a regular basis, these questions can serve as a kind of check or filter on our teaching—one that will help bring our pedagogical activities into alignment with the goal of fostering the affective and motivational elements of intellectual virtue.

Modeling intellectual delight. Affective states like pleasure and delight can't exactly be practiced, at least not in the way that intellectually virtuous activities like asking questions, paying attention to details, and probing for deeper meaning can be practiced. And we certainly can't require our students to experience these things. Instead, pleasure and delight tend to be inspired or "caught" (not taught). They're infectious. This has implications for how we go about trying to nurture our students' experience of intellectual pleasure and delight. It suggests that one of the most important things we can do is to model this delight in the ways we think, talk, and interact with them.

A relational focus. A related point is that people are generally more

susceptible to "catching" the emotional or affective states of people they know, trust, or like. A bond of this sort makes for a kind of susceptibility to affective emulation. This is yet another reason to develop a caring and trusting relationship with our students (see Ch. 20). At a minimum, when we fail to forge this kind of relationship, we erect a formidable obstacle to our students' growth in certain intellectual feelings—feelings that figure importantly into their possession and practice of intellectual virtues.

Intellectual play. Another way to foster intellectual pleasure is through the use of "intellectual play." While this can take a number of different forms, in general it involves free, open-ended, and creative engagement with important ideas and concepts (Ritchhart 2002: 186). This might look like having students build or create something as a way of illustrating a particular scientific law, asking them to conceive of and write about alternative outcomes for important historical events, or inviting them to explore certain geometrical principles or modes of thinking by experimenting with blocks or other geometrical objects. When we engage in play of any sort, we do so, not for some ulterior purpose or end, but because doing so is enjoyable. Accordingly, we can help students enjoy learning by building opportunities for intellectual play into our lessons (Willingham 2009: Ch. 1).

Importantly, intellectual play is not to be confused with mere *entertainment*. If I show a humorous video clip that relates only tangentially to something I am trying to teach my students, they might enjoy the clip but fail to gain any new knowledge or understanding. Rather, intellectual play, as I'm thinking of it, involves playing with and enjoying subject-specific content or concepts. So, again, in a math class this might look like asking students to creatively and playfully explore the relationship between certain numbers or mathematical operations. Here the source of intellectual pleasure would not be incidental to the subject matter. Rather, it would involve playing with and deriving enjoyment from the mathematical concepts themselves.

Limiting extrinsic motivators. We have seen that intellectually virtuous people tend to be intrinsically motivated. They are curious about things. And this curiosity compels them to explore and learn about new topics. They don't pursue knowledge and understanding simply because doing so would be useful for other purposes (e.g. securing a job or getting from point A to point B, etc.). Extrinsic intellectual motivation, by contrast, is when a person engages in learning or knowledge-acquisition strictly for the sake of some other, non-cognitive end or goal, for example, the goal of getting a good grade, pleasing one's parents, earning money, securing power, and so on.

It can be tempting to think that one way to foster intrinsic intellectual motivation is to begin by fostering extrinsic intellectual motivation: for example, to reward the student who scores highest on an

"When we engage in play of any sort, we do so, not for some ulterior purpose or end, but because doing so is enjoyable. Accordingly, we can help students enjoy learning by building opportunities for intellectual play into our lessons."

exam with a candy bar, with the hope that this will reinforce the student's good performance and elicit similar performances down the line. Over time, the hope is, these externally motivated intellectual performances will become internally motivated.

As we've seen in previous chapters, however, there is considerable research suggesting that something like the *opposite* is true: specifically, that intrinsic motivation actually *decreases* with an increase in extrinsic motivation (Deci et al 2001; Ryan and Deci 2000). While the occasional use of extrinsic rewards or motivators can be helpful,

we must make very thoughtful and sparing use of them.

Attention to value and meaning. Finally, if we are trying to nurture our students' intrinsic intellectual motivation, we would do well to return to a point made in Chapter 24 about the importance of drawing attention to the value and meaning of the things we are asking students to learn or do. As human beings, we are motivated to pursue the things we care about. And what we care about is at least partly a matter of what we take to be valuable, that is, what we see or believe to have merit or worth. Accordingly, we should do what we can to make connections between the tasks we are asking our students to engage in and the things they care about or value.

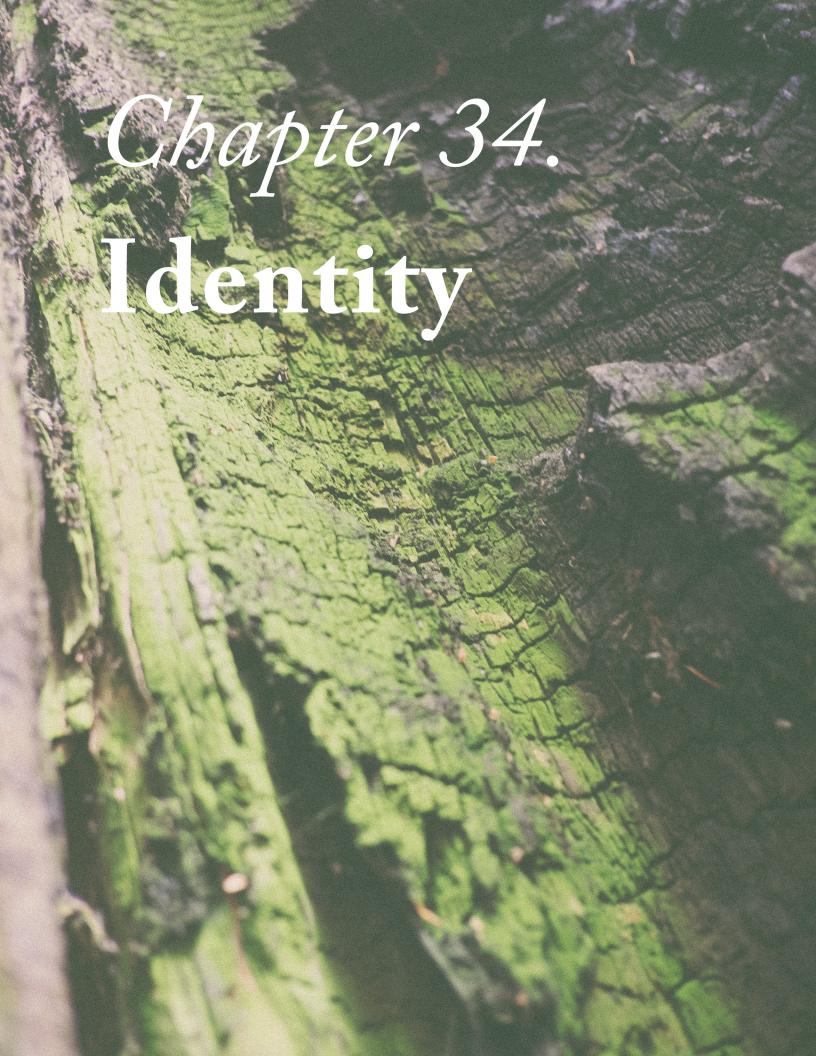
However, we mustn't stop here. We should also try to help students develop *new* values—values that are linked with the process of intellectual growth. For instance, many of our students may not care too much about becoming educated or thoughtful adults; if they're young enough, this possibility might never even have entered their minds. Yet this is a meaningful and worthwhile goal. If at the end of their formal education our students emerge as thoughtful, educated persons, they will experience this fact with a sense of pride and satisfaction. If we can get them to appreciate this early on in their education, we stand a much better chance of bolstering their intellectual motivation.

DISCUSSION QUESTIONS

- I. Which emotions or feelings do you think are most important to student success in your classes? Which emotions or feelings do you think most impede their learning? Try to identify some specific things you do that you think might affect your students (whether positively or negatively) at this level.
- 2. Why might it be the case that intrinsic motivation decreases when

extrinsic motivation increases? What is a possible explanation of this phenomenon?

3. Try to identify three specific things you can do to boost your students' intrinsic motivation. Why do you expect these measures to have the intended effect?



The goal of intellectual character education is profoundly personal. It is about shaping who students are becoming as thinkers or learners. It is about helping them become more thoughtful, curious, open-minded, intellectually humble, intellectually courageous, and more. Qualities like these go a significant way toward making their possessor the person that he or she is. Therefore, at the deepest level, intellectual character is about shaping the *identities* of our students.

In this chapter, I want to dwell on this point. Doing so will allow us to draw together a number of other points from previous chapters into what I hope will be a helpful parting perspective.

THE PERSONAL DIMENSION OF INTELLECTUAL CHARACTER EDUCATION

We can begin by comparing the goal of intellectual character education with more familiar educational aims, for example, the aims of imparting knowledge or promoting proficiency in certain intellectual skills. Knowing that a person is a success vis-à-vis these aims does not necessarily tell us much about the person as a person.

For instance, as noted in Chapter 22, if you say to me "Tell me about Jones" and I reply by saying "Well, Jones has a lot of knowledge about a lot of different subjects and he's really good at quantitative reasoning and has remarkable reading comprehension," you might still wonder, "But what is Jones like as a person?" At least part of what you'd likely be trying to get at is Jones's personality. However, you might also be interested in learning about his character. Thus I might give you something closer to the kind of answer you are looking for if I say: "Jones is very kind man. He has a gentle and friendly way about him. He's extremely generous and compassionate as well. He volunteers at the nearby homeless shelter once a month and donates a percentage of his monthly income to the Red Cross."

The latter reply says something significant about Jones's moral character. However, one of the main lessons of this guide is that personal character is broader than moral character. It is also includes *intellectual* character. Suppose, then, that I were to respond

"The goal of intellectual character education is profoundly personal. It is about shaping who students are becoming as thinkers or learners."

to your query about who Jones is "as a person" by saying something like: "Well, Jones is really knowledgeable and intelligent in lots of ways, but he's also intellectually arrogant. He thinks he knows everything and that he's always right. He's a poor lis-

tener. And his thinking and reasoning tend to be pretty sloppy and careless as well." Alternatively, suppose I were to say: "Jones has an amazing mind. He's deeply reflective, always asking really interesting questions and noticing important details. While he's really knowledgeable, he's quick to admit when he doesn't know something. And he's eager to learn from others." Both of these replies would, I submit, go a significant way toward answering your question. They would tell you something important the kind of person Jones is. However, they aren't commentaries on what we would ordinarily think of as Jones's *moral* character; instead they are commentaries on his intellectual character—on his character as a thinker or learner (for more on this topic, see Baehr 2011: 91-102; also see Passmore 1967: 195).

The personal dimension of intellectual character has important implications for how we go about trying to educate for intellectual character growth. Some of these implications may be compatible with our existing pedagogical commitments and responsibilities. Others may be a source of tension. For instance, educating for intellectual virtues is likely to be at odds with the expectation to faithfully implement a curriculum that is "a mile wide and an inch deep." And it may complicate even further the problem of large class sizes. Given that few of us are in a position to shed all of the constraints and responsibilities that might conflict with trying to educate for intellectual character growth, it is up to each of us to do the best we can to straddle both sets of expectations and constraints. We must attempt to balance what's required of

us by our schools or districts with the profoundly personal goal of trying to shape the intellectual character of our students.

I take it that this isn't just obvious, or at least that it isn't so obvious as to not be worth mentioning. Most of us have been trained and enculturated in such a way that we won't readily lose sight of the importance of educating for knowledge and skills. We don't

"We must attempt to balance what's required of us by our schools or districts with the profoundly personal goal of trying to shape the intellectual character of our students."

need to be reminded of the importance of these things on a daily basis. By contrast, the idea that we should also try to impact who our students are becoming as persons, to the extent that this is familiar at all (e.g. in the form of ideals like "a love of learning" or "lifelong learning"), is likely to feel pretty obscure and elusive.

IMPACTING IDENTITY: KEY POINTS AND PRINCIPLES

What follows, then, are several points and principles that we might do well to bear in mind as we seek to impact the identities of our students by helping them grow in intellectual virtues:

Personal change is slow. Because intellectual character education is about character change, it is not something that can be successfully undertaken in a very short period of time. Changes in people's

fundamental beliefs, attitudes, and feelings occur slowly and incrementally. We need to keep this reality clearly before our minds and allow it to inform our pedagogical practices and expectations. One useful exercise in this regard is to reflect on and write out a detailed response to questions like the following: "What kind of characterological impact can I realistically hope to make on my students in the limited amount of time I have with them? To what extent can I help them develop the motivation, skills, and judgment characteristic of intellectual virtues?" Taking such questions seriously and doing our best to answer them as specifically and concretely as possible can go a considerable way toward the adoption of suitable character-based goals for our students. It can spare us from wasting time pursuing goals that are too ambitious or unrealistic.

