Part 1

Understanding the Role of Imagination in Learning

How Engaging the Imagination Fosters Reflective Thinking

I magination is the key to human progress. Without the capacity to imagine a different world that is more beautiful than the one in which we live, change is impossible. Why would we strive for something better or different if we didn't have the imagination to conceive of a more beautiful way of living? The capacity to imagine is part of what makes us human. It is essentially a creative impulse that people build on as they conceive of, and realize, new social forms and artistic processes. Imagination is also often playful and elusive. It revels in serendipity