Personal change can't be coerced. Given its personal nature, intellectual character change is not something we can control or manage in the way that we can control or manage many impersonal or mechanical processes. We can't strong arm or force intellectual character growth. While we can "require" students to engage in activities that are characteristic of intellectual virtues (e.g. in the assignments or exams we give them), we can't require them to internalize or take ownership of these activities in the way that is necessary for genuine intellectual character growth.

Rather, successful intellectual character education is a profoundly respectful or respect-filled process. While we can create conditions, opportunities, and incentives for intellectual character growth, it is up to our students to decide whether to embrace these efforts. Ideally, we would leave our students feeling as follows: "I've been invited to participate in an approach to thinking and learning that's active, demanding, and attractive; but I haven't been argued or cajoled into it. And I certainly haven't been threatened or shamed. I feel cared for and respected. I feel encouraged to step on board; but I also feel like I have the freedom not to do so if that's what I decide."

Relationships. This aspect of intellectual character education also highlights its inter-personal or social dimension. As we have observed in previous chapters, people are receptive to taking on the attitudes and values of people they trust, especially those who they think care about them and are interested in their well-being (see Chapters 20 and 33 for more on this point). Therefore, there is no substitute for cultivating and expressing a genuine personal interest in and commitment to our students. We must do what we can to make our classrooms safe and respectful spaces and to cultivate caring and trusting relationships with as many of our students as possible.

Beliefs and values. Think for a moment about what makes you you. Suppose someone were to ask "So, who are you exactly?" or "What are you all about?" How would you respond? Part of what you'd probably talk about is your fundamental beliefs and values—what you're deeply passionate about or what you believe is ultimately most important in life. When intellectual character education is most

"We must remember that part of our goal should be to affect, whether by implicit or explicit means, what students believe is ultimately valuable or worth pursuing."

successful, it has an impact even at this level: it affects what students care about and what they deem most important. For example, it might bring a student to believe that intellectual exploration is part of what it is to thrive as a human being, that lifelong learning is just as important as making money, or that being a thoughtful and reflective person brings meaning to one's life and contributes to one's happiness. This is something that practitioners of intellectual character education need to bear in mind. We must remember that part

of our goal should be to affect, whether by implicit or explicit means, what students believe is ultimately valuable or worth pursuing.

Feelings and motivations. Another way of thinking about the "what makes you you" point above has to do with the fact that, to a significant extent, we are defined by our loves (see Adams 2006 for an account of virtue rooted in something like this idea). Part of what it is to love something is to value it or to believe that it is of great importance. But love also involves feelings and motivation: we delight in what we love, we derive pleasure from it, we care about it; and we're motivated to act on its behalf, either in pursuit of it or in an effort to tend to or preserve its well-being. Therefore, as explained in the previous chapter, if we are attempting to help our students grow in intellectual virtues, we must be ever mindful of their feelings, emotions, attitudes, and motivations. We need to remember that we aren't merely concerned with their brains. We must view and treat them as "whole persons."

Time and habit. A person's identity is also revealed by how she spends her time and how she routinely and habitually acts. These things are a natural function of what the person values or loves. However, because we don't always act or allot our time in ways that reflect what we most value and care about, this point merits separate consideration. The basic idea is that when it comes to thinking about the kind of lasting impact we'd like to have on our students, we should think, not just about their inner values and loves, but also about how they spend their time and the things that they habitually do. Our goal should be that their commitment to thinking and learning would be evident in the real activity of their lives.

Accordingly, it can be useful to spend some time reflecting on this theme with our students. As I also explained in Chapter 24, when talking about the value of education, I often share with my students a famous selection from Chapter 2 of the book *Utilitarianism* by the 19th century British philosopher John Stuart Mill. In this

passage, Mill distinguishes between "higher" and "lower" pleasures, the former being more valuable and important to human happiness. Among the higher pleasures Mill discusses are *intellectual* pleasures, including the kinds of pleasures involved with the pursuit and acquisition of knowledge. Mill explains compellingly and eloquently that if our capacity for intellectual pleasures isn't cultivated and maintained from a relatively early age, we will eventually lose it, thereby missing out on an important dimension of human happiness.

I use this passage to illustrate to students both the value of the "life of the mind" and how important it is to develop a capacity for this life. I also explain how, while this is relatively easy to do while they're in school, when they enter the "real world" many powerful

"[W]e can provide our students with opportunities to reflect on the value of 'lifelong learning' and on what this might look like in a life or career that isn't devoted full time to teaching or learning."

forces will conspire to starve their capacity for intellectual and other higher pleasures. I use this as an occasion to allow them to reflect on what it might look like for them to pursue their chosen careers while continuing to feed their minds and maintain their capacity for intellectual pleasures. I also typically tell them the story of a friend of mine who is a successful entrepreneur but who also exemplifies many intellectual virtues: he memorizes poetry, reads widely, is passionately curious, and applies his knowledge and intellectual character strengths to his work in the business world.

This is but one example and it is clearly skewed toward an older student population. But the basic point stands: we can provide our students with opportunities to reflect on the value of "lifelong learn-

ing" and on what this might look like in a life or career that isn't devoted full time to teaching or learning; and we can inspire and inform their imaginations by providing them with real life examples of people who, in the ways they spend their time and in their everyday activities and habits, manifest a commitment of this sort.

Self-understanding. Our identities are also importantly revealed in how we think about and understand ourselves, for example, in the messages and stories that we tell ourselves about ourselves. Prominent in many of these messages and stories are the *strengths* we take ourselves to have. Therefore, as practitioners of intellectual character education, we need to ask: "What can we do to help our students

"As many of us know from our experience as students, an encouraging word from a trusted and admired teacher can have a major impact on how we come to think about and understand ourselves."

think about, experience, and understand themselves at least partly in terms of their intellectual character strengths?" An obvious and plausible suggestion, discussed at length in Chapter 28, is to provide them with ongoing feedback about what their character strengths are. This can prompt them to begin viewing themselves through an intellectual virtues lens. And it can help introduce considerations of intellectual character and intellectual virtues into the basis of their identities. This is another point at which *relationships* are of great importance. For, we receive feedback (whether positive or negative) very differently from people we know, care about, trust, and admire than we do from people we don't know, aren't close with, don't trust, or don't admire. As many of us know from our experience as students, an encouraging word from a trusted and admired teacher can have a major impact on how we come to think about and understand ourselves.

Mindfulness. We have examined several ways in which the personal dimension of intellectual character education makes a big difference to how intellectual character education is practiced; and we've considered some specific steps we can take in light of this point. However, for most of us, keeping these things in mind and implementing the relevant suggestions will demand, at least in the beginning, a certain degree of intentional reflection on the deeply personal dimension of what we are trying to accomplish. Therefore, as discussed in Chapter 31, we would do well to develop a habit or practice of remembering—of bringing to mind in an intentional and thoughtful manner—the fact that as practitioners of intellectual character education, we are trying to have an impact on who our students are as persons, and that doing so has important implications for what we do and for how we relate to them.

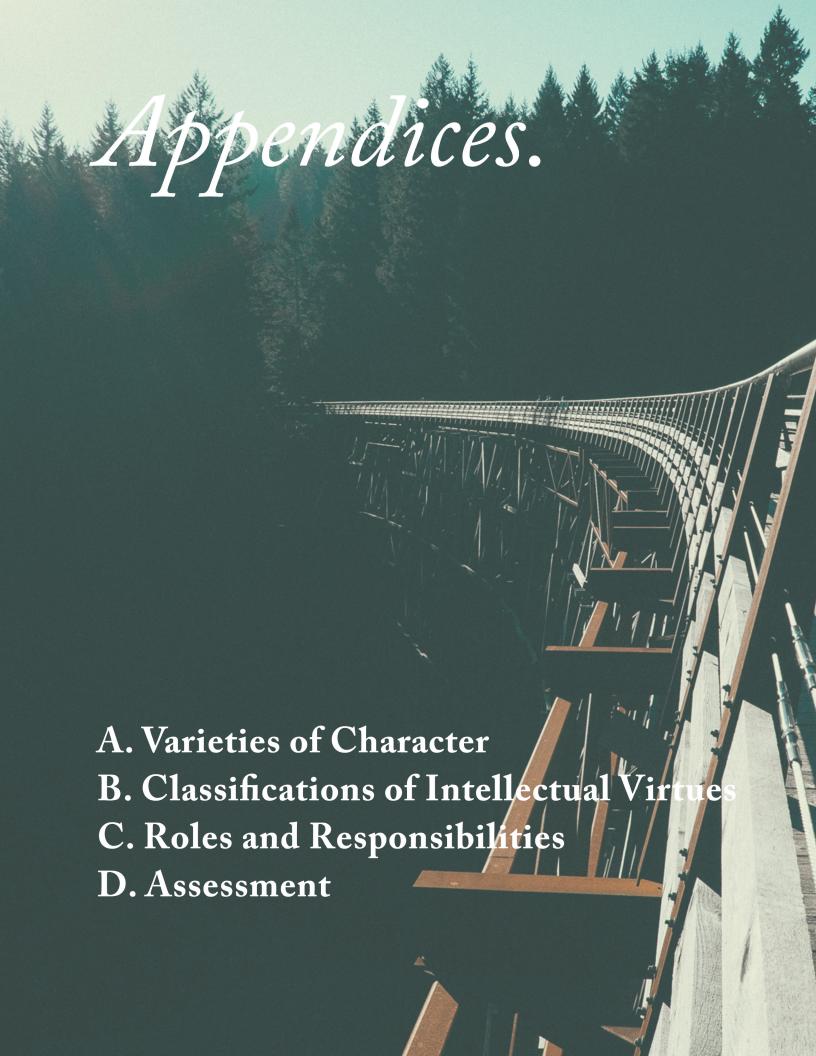
Continuing education. One way of developing this kind of mindfulness is to further our understanding of the personal dimensions and processes involved with intellectual character growth. With only a vague idea of what these things mean or amount to, we are unlikely to keep them before our minds, let alone allow them to inform our pedagogical practices. Therefore, continuing to learn about what intellectual character is, why it is valuable, and how it comes about can play an important supporting role in our efforts to educate for intellectual virtues. If we are sufficiently disciplined, we might be able to do this on our own. For many of us, however, it will require teaming up with friends or colleagues (e.g. in a book club or professional development series) to explore together the dynamics of intellectual character growth.

DISCUSSION QUESTIONS

I. What are some of the beliefs, values, or loves that go some way toward making you the person you are? To what extent, if any, are these "intellectual" in nature? That is, do any of them pertain to

your values, commitments, or habits as a thinker or learner (or as a *teacher*)?

- 2. Have any of your teachers helped shape your identity, that is, helped make you the person you are today? If so, how did this happen? What things this teacher do—or what qualities did he or she exhibit—that explain this impact?
- 3. Our identities are also shaped by our personal stories or narratives. What might it look like for considerations of intellectual character to figure into the personal stories or narratives of our students? How might they figure into your own narrative?



APPENDIX A

Varieties of Character: Moral, Civic, Performance, and Intellectual

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This paper was delivered at the inaugural conference for the Jubilee Centre for Character and Virtues at the University of Birmingham, United Kingdom, in December of 2012. It explores the distinction between intellectual character and other dimensions of character: namely, moral, civic, and performance character.

haracter education has traditionally focused on the promotion of moral and civic character virtues like respect, kindness, compassion, civility, and tolerance.¹ Recently, however, the notions of "performance character" and "performance strengths" have been introduced as a way of capturing a dimension of character that seems at once highly relevant to academic performance but also something of a departure from the categories of traditional character education. Performance strengths include perseverance, self-discipline, resilience, ingenuity, and grit.² My aim in this paper is to develop and defend a fourth dimension of personal character: namely, intellectual character. Intellectual character is not entirely separable from moral, civic, or performance character. However, it is separable enough to be worth distinguish-

ing. Indeed, I will argue that an approach to character education that aims at fostering growth in intellectual virtues like curiosity, attentiveness, open-mindedness, intellectual courage, and intellectual humility enjoys some unique advantages compared with other approaches.

1. INTELLECTUAL CHARACTER

As with traditional character education, philosophical reflection on character and virtues has tended to focus on the moral and civic dimensions of personal character. While these discussions cover much of the relevant territory, they do not cover it all. In particular, they fail to give sufficient attention to the dimension of personal character that bears directly on cognition, and more specifically, on the pursuit of distinctively epistemic goods like knowledge, truth, and understanding.

Philosophical treatments of knowledge and knowing, especially since the modern period, have tended to focus either on the more mechanistic (rather than personal or volitional) aspects of cognition or on the epistemic status of particular propositions or types of propositions (e.g. propositions about the external world).³ While philosophers like Descartes and Locke, for instance, did occasionally attend to the more active or volitional aspects of cognition, their work in this area is not especially systematic or extensive. Nor did they tend to view these aspects as continuous with or conceptually isomorphic with moral character.

Just a little bit of reflection reveals the limitation of such a focus. Suppose, with most epistemologists today, that the primary goal of cognition is something like truth or true belief.⁴ In some cases, getting to the truth is easy. Forming true beliefs about the physical appearance of one's immediate surroundings or about the salient contents of one's current mental states typically makes few if any demands on a knower's agency or character. In other circumstances, however, this is far from the case.

Consider, for instance, what might be required for reaching the truth about the details of some ancient historical event. Or, somewhat differently, about the bearing of a prima facie plausible counter-argument on the truth of a cherished belief. In cases like this, reaching the truth does make demands on cognitive agents qua agents. Specifically, it demands an exercise of intellectual character virtues like intellectual tenacity, intellectual thoroughness, open-mindedness, and intellectual humility. As Linda Zagzebski has argued, while epistemically oriented, these traits otherwise mirror the content and structure of what we typically think of as moral virtues.⁵ The upshot, then, is that there is a dimension of personal character that is central to good cognition but that has, as it were, slipped through the cracks between moral philosophy and the theory of knowledge.

Such neglect has received a direct and forceful challenge from virtue epistemology, an approach to the theory of knowledge that gives a central role to reflection on intellectual virtues. One major

strand of virtue epistemology—known as "virtue responsibilism" or "character-based" virtue epistemology—conceives of intellectual virtues as good intellectual character traits on the model of Aristotelian moral virtues.⁶ According to these philosophers, a person's intellectual character is a function of her psychological orientation toward epistemic ends or goals like knowledge, truth, and understanding. An intellectually virtuous person desires knowledge and understanding; and this fundamental orientation disposes her to think and inquire in ways that are reflective, honest, open, careful, fair, and the like.

My contention, again, is that intellectual character is importantly (albeit not entirely or categorically) distinct from the types or dimensions of character widely recognized in the character education literature today; and, moreover, that an approach to character education grounded in a model of intellectual character has special significance and promise.⁷

2. DIMENSIONS OF CHARACTER: MORAL, CIVIC, PERFORMANCE, AND INTELLECTUAL

How, then, is intellectual character related to these other dimensions of character? One effective way of answering this question is by focusing on the fundamental aim or goal proper to intellectual virtues.

As suggested earlier, intellectual virtues have their motivational

basis in something like a "love of learning" or a desire for truth, knowledge, understanding, or the like. They are intrinsically epistemically oriented.⁸ Compare this with what we typically think of as moral virtues.⁹ We tend to think of morally virtuous persons as being motivated, not by epistemic goods, but rather by distinctively moral ends like social justice, peace, the alleviation of poverty, suffering, and related evils. For this reason it makes sense to think of moral virtues as the character traits of a good neighbor (in the biblical sense) and intellectual virtues as the character traits of a good thinker or inquirer.

But, of course, one can be a good neighbor without thirsting for knowledge or understanding of physical, biological, political, historical, or related spheres of reality. The converse is also true. A formidable and successful scientist might lust after knowledge and understanding, and out of this orientation think and inquire in ways that are thoughtful, open, rigorous, careful, and persevering, while nevertheless being systematically cold and insensitive to his family, colleagues, and other relations. Thus it appears possible for a person to possess a fairly high degree of intellectual virtue without much moral virtue and for a person with a high degree of moral virtue to possess relatively little in the way of intellectual virtue.

A similar distinction can be drawn between intellectual character and civic character. The aim of civic virtues is something like the well-being or good of the community as a whole.¹⁰ Civic virtues

include traits like civility, respect, cooperation, tolerance, and community-mindedness. It is not hard to identify some possible divergence between these traits and intellectual virtues. Like the advocate of social justice, a virtuous community organizer, for instance, might have little interest in the life of mind. And the intellectually virtuous scientist might also fail to be motivated, even in part, by a concern with how her research will benefit society at large.

It is worth noting, however, that the skills and qualities of a "critical thinker" are often closely associated with good civic character. A good citizen, for instance, needs to know how to inform herself, to sort through competing arguments and claims, and to make evidence-based decisions.¹¹ However, the epistemic focus and concern here are, strictly speaking, instrumental to the goal of a well-functioning community or society: they are not a concern or focus on knowledge or learning as such. In this way, a distinction between civic and intellectual character remains.

The concept of "performance" character was introduced by Thomas Lickona and Matthew Davidson as a way of capturing a dimension of good character that is at least somewhat distinct from moral character but that has special relevance to teaching and learning.¹² There are some important and obvious similarities between performance character and intellectual character. Neither, for instance, has an overtly moral dimension; and each has obvious relevance to the domain of thinking and learning. However,

performance character is at once broader and narrower than intellectual character.

To see why it is broader, note that performance virtues are described as having immediate application across a wide range of domains and activities, from athletics to business to academics. Indeed, while performance character may be receiving special attention in education circles, there would not appear to be anything about performance character itself that makes it more relevant to education than to any other domain in which success requires a long-term commitment and the overcoming of various challenges. Intellectual character is different. Again, it pertains specifically to the domain of seeking, refining, and transmitting knowledge and related epistemic goods. It bears on epistemically oriented activities like thinking, reasoning, reflecting, interpreting, and analyzing. And it is rooted in a love of knowledge and learning.

How then is performance character narrower than intellectual character? Performance character, as it is standardly described, seems primarily to be a matter of pressing on, persevering, not quitting in the pursuit of some goal; hence the idea of "grit" and perseverance as paradigm instances of performance virtues. As already suggested, this certainly is relevant to the pursuit of knowledge or a good education: success in this domain often requires grit, diligence, perseverance, and so on. However, there is much more to a virtuous orientation toward epistemic goods than

is captured by a virtuous disposition to press on, persevere, and the like, in pursuit of these goods.

Consider virtues like curiosity, wonder, reflectiveness, open-mindedness, and intellectual humility. Persistent curiosity can, of course, be critical to bringing an inquiry to completion; however, it is also characteristically what motivates inquiry to begin with—what gets it off the ground. Similarly, wonder is not really about moving forward in the pursuit of a goal: rather, it is often about pausing to appreciate, reflect on, even to feel some point or question or reality. Open-mindedness, reflectiveness, intellectual carefulness, and intellectual caution can have a similar function. Thus good intellectual character is not infrequently a matter of going slow, of proceeding in a thoughtful way, and of savoring value embedded in the process of thinking and learning. In this respect, its scope is notably broader than the scope of performance character.¹⁴

A distinction between performance character and intellectual character can also be drawn in a related and complementary way. As Marvin Berkowitz and William Puka have observed, performance virtues are, in a sense, evaluatively neutral.¹⁵ To say that someone is disposed to persevere or has "grit" is not necessarily to say anything good about this person, since this person's perseverance or grit may be ill-motivated: the person may persevere or show grit in pursuit of a wicked end. By contrast, intellectual virtues are motivated by epistemic goods like knowledge and understanding.¹⁶

The emerging picture is one according to which moral character, civic character, and intellectual character can be defined motivationally, that is, in terms of the sorts of ends or goals at which they aim. Again, moral character is a matter of how a person is disposed to act, think, and feel in connection with distinctively moral ends like justice, peace, or the alleviation of suffering, civic character is concerned with a person's orientation toward well-being of the community as a whole, and intellectual character is concerned with a person's orientation toward intellectual or epistemic ends like knowledge and truth. Performance character, by contrast, is best understood in procedural terms—in terms of how one pursues a particular goal, and, in particular, of how one proceeds in the face various challenges or obstacles to the achievement of a goal. As such it cuts across the different dimensions just noted. Strong performance character is needed in academic and other intellectual pursuits. It is also needed in civic and moral pursuits: the bumbling or akratic moral or civic agent is hardly virtuous.

My own view is that this way of carving things up is, from a purely conceptual or philosophical standpoint, an oversimplification.¹⁷ Nevertheless, for educational purposes, I think the picture is accurate enough. As Scott Seider's recent book *Character Compass* illustrates, there are discernible and educationally significant differences between what we might reasonably label moral, civic, and performance character. I am suggesting, as Seider himself alludes to in the final pages of his book,¹⁸ that there is at least one

additional dimension of personal character that is highly relevant to educational theory and practice. This again is the dimension of intellectual character.

3. THE PROMISE OF INTELLECTUAL CHARACTER EDUCATION

In the remainder of the paper, I will briefly highlight a few advantages of an approach to character education that is grounded in a conception of intellectual character. The aim of such an approach, naturally enough, is to foster significant growth in intellectual character virtues like curiosity, open-mindedness, attentiveness, and intellectual rigor.¹⁹

One fairly standard misgiving about character education in its traditional forms is that it requires the promotion of certain moral, political, or religious ideas or values that are out of place in public education.²⁰ One advantage of intellectual character education is that it requires no such thing. To get behind this approach, one need only believe that knowledge and learning are good and worth pursuing and that the personal qualities critical to achieving and making good use of knowledge should be deliberately fostered in educational settings. One advantage of intellectual character education is that it provides a way of making character education "safe" for public school environments.²¹

A related objection to character education is that anything ap-

proximating an explicit and systematic concern with fostering moral or civic virtues, whatever its value in principle, simply is not feasible given everything else that educators today are expected to cover and do for their students today. This objection might appear to have equal force against an explicit and systematic concern with fostering intellectual virtues.

However, this objection belies a misconception of what it would look like to foster intellectual virtues in an educational setting. While at its best this process is multifaceted and dynamic, one central and promising means of fostering growth in intellectual virtues is through an active and reflective engagement with academic content, that is, through an active and reflective engagement with the curricular staples of math, science, history, literature, and the like. This is a function of the fact that character virtues arise through the practice or repetition of virtuous actions.²² Applied to intellectual virtues, the idea is that the traits in question develop through thinking, reading, interpreting, reflecting, analyzing, and discussing academic content in ways that are inquisitive, attentive, careful, thorough, honest, and so on. Moreover, it is quite plausible that engaging with academic content and ideas in these ways—as opposed to ways that are, say, passive, unreflective, or noninteractive—will have at least some positive bearing on academic performance and achievement.²³

There appears, then, to be an important connection between teaching for intellectual virtues and academic engagement and

performance. For this reason, the enterprise of intellectual character education does not require choosing between teaching for academic standards or similar objectives, on the one hand, and teaching for intellectual character growth, on the other.

The two advantages of intellectual character education noted thus far are primarily advantages vis-à-vis moral and civic character education. They are advantages largely shared by performance character education. A third advantage is an advantage relative even to this latter approach.

I noted earlier that the scope of intellectual character in one respect is broader than the scope of performance character. Again, when it comes to the learning process, performance virtues seem primarily relevant to the successful completion of intellectual goals and tasks—to persevering when the going gets tough, and so on. Intellectual virtues, by contrast, are relevant to all aspects of the learning process.

On one way of categorizing intellectual virtues, the traits in question can be placed in different groups or "clusters" based on their relevance to the different stages of inquiry.²⁴ One group of virtues—e.g. curiosity, wonder, intellectual humility, and intellectual autonomy—is especially pertinent to getting the learning process started and headed in the right direction. A second group is relevant to making inquiry go well once it is already underway. This includes attentiveness, intellectual carefulness, and intel-

lectual thoroughness. A third group is helpful for dealing with certain obstacles that tend to arise in the context of inquiry. It includes open-mindedness, intellectual courage, and intellectual perseverance.

Performance character seems to be relevant primarily to the third category. And even here its relevance is somewhat limited. For example, one major obstacle to expanding one's mind or knowledge base is an inability or unwillingness to consider counter-evidence or perspectives that might be hostile to one's own. For this reason, open-mindedness is an indispensable intellectual virtue. But open-mindedness is not standardly thought of as a performance virtue. Again, this is because it is not primarily about persevering, following through, showing self-discipline, and so on.

My suggestion, then, is that educating for intellectual virtues lends itself to a characterological focus across or throughout the learning process in a way that educating primarily for performance virtues does not.

I conclude with an acknowledgement that there are bound to be tradeoffs with any approach to character education, whether intellectual, moral, civic, performance, or otherwise. Further, I am not claiming that intellectual character education is the only viable approach to character education or that it cannot be combined with other more familiar approaches. It remains, however, that intellectual character education is presently the least recog-

nized and least developed alternative of those considered above. For this and related reasons I have seen fit to highlight some of its distinctive advantages.

REFERENCES

- I. See e.g. Thomas Lickona, *Educating for Character* (New York: Bantam, 1991).
- 2. The notion of performance character was introduced by Thomas Lickona and Matthew Davidson in *Smart and Good High Schools* (Center for the 4th and 5th Rs and the Character Education Partnership, 2005). For recent worth on this and related concepts, see Angela Duckworth et al, "Grit: Perseverance and Passion for Long-Term Goals," *Journal of Personality and Social Psychology* 92/6 (2007): 1087-1101, and Paul Tough, *How Children Succeed* (Boston: Houghton Mifflin Harcourt, 2012).
- 3. See Linda Zagzebski, *Virtues of the Mind* (Cambridge: Cambridge UP, 1996), 1-76.
- 4. Or, somewhat more broadly, "cognitive contact with reality" (Zagzebski, op cit., p. 45 *passim*), which makes room for understanding, wisdom, and other epistemic goods the value of which may transcend that of truth.
- 5. See her Virtues of the Mind, 77-258.
- 6. For more on virtue epistemology, and for some well-developed accounts of the basic nature and structure of intellectual virtues, see Zagzebski, *Virtues of the Mind*, Robert Roberts and Jay Wood, *Intellectual Virtues* (Oxford: Oxford UP, 2007), and Jason Baehr, *The Inquiring Mind* (Oxford: Oxford UP, 2011). For an account of intellectual character education within educational psychology, see Ron Ritchhart, *Intellectual Character* (San Francisco: Jossey-Bass, 2002).
- 7. Such an approach is also briefly discussed, albeit not elaborated on, in Scott Seider, *Character Compass* (Cambridge: Harvard Education Press, 2012) and David Shields, "Character as the Aim of Educa-

- tion," *Phi Delta Kappan* 92/8 (2011): 48-53. While he does not speak specifically in terms of "intellectual virtues" and does not seem to view his approach as very continuous with "character education" in the traditional sense, Ritchhart's *Intellectual Character* goes a considerable way toward demonstrating what it might look like "on the ground" to educate for intellectual virtues.
- 8. It does not follow, of course, that an intellectually virtuous person will not also aim at, and even sometimes use her intellectual virtues in the service of, non-epistemic ends, including various moral or civic ends.
- 9. "What we typically think of" is intentional, as there may be a broad enough conception of "moral" such that intellectual virtues just are a subset of moral virtues. For more on this, see Baehr, *The Inquiring Mind*, 206-222.
- 10. See Shields, "Character as an Aim of Education," 51-52, and Seider, *Character Compass*, 32-33.
- See e.g. Martha Nussbaum, Not for Profit (Princeton, Princeton UP, 2010).
- 12. Lickona and Davidson, Smart and Good High Schools, 16-31.
- 13. This is evident in Seider's recent remark that performance strengths seem to be "the qualities possessed by entrepreneurs and politicians rather than activists or moral exemplars" (op. cit., 3).
- 14. Of course, one could define "performance character" more broadly, such that it would cover all dimensions of inquiry. See e.g. "Performance Values," a position paper published by the Character Education Partnership, April 2008 (www.character.org). While this broader construal may minimize the difference between intellectual character and performance character, it also threatens to dilute the latter concept.
- 15. "Dissent and Character Education," *Reclaiming Dissent* (Amsterdam: Sense Publishers, 2009), p. 108.
- 16. This does not entail that all knowledge is epistemically good any more than the corresponding claim about moral virtues entails that, say, all pain is bad.
- 17. See Baehr, The Inquiring Mind, 206-222.

- 18. Character Compass, pp. 231-232.
- 19. See Ritchhart, *Intellectual Character*, for an idea of what this might look like in practice.
- 20. See Robert Nash, Answering the Virtuecrats (New York: Teachers College Press, 1997).
- 21. This alternative approach may seem objectionable to some on the other (right-leaning) end of the political spectrum. In response, I briefly note that intellectual character education should not be confused with an approach that is fundamentally suspicious of authority or tradition or that primarily emphasizes skepticism (intellectual trust and intellectual humility are important intellectual virtues, after all). For a defense against this sort of concern, see William Hare, In Defence of Open-Mindedness (Montreal: McGill Queens Press, 1985).
- 22. See Aristotle, Nicomachean Ethics, Book II.
- 23. See e.g. Seider, *Character Compass*, Chs. 4-5, and Lickona and Davidson, *Smart and Good High Schools*, pp. 27-28.
- 24. See Baehr, The Inquiring Mind, pp. 17-22.

APPENDIX B Two Classifications of Intellectual Virtues

A rguably, there is no perfect classification of intellectual virtues. There certainly is no single or authoritative classification. Rather, different classifications are appropriate for different purposes and contexts. To illustrate this point, and to provide a sense of what such classifications look like, this appendix identifies two ways in which several intellectual virtues might be classified or grouped. In neither case is the classification intended to be exhaustive; nor are the various categories or groupings of intellectual virtues entirely mutually exclusive. Nevertheless, having some sense of how intellectual virtues fit together can be a useful way of better understanding what they are and how they function.

Both classifications divide intellectual virtues into groups based on their role in the learning process or in the process of "inquiry," by which I mean a deliberate attempt to get to the truth about (or to learn about or understand) some specific matter. This includes a very wide range of intellectual activities, from a student trying to understand how a series of historical events fit together to a scientist or philosopher developing a complex theoretical model in an effort to explain a given phenomenon.

I.

The first classification is relatively simple and limited (which is both a strength and a weakness). It is taken directly from the Intellectual Virtues Academy of Long Beach. It groups each of the school's nine "master virtues" into three categories, with each category pertaining to a particular stage or dimension of the learning process.

The first stage consists of getting the learning process started and headed in the right direction. This requires a certain kind of motivation as well as certain "checks and balances." Curiosity supplies the motivation to learn. However, intellectual autonomy equips a person to direct and guide her own thinking—it equips her to "think for herself." Intellectual autonomy needs to be balanced by a willingness to admit what one doesn't know and to rely on others where appropriate. Hence the need for intellectual humility. (For definitions, explanations, and examples of these and the other six virtues in this classification, see Chapters 4-12 of the guide.)

The second stage is a matter of keeping the learning process on track. This requires that one be "personally present" and observant—it requires attentiveness. It also requires "going deep," probing for explanations and deep understanding. Thus it requires intellectual thoroughness. Finally, to keep the learning process on track, one must also be aware of possible errors and mistakes and

take pains to avoid them. One must practice intellectual carefulness.

The third set of virtues pertains, not necessarily to a particular stage of the learning process, but to certain challenges that often arise during this process. One such challenge is seeing things from foreign or alternative points of view, that is, "thinking outside the box." Open-mindedness is often needed to overcome this challenge. Fear is another obstacle to productive learning. In a school setting, this often looks like a fear of making mistakes or a fear of embarrassment. Intellectual courage equips a person to overcome these fears and to do so in the interest of learning or understanding. A final obstacle is the temptation to quit or give up before one has figured things out or developed an understanding of the subject matter. In situations like this, intellectual tenacity is required.

STAGE OR DIMENSION OF THE LEARNING PROCESS	CORRESPONDING VIRTUES
Getting the process started and headed in the right direction	Curiosity Intellectual autonomy Intellectual humility
Keeping the process on track	Attentiveness Intellectual carefulness Intellectual thoroughness
Overcoming challenges to productive learning	Open-mindedness Intellectual courage Intellectual tenacity

II.

The second classification of intellectual virtues differs from the first one in a few notable ways. First, it includes a greater number of groupings and virtues. Second, it groups virtues according to a different and wider array of demands or challenges that arise in the context of inquiry. Third, certain virtues appear in more than one classification. (This classification is adapted from Baehr 2011: Ch. 2.)

Successful inquiry makes the following demands:

First, it is something that must be initiated or undertaken. Therefore, it requires virtues like curiosity, attentiveness, contemplativeness, and thoughtfulness. People with these virtues wonder, ask questions, notice important details, and engage in other kinds of intellectual activity that often prompt inquiry, that is, that prompt an attempt to learn or to understand.

Second, inquiry often demands that the inquirer get and remain properly focused. Thus it requires ongoing attentiveness, keen observation, scrutiny, perceptiveness, and concentration.

Third, because inquiry often involves consulting and evaluating a wide variety of sources, some of which might be foreign or disagreeable, it can give rise to the temptation to evaluate different views using different criteria or standards (e.g. "going easy" on

views similar to one's own and being overly critical about competing views). A similar challenge can arise when one is investigating a subject matter or evaluating sources over a long period of time. To overcome these challenges, one needs virtues like intellectual fairness, consistency, and objectivity.

Fourth, inquiry can also fall prey to a different intellectual temptation, namely, the temptation of self-deception. When a certain piece or body of evidence threatens one of our cherished beliefs, or when it might otherwise be deemed inconvenient, we often face the temptation to ignore, distort, or repress this evidence (sometimes this occurs at an entirely subconscious level). Obviously, this can have a negative effect on our attempts to form accurate beliefs and to develop a genuine understanding of the world around us. To mitigate such effects, we need to possess and exercise virtues like intellectual self-awareness, self-scrutiny, honesty, open-mindedness, intellectual humility, and intellectual courage. When we do, the result is an important and powerful form of intellectual "wholeness" or integrity.

Fifth, successful inquiry often involves "thinking outside the box." This can be challenging in a couple of ways. It can demand an extreme kind of intellectual stretching, requiring us to conceive of creative new solutions or possibilities. It can also require taking up a perspective that we find disagreeable or objectionable. As such, this aspect of inquiry demands the practice of virtues like imaginativeness, creativity, intellectual adaptability, flexibility,

agility, and open-mindedness.

Sixth, reaching the truth or acquiring genuine understanding sometimes requires considerable exertion or endurance. This can be the result of a variety of factors: reaching the truth may be dangerous; it may be especially time-consuming; it may require ongoing repetition of a mundane technical procedure; etc. In cases like this, successful inquiry requires virtues like intellectual courage, determination, perseverance, patience, tenacity, and diligence.

CHALLENGE OR OBSTACLE TO SUCCESSFUL INQUIRY	CORRESPONDING VIRTUES
Initial motivation	Curiosity, attentiveness, contemplativeness, and thoughtfulness
Proper focusing	Attentiveness, keen observation, intellectual scrutiny, perceptiveness, and concentration
Consistency in evaluation	Fair-mindedness, objectivity, and intellectual consistency
Intellectual "wholeness" or integrity	Self-awareness, self-scrutiny, intellectual honesty, open-mindedness, intellectual humility, intellectual courage, and intellectual integrity
Mental flexibility	Imaginativeness, creativity, intellectual adaptability, intellectual flexibility, intellectual agility, and open-mindedness
Endurance or persistence	Intellectual courage, intellectual determination, intellectual perseverance, intellectual patience, intellectual tenacity, and intellectual diligence

APPENDIX C

Intellectual Character Education: Roles and Responsibilities

This appendix specifies a list of responsibilities related to the practice of intellectual character education for several key stakeholder groups. These lists are adapted from materials used at the Intellectual Virtues Academy of Long Beach. They are intended merely as an example of what such responsibilities might look like. Individual readers are advised to adapt the responsibilities listed here to better fit with their own roles and limitations.

Ideally, intellectual character education will be practiced by all key stakeholder groups at a school. Depending on the school, these might include: (1) the school leader or principal; (2) teachers; (3) advisory group leaders (i.e. facilitators of weekly small group meetings with students—see Chapter 19); (4) parents/families; and (5) governing board members. For each of these groups, a list of responsibilities is specified. The lists are meant to be suggestive rather than authoritative or comprehensive.

SCHOOL LEADER

- Develop a firm understanding of intellectual virtues in general (including their nature, structure, and value, educational and otherwise) and of the school's target virtues in particular.
- Develop a firm understanding of the "core principles and practices" involved with an intellectual virtues educational model.
- Formulate realistic and concrete character-based goals for the students at the school.
- Take primary responsibility for and oversee a systematic and comprehensive implementation of the school's character-based goals, including monitoring and supporting the role of other stakeholders (teachers, advisors, parents, etc.) in this process.
- Model intellectual virtues in his/her leadership of and interactions with other stakeholders, especially teachers.
- Engage in ongoing self-reflection and self-assessment aimed at his/ her growth in intellectual virtues.
- Take primary responsibility for creating a school climate and culture deeply rooted in and aligned with the goal of fostering intellectual character growth.
- Instruct and train stakeholders—especially teachers—in the core principles and practices of an intellectual virtues educational model, including the design and oversight of a character-based professional development program.
- Continue to expand his/her understanding of the "best practices" involved with educating for intellectual virtues.
- Share the uniqueness and advantages of an intellectual virtues approach to education with community members.
- Monitor and assess the school's progress relative to its character-based standards.

TEACHERS

- Develop a firm understanding of intellectual virtues in general (including their nature, structure, and value, educational and otherwise) and of the school's target virtues in particular.
- Develop a firm understanding of the core principles and practices involved with an intellectual virtues educational model.
- Systematically implement the "core principles and practices" of an intellectual virtues framework, including the creation of a classroom culture and the daily employment of pedagogical strategies conducive to intellectual character growth.
- Participate in ongoing professional development aimed at better understanding and practicing an intellectual virtues approach to education.
- Support and collaborate with colleagues in their attempts to educate for intellectual virtues.
- Engage in ongoing self-reflection and self-assessment aimed at his/ her own growth in intellectual virtues.
- Model intellectual virtues in all of his/her interactions with students and other stakeholders (e.g. parents and fellow teachers).
- Faithfully implement the school's character-based assessment plan, including the monitoring of and documentation of student progress relative to the corresponding goals and objectives.
- Continue to nurture in him/herself a passion for and knowledge of his/her content area.
- Continue to expand his/her understanding of the "best practices" involved with educating for intellectual virtues.

ADVISORS

- Develop a firm understanding of intellectual virtues in general (including their nature, structure, and value, educational and otherwise) and of the school's target virtues in particular.
- Develop a firm understanding of the "core principles and practices" involved with an intellectual virtues educational model.
- Engage in ongoing self-reflection and self-assessment aimed at his/ her own growth in intellectual virtues.
- Meet with advisees on a weekly basis.
- Form trusting and supportive relationships with each advisee.
- Faithfully implement the advisory curriculum.
- Develop an understanding of the intellectual character strengths and weaknesses of each of his/her advisees (e.g. of how each advisee's "mind works").
- Create ongoing opportunities for his/her advisees to reflect on and practice intellectual virtues.
- Model the school's target virtues in all of his/her interactions with students and other stakeholders.
- Monitor and document his/her advisees' progress in intellectual character growth.
- Continue to expand his/her understanding of the "best practices" involved with educating for intellectual virtues.

PARENTS/FAMILIES

- Develop a firm understanding of intellectual virtues in general (including their nature, structure, and value, educational and otherwise) and the school's target virtues in particular.
- Engage in ongoing self-reflection and self-assessment aimed at his/ her own growth in intellectual virtues.
- Use the language of intellectual virtues in conversations at home.
- Create opportunities for the practice intellectual virtues outside of school.
- Reinforce expressions of intellectual virtues in the home.

BOARD MEMBERS

- Develop a firm understanding of intellectual virtues in general (including their nature, structure, and value, educational and otherwise) and of the school's target virtues in particular.
- Develop a firm understanding of the "core principles and practices" involved with an intellectual virtues educational model.
- Engage in ongoing self-reflection and self-assessment aimed at his/ her own growth in intellectual virtues.
- Model intellectual virtues in his/her interactions with other board members and stakeholders.
- Support, monitor, and hold accountable the principal in his/her implementation of an intellectual virtues educational model.
- Share the uniqueness and advantages of an intellectual virtues approach to education with community members.

Appendix D

Assessing Intellectual Character Growth

In this final appendix I take up the thorny but important issue of trying to assess students' intellectual character growth. Entire volumes could be written about this topic. Thus my own discussion will merely scratch the surface. My aim is to provide you with some guiding principles and sample resources that you may find of use in your own attempts to track your students' growth in intellectual virtues.

WHY MEASURING INTELLECTUAL VIRTUES IS DIFFICULT AND PRECARIOUS

I'll begin with a few words about the challenges and pitfalls of trying to measure intellectual character growth (for a more in depth treatment of this topic, see Kotzee 2015, forthcoming). First, intellectual character growth is a largely internal process. To a significant extent, it is a matter of developing new ways of thinking, feeling, and being motivated. These things are difficult to measure by objective or external means. While possessing intellectual virtues also involves being disposed to act in certain ways, a person can act or behave in an intellectually virtuous manner without actually possessing the virtue or virtues in question, for example, without having the requisite motivation, judgment, at-

titudes, or the like. For these reasons, genuine intellectual character growth can be very difficult to measure.

Second, personal character takes time to develop. It isn't something that changes overnight. This is true regardless of whether the change is positive or negative. Good or bad, virtuous or vicious, character is formed over time and through a series of choices and other influential factors. As a result, it would be naive for us to think that in a single semester or year we are likely to have a transformative effect on the intellectual character of most of our students. This in turn should make us wary about trying to measure significant intellectual character growth over relatively short periods of time.

Third, attempts to measure the intellectual character strengths and weaknesses of our students can have a detrimental effect on their intellectual character, especially if we share the relevant data with them. For instance, if a student is provided with a substantial amount of negative or critical feedback about her intellectual character, this could spoil the very idea of trying to grow in intellectual virtues for this student. Alternatively, if a student receives an A on a "character report card," this might cause him to warm to the idea of growing in intellectual virtues, but for the wrong reasons. For instance, he might begin engaging in intellectually virtuous activity for the sake of receiving even more praise from his teachers. This would be problematic given that intellectual virtues flow, not from a desire for praise or approval, but out of a

genuine interest in thinking and learning.

WHY MEASURING INTELLECTUAL VIRTUES IS IMPORTANT

Despite these challenges and pitfalls, my own view is that attempting to assess students' progress in intellectual virtues is an essential part of intellectual character education. The reason is simple. The overarching goal of intellectual character education is to foster growth in intellectual virtues within an academic context. Thus practitioners of intellectual character education should want to know whether or to what extent they have achieved this goal. This in turn will require some form of character-based assessment.

Further, character-based assessment can enhance the quality and impact of our attempts to educate for intellectual virtues. This is true in a few ways. First, identifying clear character-based goals and making attempts to track students' progress relative to these goals can help us focus on and remain committed to the goal of educating for intellectual virtues. Second, even if only modestly successful, our attempts to measure intellectual character growth provide an occasion for us to reflect on our pedagogical habits and practices, to try to identify which ones are most (or least) effective, and to make adjustments in light of this information. Third, character-based feedback, if conveyed appropriately, can also be very useful to students. If we can provide students with accurate information about their intellectual character strengths and

weaknesses, and if we communicate this information in an appropriate manner, students can use it to develop a better self-understanding and to inform and guide their own intellectual activity.

SOME GUIDING PRINCIPLES

Given that character-based assessment is an integral part of intellectual character education, we would do well to keep in mind a couple of guiding principles, both of which are derived from considerations noted above.

First, we must be careful and thoughtful about how we use the data we collect, and specifically, about whether or how much of this information we share with our students. At a minimum, we should avoid using character-based data to cajole or shame students into behaving in intellectually virtuous ways. Such an approach is likely to have a detrimental and counterproductive effect. Further, when we do share this feedback with our students, we should take steps to prevent it from having unintended consequences for their intellectual motivation. We should, for instance, exercise caution to ensure that the feedback doesn't increase their external motivation to think and learn, thereby decreasing their internal motivation (see Ch. 22 for more on the relationship between internal and external motivation).

Second, we must be realistic about the entire process of character-based assessment. This includes being realistic about the kind

of growth that is possible and therefore capable of being measured (especially over shorter periods of time). At IVA, we have sought to be guided by this principle, first, by giving students three years to achieve the school's character-based standards (see below); and, second, by formulating standards that call for "meaningful growth" in intellectual virtues rather than anything like maximal growth or perfection. We must also be realistic about our ability to track whatever intellectual character growth we might reasonably expect to occur. Again, such growth is difficult to detect. Therefore, we must think carefully about what it would involve for our students—its various qualities or facets—and do what we can to develop and use measurements that reliably track these indicators.

DIMENSIONS OF INTELLECTUAL CHARACTER GROWTH

Below I will share and explain each of IVA's character-based standards and some of the assessments we have developed to measure student progress relative to these standards. Before doing so, however, it will be helpful to say a few things about how we have come to conceive of the sort of intellectual character growth that we are attempting to measure.

IVA's mission, as we have seen, is "to foster meaningful growth in intellectual virtues in a thoughtful, challenging, and supportive academic environment." In keeping with some of the considerations noted above, we have chosen to divide the notion

of "meaningful growth in intellectual virtues" into five distinct parts or dimensions and have developed or are in the process of developing separate measurements for each dimension. These dimensions are as follows:

- I. Knowledge. Though not technically or necessarily an aspect of intellectual character growth, it is important to us that students graduate from IVA with a good understanding of what intellectual virtues are, of how they relate to other cognitive and moral strengths, and of the value of intellectual virtues for living and learning well. We think this knowledge is worth having for its own sake. It is also a tool of sorts. As students develop a better understanding of what intellectual virtues are, they'll be more likely to recognize these qualities (or their absence) in themselves and others. They can then make use of this knowledge in their own attempts at intellectual growth.
- 2. Self-knowledge. We also want our students to depart from IVA with a rich understanding of their own intellectual character strengths and weaknesses. In part, the development of such understanding is an exercise in intellectual humility, which again involves an awareness of and a willingness to "own" one's intellectual limitations and weaknesses. However, it also provides a useful platform from which to pursue growth in other intellectual virtues. The student who understands his intellectual character strengths and weaknesses will be well positioned both to "play to his strengths" and to identify the areas of his intellectual character that need improvement.
- 3. Skill/ability. As we saw in Chapter 1, part of what it is to develop intellectual virtues is to practice and become competent at the skills or abilities proper to the specific virtues in question. Thus an open-minded person is skilled at perspective-switching, a curious person has the ability to formulate thoughtful and insightful questions, and an intellectually careful person is proficient at identifying

and avoiding intellectual pitfalls and mistakes. There is, then, a skill or ability dimension to each intellectual virtue. Accordingly, one of our aims at IVA is that all of our graduates will experience meaningful growth in the abilities or skills proper to several of IVA's "master virtues."

- Motivation. Having the ability to perspective-switch, formulate thoughtful questions, and avoid intellectual errors is one thing; actually doing these things is another; and doing them out of a desire to learn or know is another thing still. As this suggests, motivation, including some element of intrinsic motivation, is also an important part of what it is to possess an intellectual virtue. If a student has the ability to avoid intellectual errors but regularly engages in thinking and submits work that is intellectually sloppy, then presumably this student lacks the virtue of intellectual carefulness. Further, if a student regularly shows intellectual carefulness, but does so only in order to please his teacher or achieve a good grade, then while he might be intellectually careful in a sense, his carefulness lacks an important aspect of excellence or virtue. In light of these requirements, one of our character-based objectives (which again I discuss in detail below) pertains to a "love of learning" or intrinsic intellectual motivation.
- 5. Judgment. Research conducted at Harvard's Project Zero has shown that students often have the ability and motivation to engage in intellectually virtuous activity but nevertheless fail to do so (Ritchhart and Perkins 2000). The explanation: they lack an appropriate awareness or sensitivity to when this activity would be appropriate. They aren't good at recognizing occasions that call for an exercise of the virtues in question. In short, they lack a kind of intellectual judgment. To illustrate: if I have the ability to take up alternative points of view, am motivated to do so, but fail to appreciate when a situation calls for this kind of intellectual activity, then I can't really be said to possess open-mindedness. Therefore, intellectual virtues, in

addition to having an ability dimension and a motivation dimension, also have a judgment dimension. This aspect of intellectual virtues is also reflected in IVA's character-based standards.

CHARACTER-BASED STANDARDS AND ASSESSMENTS

We are now in a position to consider the character-based standards and assessments that we have developed or adopted at IVA. As will eventually become very clear, our efforts at character-based assessment, while a respectable first attempt, are very much a work in progress. We have given these matters a good deal of thought and attention. And we have come up with what we believe are some valuable resources. However, there is clearly much room for growth and improvement. As I will touch on at various points, we are currently in the process of making larger and smaller adjustments to these efforts.

I will proceed as follows. Each of our five character-based standards corresponds to one of the dimensions of intellectual character growth noted in the previous section. For each standard, I will first state both a rough and simplistic (version A) and a more technical and precise (version B) rendering of the standard. Next I will discuss the materials we have used or developed to track student progress relative to this standard.

KNOWLEDGE STANDARD

Standard 1-A: Students will develop an understanding of what intellectual virtues are and why they are valuable.

Standard 1-B: Upon graduation from IVA, 75% of students who have attended the school for two or more years will demonstrate a proficient understanding of intellectual virtues. They will understand what intellectual virtues are, why they are important, how they compare with related cognitive and moral strengths, etc. They will also be able to name and provide an accurate description of each of IVA's nine master virtues.

From an assessment standpoint, this standard is the least problematic. It requires merely that students understand and be able to explain certain facts about intellectual virtues. Such understanding can be reliably measured via multiple-choice, short-answer, and similar types of questions. We have used questions like the following for this purpose:

List each of IVA's nine master virtues from memory. Then provide a definition for each one. Finally, give an example of how you have demonstrated (or could demonstrate) this virtue as a thinker or learner.

We also use a simple matching exercise that requires students to pair each of IVA's master virtues with the corresponding definition. Finally, we test students' ability to identify these virtues "in action" by providing scenarios like the following and asking them to select from a short list the virtue that is mostly clearly illustrated by the scenario:

Jim asks his friend Diego if he understands how to do their math homework. Diego wants to appear "smart" so he's tempted to answer "yes" even though doesn't really understand. On further reflection, Diego decides to be honest about what he doesn't know, so he replies to Jim, "Not really. I'm pretty confused by it too." [intellectual humility]

Victoria is constantly asking why. Not because she likes to be annoying. She just wonders about a lot of things. Her mind is filled with questions. She wants to learn and understand the world around her. [curiosity]

Some people have a lot of knowledge, but their knowledge doesn't go very deep. Not Marcus. Marcus understands things. If you ask him a question, he doesn't just give you a one-sentence answer. He explains himself. He does the same thing on tests: he doesn't just repeat what the teacher said in class; he shows that he really understands the material. [intellectual thoroughness]

SELF-KNOWLEDGE STANDARD

Standard 2-A: Students will develop a rich and accurate understanding of their own intellectual character strengths and weaknesses.

Standard 2-B: Upon graduation from IVA, 75% of students will demonstrate a proficient understanding of their own intellectual character strengths and weaknesses. This includes a rich and accurate understanding of what those strengths and weaknesses are, how they manifest in the student's life, why they are significant, etc.

Tracking progress relative to this standard is challenging in at least two significant respects. First, what counts as a "rich" understanding of one's intellectual character strengths and weak-

nesses and how can this be assessed? Second, how are we to measure whether a student's self-understanding is *accurate*?

In response to the first question, the "richness" of student's self-understanding can be evaluated, among other ways, in terms of the level of detail found in his descriptions of his intellectual character strengths and weaknesses or the number of examples he can give to illustrate this understanding. However, one drawback of this approach is that the kind of evaluation it involves is time-consuming and fairly complex.

In response to the second question, the accuracy of a student's self-assessment can be gauged by triangulating this assessment with feedback from others who are well acquainted with the student's intellectual character, for example, the student's teachers, parents, or advisory group leader. At IVA, we have begun collecting such data from our advisors, who meet with students in small groups on a weekly basis to learn about and explore topics and questions that students are naturally curious about (see Ch. 19). However, we are still in the process of figuring out how to integrate this data with the students' self-assessments in order to produce a single cohesive and reliable measurement. For this reason, we also track students' progress relative to this goal by asking them to self-report on the extent to which they think they have grown in their understanding of their own intellectual character strengths and weaknesses. For instance, we have asked questions like the following:

Thinking back to the beginning of the year, how well do you think you understood your intellectual character strengths and weaknesses at that point? Now, at the end of the year, how well do you think you understand these things?

SKILL OR ABILITY-STANDARD

Standard 3-A: Students will make significant progress in the skills or abilities specific to IVA's master virtues.

Standard 3-B: Upon graduation from IVA, 75% of IVA students who have attended the school for two or more years will demonstrate significant progress in the skills or abilities proper to no less than three of IVA's master virtues.

On the one hand, measuring progress relative to this goal can seem like a fairly straightforward affair: one needs simply to identify the skill or skills proper to each target virtue and then formulate and administer assessments that gauge proficiency in this skill.

However, this can be much harder than it seems, especially where the goal is to measure student progress in the skills proper to multiple virtues. At IVA, we initially asked teachers to create short assignments that demanded an exercise of the skills proper to each of IVA's nine target virtues and to administer these exercises at the beginning and end of the year, thereby registering any growth that had taken place. However, this was not a very feasible approach. One problem was that it put unrealistic

demands on the teachers. Another problem concerned the fact that intellectual tasks and challenges typically demand clusters of virtue-specific skills. This made it very difficult to formulate separate measurements for the full range of virtue-specific skills we were interested in.

In light of these challenges, we are presently relying on other, less complex and less demanding assessments to track students' progress in virtue-specific skills. These include the advisor assessments noted above (which ask advisory group leaders to provide feedback on the extent to which their advisees have manifested the skills proper to all nine master virtues). They also include written feedback from teachers on student report cards. These comments focus on the intellectual character traits of students, especially their practice of virtue-specific skills and abilities (as such, they can also be used to assess the accuracy of students' self-understanding, noted above). In addition, we have developed self-assessments for each of IVA's nine master virtues that primarily target the skill or ability dimension of these qualities. For each virtue, we have a four- and an eight-item self-report measure that students respond to using a five-point Likert scale (viz. "Very different from me," "Different from me," "Neither different nor like me," "Like me," and "Very much like me"). While these measures have undergone significant revision and refinement, they have not yet been rigorously validated (though plans for such evaluation are in the works). The shorter, four-item versions of these scales are as follows (an asterisk indicates that the item should be reverse-scored):

CURIOSITY	INTELLECTUAL AUTONOMY	INTELLECTUAL HUMILITY
 I am eager to explore new things. My classes often leave me wondering about the topics we discussed. I am interested in a lot of topics. I rarely think of questions about what we're learning in class.* 	 I am an independent thinker. I have a hard time coming up with my own ideas.* When I get stuck on a problem, I immediately ask my parents or teacher for help.* I think differently from my classmates. 	 It is easy for me to admit when I am wrong. I feel embarrassed when I don't know something.* I have a lot to learn. I like to correct my classmates' mistakes.*

ATTENTIVENESS	INTELLECTUAL CAREFULNESS	INTELLECTUAL THOROUGHNESS
 I enjoy paying attention to details. I notice small details in stories that might become important later on. I like to look closely at things. I tend to notice things that other people miss. 	 I always read the directions before starting an assignment. I go back over my assignments before turning them in. I like to finish assignments quickly even if this means getting a few answers wrong.* I make careless mistakes in my schoolwork.* 	 I am good at explaining things to people. My answers on written tests and assignments are usually very brief.* When I get interested in something, I like to keep learning about it. I think it is more important to understand what I am learning than to get a good grade.

OPEN-MINDEDNESS	INTELLECTUAL COURAGE	INTELLECTUAL TENACITY
 I am willing to change my beliefs. I don't like to be around people who disagree with me.* I enjoy learning why people believe what they believe. I like to hear different perspectives. 	 I am willing to answer questions even if I think my answer might be wrong. I stand up for what I believe. When my answer is different from everyone else's, I don't speak up.* I don't ask questions in class because I don't want to get embarrassed.* 	 When I am frustrated with a problem, I try to stick with it. I continue thinking about difficult problems even though I can't find a solution. When I can't figure out a problem, I quit trying.* I enjoy challenging assignments.

While far from perfect, these self-report measures can shed at least some light on students' development of the relevant virtue-based skills, particularly when administered on multiple occasions over a significant period of time.

MOTIVATION STANDARD

Standard 4-A: Students will experience growth in their "love of learning."

Standard 4-B: Upon graduation from IVA, 50% of students who have attended the school for two or more years will demonstrate a significant increase in intrinsic intellectual motivation.

Impacting a student's intrinsic intellectual cares and concerns is

a formidable challenge; hence the 50% goal in Standard 4-B (for more on this topic, see Ch. 33). Measuring these cares and concerns—and, specifically, a student's "love of learning"—is also challenging. However, it isn't impossible. Teachers and advisors are often in a reasonably good position to comment on students' intellectual motivation. Self-assessments can also be useful in this context. While we are in the process of selecting a validated self-report measure for intrinsic intellectual motivation, in the past we have attempted to get at this factor by having students respond to questions like the following:

I dislike assignments that require me to think hard.*

I enjoy learning.

I am eager to continue learning.

$JUDGMENT\ STANDARD$

Standard 5-A: For each of IVA's nine master virtues, students will learn to reliably identify situations in which these virtues should be exercised.

Standard 5-B: Upon graduation from IVA, 75% of students who have attended the school for two or more years will demonstrate proficiency in the judgment proper to each of IVA's master virtues.

To get at whether students are developing the kind of judgment involved with the possession of intellectual virtues, we provide them with a series of scenarios and ask them to identify from a

short list the virtue that is called for in each scenario. Some examples:

Your teacher is asking for a student to volunteer his or her essay as an example to go over in class. You don't think your essay is well written, but you think it might be a good example that would help others. Which intellectual virtue is most needed in this situation? [intellectual courage]

You quickly write an essay in response to a detailed question. You are not sure if you wrote on each part of the question. You can either leave the class early for lunch or go back over your essay to make sure you answered each part of the question. Which intellectual virtue is most needed in this situation? [intellectual carefulness]

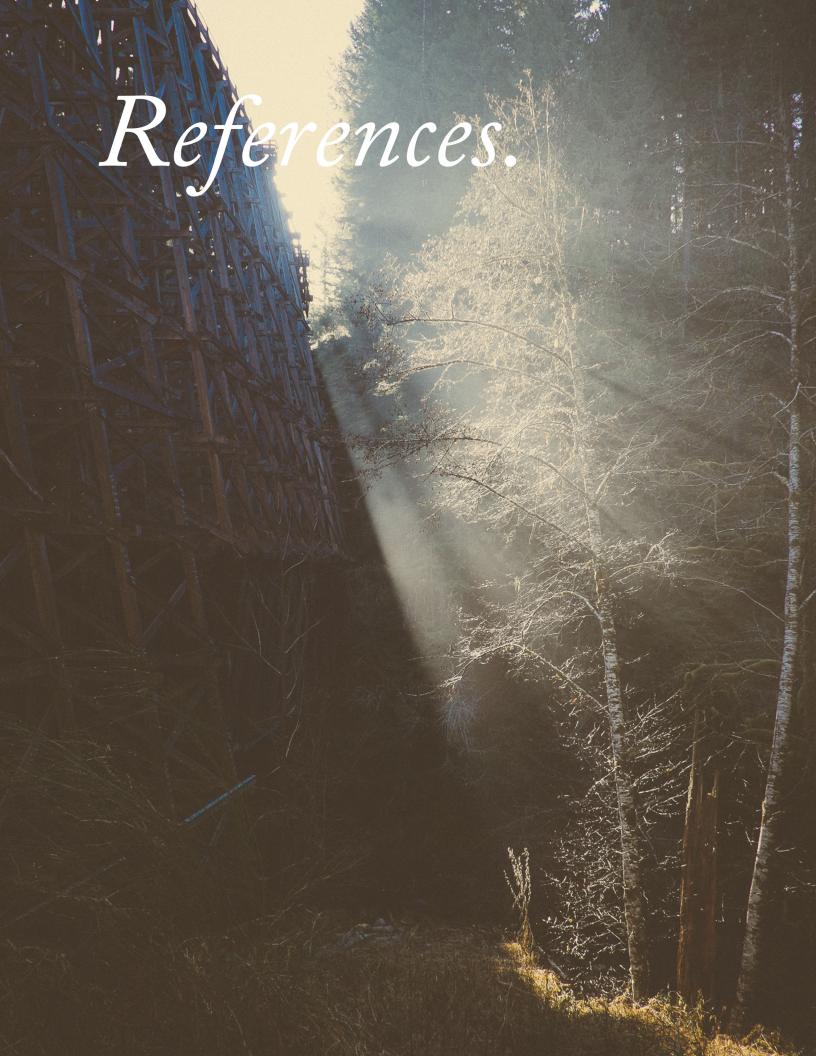
Your teacher gives you a math problem that is tricky to solve. She allows you to either solve it on your own or look up the answer on the internet. Which intellectual virtue is most needed in this situation? [intellectual autonomy]

This assessment sheds light on students' ability to look at a situation and judge which virtue it calls for. A limitation, however, is that it fails to get at the extent to which students are disposed to exercise such judgment "in the wild," that is, in their ordinary lives and without any prompting. So here as well there is considerable room for improvement in our methods.

CONCLUSION

We have examined the outline of an approach to measuring intellectual character growth that involves (1) dividing such growth into different parts or dimensions and (2) using a variety of meaAppendix D: Assessing Intellectual Character Growth

surement tools to track growth along these dimensions. Advantages of an approach like this include that it does justice to the multi-faceted structure of intellectual character growth and thereby allows for relatively refined measurements that can more accurately capture the target phenomenon. One disadvantage is that it results in a fairly complex and messy picture of a student's intellectual character: it doesn't generate anything approximating a single, uniform assessment. This is a limitation that we are presently working to mitigate. We are also still in the process of deciding how much of the data we collect to share with students or their parents. We hope to make significant progress on these and many related matters in years to come.



- Adams, Robert. 2006. A Theory of Virtue: Excellence in Being for the Good (Oxford: Oxford University Press).
- Adderholdt-Elliott, Miriam. 1989. "Perfectionism and Underachievement," *Gifted Child Today* 12/1: pp. 19-21.
- Aristotle. 2000. *Nicomachean Ethics*, trans. Roger Crisp (Cambridge: Cambridge University Press).
- BAEHR, JASON. 2016, FORTHCOMING. "Is Intellectual Character Growth a Realistic Educational Aim?" in a special issue of the *Journal of Moral Education* on "Virtue and Control: Lessons from East and West," eds. Heather Battaly and Ryan Nichols.
- BAEHR, JASON. 2015A, FORTHCOMING. Intellectual Virtues and Education: Essays in Applied Virtue Epistemology (New York: Routledge).
- BAEHR, JASON. 2015B, FORTHCOMING. "The Four Dimensions of an Intellectual Virtue," in *Moral and Intellectual Virtues in Western and Chinese Philosophy: The Turn Toward Virtue*, eds. Chienkuo Mi, Michael Slote, and Ernest Sosa (New York: Routledge).
- BAEHR, JASON. 2013. "Educating for Intellectual Virtues: From Theory to Practice," *Journal of the Philosophy of Education* 47: pp. 248-262.

- BAEHR, JASON. 2011. The Inquiring Mind: On Intellectual Virtues and Virtue Epistemology (Oxford: Oxford University Press).
- Baehr, Jason. 2011B. "The Structure of Open-Mindedness," *Canadian Journal of Philosophy* 41/2: pp. 191-214.
- BARON, JONATHAN. 2008. *Thinking and Deciding*, fourth edition (Cambridge: Cambridge University Press).
- BARON, ROBERT A. 1997. "The Sweet Smell of ... Helping: Effects of Pleasant Ambient Fragrance on Prosocial Behavior in Shopping Malls," *Personal Social Psychology Bulletin* 23/5: pp. 498-503.
- Whitcomb, Dennis, Heather Battaly, Jason Baehr, and Dan Howard-Snyder. Forthcoming. "Intellectual Humility: Owning Our Limitations," *Philosophy and Phenomenological Research*.
- Benninga, Jacques, Marvin Berkowitz, Phyllis Kuehn, and Karen Smith. 2003. "The Relationship of Character Education Implementation and Academic Achievement in Elementary Schools," *Journal of Research in Character Education* 1/1: pp. 19-32.
- Berkowitz, Marvin. 2012. You Can't Teach Through a Rat (Boone, NC: Character Development Group).
- BERKOWITZ, MARVIN AND BILL PUKA. 2009. "Dissent and Character Education," in *Reclaiming Dissent: Civics Education for the 21st Century*, ed. Mordechai Gordon (Rotterdam: Sense Publishers): pp. 107-30.
- Berkowitz, Marvin and Melinda Bier. 2007. "What Works in Character Education." *Journal of Research in Character Edu*-

- cation 5/1: pp. 29-48.
- Berkowitz, Marvin and Melinda Bier. 2006. "What Works in Character Education: A Research-Driven Guide for Educators" (Washington, DC: Character Education Partnership).
- BLACKWELL, LISA, KALI TRZESNIEWSKI, AND CAROL DWECK. 2007. "Implicit Theories of Intelligence Predict Achievement Across an Adolescent Transition: A Longitudinal Study and An Intervention," *Child Development* 78/1: pp. 246–263.
- BLYTHE, TINA AND THE TEACHERS AND RESEARCHERS OF THE TEACHING FOR UNDERSTANDING PROJECT. 1998. *The Teaching for Understanding Guide* (San Francisco: Jossey-Bass).
- Bronte, Charlotte. 1997/1847. *Jane Eyre* (New York: Wadsworth).
- Brooks, David. 2014. "The Mental Virtues," *The New York Times*, August 8, http://www.nytimes.com/2014/08/29/opin-ion/david-brooks-the-mental-virtues.html.
- Burnett, Frances Hodgson. 2014/1905. *A Little Princess* (CreateSpace Independent Publishing Platform).
- CARTER, SAMUEL CASEY. 2011. On Purpose: How Great School Cultures Form Strong Character (Thousand Oaks, CA; Corwin).
- Cohen, Leah Hager. 2013. I Don't Know: In Praise of Admitting Ignorance (Except When You Shouldn't) (New York: Riverhead Books).
- CORDOVA, DIANA I. AND MARK R. LEPPER. 1996. "Intrinsic Motivation and the Process of Learning: Beneficial Effects of Contextualization, Personalization, and Choice," *Journal of*

- Educational Psychology 88/4: pp. 715-730.
- Costa, Arthur and Bena Kallick. 2008. Learning and Leading with Habits of Mind (Alexandria, VA: ASDC).
- Damon, William, Ed. 2002. Bringing in a New Era in Character Education (Stanford, CA: Hoover Institution Press).
- Deci, Edward, Richard Koestner, and Richard M. Ryan. 2001. "Extrinsic Rewards and Intrinsic Motivation in Education: Reconsidered Once Again," *Review of Educational Research* 71/1: pp. 1-27.
- DeJong, Meindert. 1972. *The Wheel on the School* (New York: Harper Trophy).
- Dewey, John. 2007/1906. *The Child and the Curriculum* (Chestnut Hill, MA: Adamant Media Corporation).
- DICKENS, CHARLES. 1983/1850. *David Copperfield* (New York: Penguin).
- DiPrete, Thomas A. and Jennifer L. Jennings. 2012. "Social and Behavioral Skills and the Gender Gap in Early Educational Achievement," *Social Science Research* 41/1: pp. 1-15.
- Douglass, Frederick. 2001/1845. Narrative of the Life of Frederick Douglass, an American Slave (New Haven: Yale University Press).
- Dow, Philip. 2013. *Virtuous Minds* (Downers Grove: InterVarsity Press).
- Duckworth, Angela L, Christopher Peterson, Michael D. Matthews, and Dennis R. Kelly. 2007. "Grit: Perseverance and Passion for Long-Term Goals," *Journal of Personality and Social Psychology* 92/6: pp. 1087-1101.

- Duckworth, Angela L. and Patrick D. Quinn. 2009. "Development and Validation of the Short Grit Scale (Grit-S)," *Journal of Personality Assessment* 91/2: pp. 166-74.
- Dweck, Carol. 2010. "Even Geniuses Work Hard," Educational Leadership 68/1: pp. 16-20.
- DWECK, CAROL. 2006. Mindset: The New Psychology of Success (New York: Random House).
- Egan, Kieran, Annabella Cant, and Gillian Judson, eds. 2014. Wonder-Full Education: The Centrality of Wonder in Teaching and Learning Across the Curriculum (New York: Routledge).
- FARNHAM, LIJA, GIHANI FERNANDO, MIKE PERIGO, COLLEEN BROSMAN, AND PAUL TOUGH. 2015. "Rethinking How Students Succeed," *Stanford Social Innovation Review*, February 17, http://www.ssireview.org/up for debate/article/rethinking how students succeed.
- Frawley, Timothy. 2005. "Gender Bias in the Classroom: Current Controversies and Implications for Teachers," *Childhood Education* 81/4: pp. 221-27.
- FRIEDMAN, THOMAS. 2014. "How to Get a Job at Google,"

 The New York Times, February 22, http://www.nytimes.com/2014/02/23/opinion/sunday/friedman-how-to-get-a-job-at-google.html.
- Garner, R.L. 2006. "Humor in Pedagogy: How Ha-Ha can Lead to Aha!" *College Teaching* 54/1: pp. 177-80.
- GOODALL, JANE. 1990. *Through a Window* (New York: Houghton Mifflin Harcourt).

- Hadzigeorgiou, Yannis. 2014. "Reclaiming the Value of Wonder in Science Education," in Wonder-Full Education: The Centrality of Wonder in Teaching and Learning Across the Curriculum, eds. Kieran Egan, Annabella Cant, and Gillian Judson (New York: Routledge): pp. 40-65.
- HARE, WILLIAM. 2003. "The Ideal of Open-Mindedness and Its Place in Education," *Journal of Thought* 38/2: pp. 3-10.
- HARE, WILLIAM. 2002. "Teaching and the Attitude of Open-Mindedness," *Journal of Educational Administration and Foundations* 16/2: pp. 103-24.
- HARE, WILLIAM. 1985. In Defence of Open-Mindedness (Montreal: McGill Queens University Press).
- HARE, WILLIAM. 1979. Open-Mindedness and Education (Montreal: McGill Queens University Press).
- HATTIE, JOHN. 2012. Visible Learning for Teachers: Maximizing Impact on Learning (London: Routledge).
- HECKMAN, JAMES AND TIM KAUTZ. 2012. "Hard Evidence on Softs Skills," *Labour Economics*, 19/4: pp. 451–464.
- IBSEN, HENRIK. 1992/1879. *A Doll's House* (New York: Dover Publications).
- JENSEN, FRANCES. 2015. *The Teenage Brain* (New York: Harper-Collins).
- Kashdan, Todd. 2009. Curious? Discover the Missing Ingredient to a Fulfilling Life (New York: William Morrow).
- Kashdan, Todd, Paul Rose, and Frank Finchman. 2004. "Curiosity and Exploration: Facilitating Positive Subjective Experiences and Personal Growth Opportunities," *Journal of*

- Personality Assessment 82/3: pp. 291-305.
- Kearns Goodwin, Doris. 2002. "How I Caused That Story," *Time*, January 27, http://content.time.com/time/nation/article/0,8599,197614,00.html.
- Kohn, Alfie. 1997. "How Not to Teach Values: A Critical Look at Character Education," *Phi Delta Kappan* 78/6: pp. 428-439.
- Kotzee, Ben. 2015, forthcoming. "Problems of Assessment in Educating for Intellectual Virtue," in *Intellectual Virtues and Education*, ed. Jason Baehr (New York: Routledge).
- Kotzee, Ben, ed. 2013. Education and the Growth of Knowledge: Perspectives from Virtue Epistemology and Social Epistemology (Malden, MA: Blackwell).
- Langer, Ellen J. 1989. *Mindfulness* (Reading, MA: Addison Wesley).
- Langer, Ellen J. 1997. *The Power of Mindful Learning* (Cambridge, MA: Da Capo Press).
- Leithwood, Kenneth, Pat McAide, Nina Bascia, Anne Rodrigue, eds. 2006. *Teaching for Deep Understanding: What Every Educator Should Know* (Thousand Oaks, CA: Corwin Press).
- Lickona, Thomas. 2004. Character Matters: How to Help Children Develop Good Judgment, Integrity, and Other Essential Virtues (New York: Simon and Schuster).
- Lickona, Thomas. 1991. Educating for Character: How Our Schools Can Teach Respect and Responsibility (New York: Bantam Books).

- LICKONA, THOMAS AND MATTHEW DAVIDSON. 2005. Smart and Good High Schools: Integrating Excellence and Ethics for Success in School, Work, and Beyond (Cortland, NY: Center for the 4th and 5th Rs/Washington, DC: Character Education Partnership).
- Lockwood, Alan L. 2009. The Case for Character Education: A Developmental Approach (New York: Teachers College Press).
- MILL, JOHN STUART. 1998. *Utilitarianism*, ed. Roger Crisp (Oxford: Oxford University Press).
- Montmarquet. 1993. Epistemic Virtues and Doxastic Responsibility (Lanham, MD: Rowman & Littlefield).
- NEWMANN, FRED. M, ANTHONY S. BRYK, AND JENNY K.

 NAGAOKA. 2001. Authentic Intellectual Work and Standardized

 Tests: Conflict or Coexistence? (Chicago: Consortium on Chicago School Research).
- Nickerson, Raymond S. 1998. "Confirmation Bias: A Ubiquitous Phenomenon," *Review of General Psychology* 2/2: pp. 175-220.
- Passmore, John. 1967. "On Teaching to be Critical," *The Concept of Education*, ed. R.S. Peters (London: Routledge & Kegan Paul): pp. 192-211.
- Paul, Richard. 2000. "Critical Thinking, Moral Integrity, and Citizenship," in *Knowledge, Belief, and Character: Readings in Virtue Epistemology*, ed. Guy Axtell (Lanham, MI: Rowman and Littlefield): pp. 163-75
- Paul, Richard. 1995. Critical Thinking: What Every Person Needs to Survive in a Rapidly Changing World, second edition

- (Santa Rosa, CA: Foundation for Critical Thinking).
- PAUL, RICHARD W. 1990. "Critical Thinking, Moral Integrity, and Citizenship: Teaching for the Intellectual Virtues," in *Critical Thinking: What Every Person Needs to Survive in a Rapidly Changing World*, second ed. (Foundation for Critical Thinking): pp. 255-67.
- Paul, Richard and Linda Elder. 2002. Critical Thinking:

 Tools for Taking Charge of Your Professional and Personal Life
 (Upper Saddle River, NJ: Pearson Education).
- Perkins, David. 1995. Outsmarting IQ: The Emerging Science of Learnable Intelligence (New York: The Free Press).
- Perkins, David and Gavriel Salomon. 1989. "Are Cognitive Skills Context-Bound," *Educational Researcher* 18/1: pp. 16-25.
- Perkins, David and Shari Tishman. 2006. "Learning that Matters: Toward a Dispositional Perspective on Education and Its Research Needs," unpublished paper.
- Perkins, David. 1993. "Teaching for Understanding," American Educator: The Professional Journal of the American Federation of Teachers 17/3: pp. 28-35.
- Peters, R.S., ed. 1967. *The Concept of Education* (London: Routledge & Kegan Paul).
- PORTER, STEVE. 2015, FORTHCOMING. "A Therapeutic Approach to Intellectual Character Formation," in *Intellectual Virtues and Education: Essays in Applied Virtue Epistemology*, ed. Jason Baehr (New York: Routledge).
- RICCI, MARY CAY. 2013. Mindsets in the Classroom: Building a

- Culture of Success and Student Achievement in Schools (Waco, TX: Prufrock Press).
- RITCHHART, RON. 2015. Creating Cultures of Thinking: The Eight Forces We Must Master to Truly Transform Our Schools (San Francisco: Jossey-Bass).
- RITCHHART, RON. 2002. Intellectual Character: What It Is, Why It Matters, and How to Get It (San Francisco: Jossey-Bass).
- RITCHHART, RON AND DAVID PERKINS. 2000. "Life in the Mindful Classroom: Nurturing the Disposition of Mindfulness," *Journal of Social Issues* 56/1: pp. 27-47.
- RITCHHART, RON, MARK CHURCH, AND KARIN MORRISON. 2011. *Making Thinking Visible* (San Francisco: Jossey-Bass).
- ROBERTS, ROBERT AND JAY WOOD. 2007. Intellectual Virtues: An Essay In Regulative Epistemology (Oxford: Oxford University Press).
- Ross, Lee and Richard Nisbett. 1991. The Person and the Situation: Perspectives from Social Psychology (London: Pinter and Martin).
- Rowling, J.K. 2000. *Harry Potter and the Chamber of Secrets* (New York: Scholastic Paperbacks).
- Russell, Bertrand. 1926. On Education (London: Routledge).
- Ryan, Kevin and Karen Bohlin. 2003. Building Character In Schools: Practical Ways to Bring Moral Instruction to Life (San Francisco: Jossey-Bass).
- Ryan, Richard M. and Edward L. Deci. 2000. "Intrinsic and Extrinsic Motivations: Classic Definitions and New Directions," *Contemporary Educational Psychology* 25/1: pp.

54-67.

- Scheffler, Israel. 1991. *In Praise of Cognitive Emotions* (New York: Routledge).
- Schulz, Bernd. 2008. "The Importance of Soft Skills: Education Beyond Academic Knowledge," *Nawa Journal of Language and Communication* 2/1: pp. 146-54.
- SEIDER, SCOTT. 2012. Character Compass: How Powerful School Culture Can Point Students Toward Success (Cambridge, MA: Harvard Education Press).
- SIEGEL, DANIEL. 2012. The Developing Mind: How Relationships and the Brain Interact to Shape Who We Are, second edition (New York: Guilford Press).
- Siegel, Daniel and Tina Payne Bryson. 2012. The Whole-Brain Child: 12 Revolutionary Strategies to Nurture Your Child's Developing Mind (New York: Random House).
- Siegel, Harvey. 1998. Educating Reason: Rationality, Critical Thinking, and Education (New York: Routledge).
- SIMISTER, C.J. 2009. *The Bright Stuff: Playful Ways to Nurture Your Child's Extraordinary Mind* (Harlow, England: Pearson Education Limited).
- Smith, Sarah Harrison. 2004. *The Fact Checker's Bible: A Guide to Getting It Right* (New York: Anchor Books).
- Snow, C.P. 1934. The Search (New York: Penguin Books).
- Snyder, Benson. 1973. *The Hidden Curriculum* (Boston: MIT Press).
- Spiegel, James. 2012. "Open-mindedness and Intellectual Humility," *Theory and Research in Education*, 10/1: pp. 27-38.

- STANOVICH, KEITH, RICHARD F. WEST, AND MAGGIE. E. TO-PLAK. 2013. "Myside Bias, Rational Thinking, and Intelligence," *Current Directions in Psychological Science* 22/4: pp. 259-64.
- STIPEK, DEBORAH. 2001. *Motivation to Learn*, fourth ed. (New York: Pearson).
- STIPEK, DEBORAH AND KATHY SEAL. 2001. *Motivated Minds:* Raising Children to Love Learning (New York: Holt Paperbacks).
- Strauss, Valerie. 2013. "US Teachers' Job Satisfaction Craters," *The Washington Post*, February 21, http://www.washingtonpost.com/blogs/answer-sheet/wp/2013/02/21/u-s-teachers-job-satisfaction-craters-report/.
- Taylor, Carolyn. 2005. Walking the Talk (New York: Random House).
- Tishman, Shari, David Perkins, and Eileen Jay. 1995. The Thinking Classroom: Learning and Teaching in a Culture of Thinking (Boston: Allyn and Bacon).
- Tough, Paul. 2012. How Children Succeed: Grit, Curiosity, and the Hidden Power of Character (New York: Houghton Mifflin Harcourt).
- Van Swol, Lyn M. 2007. "Perceived Importance of Information: The Effects of Mentioning Information, Shared Information Bias, Ownership Bias, Reiteration, and Confirmation Bias," *Group Processes & Intergroup Relations* 10/2: pp. 239–256.
- Walker, Lawrence J. 2002. "Moral Exemplarity," Bringing in

- a New Era of Character Education, ed. William Damon (Stanford, CA: Hoover Institution Press): pp. 65-84.
- Wiggins, Grant and Jay McTighe. 2005. *Understanding by Design*, second ed. (Alexandria, VA: ASCD).
- WILLIAMS, BERNARD. 1985. Ethics and the Limits of Philosophy (Cambridge, MA: Harvard University Press).
- WILLINGHAM, DANIEL T. 2009. Why Don't Students Like School? (San Francisco: Jossey-Bass).
- Wollstonecraft, Mary. 2009. A Vindication of the Rights of Woman, selections reprinted in Philosophy of Education: Essential Texts, ed. Steven M. Kahn (New York: Routledge): pp. 293-308.
- ZAGZEBSKI, LINDA. 1996. Virtues of the Mind (Cambridge: Cambridge University Press).
- ZIV, AVNER. 1988. "Teaching and Learning with Humor: Experiment and Replication," *The Journal of Experimental Education* 57/1: pp. 4-15.

any people and organizations have played an important role in the development of this guide. I'll begin with the people.

While I've been thinking about the educational significance of intellectual virtues like curiosity, open-mindedness, and intellectual courage for many years, it wasn't until the fall of 2008, when my good friend and fellow philosopher Steve Porter proposed that we consider "starting a charter school," that I began to do so more seriously and systematically (the proposal, as outlandish as it was, eventually led to the founding of the Intellectual Virtues Academy of Long Beach, which I discussed in several of the preceding chapters). Conversations with Steve over the past seven years have been a major source of the ideas and suggestions that have found their way into this guide. The influence of his wise, psychologically-oriented perspective is evident throughout. I am very grateful to Steve for his friendship and presence along the way.

Another early source of input was the participants in a series of "pedagogy seminars" facilitated by Steve and me at Loyola Marymount University from 2012-2014 as part of the Intellectual

Virtues and Education Project at Loyola Marymount University. This cohort of 15 educators, consisting mainly of middle school and high school teachers from Los Angeles and Long Beach, confirmed our suspicion that philosophical work on intellectual virtues had something worthwhile to contribute to educational theory and practice. Their commitment to, enthusiasm about, and insight into educating for intellectual virtues have been and continue to be an important source of guidance and support in my own thinking about this topic.

A partially overlapping group, whose influence on the present work is second to none, is the staff at the Intellectual Virtues Academy of Long Beach. Principal Jacquie Bryant and Program Administrator Danielle Montiel merit special recognition. Jacquie's visionary leadership, including her unwavering commitment to thinking and making decisions with an eye to IVA's mission, goes a significant way toward explaining the school's unique and vital culture. Her leadership has also deepened and enlivened my own understanding of what it looks like to educate for intellectual virtues. Albeit in a more "behind the scenes" kind of way, Danielle's presence and work on behalf of IVA also make an invaluable contribution to the school's health and success. Her intellectual character and thoughtful attention to IVA's educational model demonstrate the deep and productive bearing of intellectual virtues on the business, operational, and many related aspects of an educational organization (or any organization, for that matter).

Two of IVA's founding teachers, Ian McCurry and Cari Noble, through conversation and especially by example, have also played a critical role in helping me begin to identify the "best practices" of intellectual character education. Eric Churchill, chairman of the IVA Board of Directors, has expanded my understanding of intellectual character education as well, partly through his integration of IVA's mission with the governance of the school, and partly on account of his vision for the kind of broad, even global, impact this approach might have. The enthusiasm, sense of humor, and general thoughtfulness and cooperation of everyone at IVA has made for an ideal environment in which to think, learn, and write about the enterprise of educating for intellectual virtues.

I also owe a large debt of gratitude to Ron Ritchhart, educational psychologist, author, and principal researcher at Harvard University's Project Zero. The influence of Ron's work, especially his 2002 book *Intellectual Character: What It Is, Why It Matters, and How to Get It*, is evident on almost every page of this guide. I am also grateful to Ron for his personal involvement at IVA and in some of the other grant-sponsored activities described above.

Several other friends and colleagues have been an important source of guidance or encouragement in the process of writing this guide. My good friend Phil Dow, Superintendent of the Rosslyn Academy in Nairobi, Kenya, has been thinking about and practicing intellectual character education for much longer than I.

Conversations with Phil and his 2013 book Virtuous Minds have been and continue to be a source of great intellectual pleasure and insight for me. Fellow philosopher Heather Battaly has also been thinking and writing about the educational significance of intellectual virtues for some time. Heather's involvement in some of the events described above, and her ongoing support and friendship, have helped sustain the present application of philosophical theory to educational practice. I am also grateful to Marvin Berkowitz, the Sanford N. McDonnell Endowed Professor of Character Education and Co-Director of the Center for Character and Citizenship at the University of Missouri in St. Louis. At an early point in my thinking about how to educate for intellectual character growth, a lengthy phone conversation with Marvin was influential and helped set me straight on a number of important points. Marvin's own research in traditional character education has also provided a solid and helpful framework in which to think about the enterprise of *intellectual* character education.

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have significantly benefited the present work.

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ason Baehr is Professor of Philosophy at Loyola Marymount University, where he began teaching in 2003. Baehr received his Ph.D. in philosophy from the University of Washington in Seattle in 2002. He works mainly in the area of "virtue epistemology," which is an approach to the philosophical study of knowledge that focuses intellectual virtues like curiosity, attentiveness, intellectual humility, open-mindedness, intellectual courage, and intellectual tenacity. His book The Inquiring Mind: On Intellectual Virtues and Virtue Epistemology was published by Oxford University Press in 2011. He is also editor of Intellectual Virtues and Education: Essays in Applied Virtue Epistemology (forthcoming with Routledge in 2016). In 2012, Baehr was awarded two grants from the John Templeton Foundation totaling over \$1 million to advance and implement new research at the intersection of virtue epistemology and educational theory and practice. One grant funded the Intellectual Virtues and Education Project, which Baehr directed from 2012-2015. The other supported the founding of the Intellectual Virtues Academy of Long Beach, a new charter middle school in Long Beach, CA, which opened in 2013. Baehr has also published several papers on intellectual virtues and education and has spoken on this and related topics to a variety of audiences throughout the United States, in Africa, and in several countries in Asia and Europe. He lives with his wife and three children in Long Beach, CA.

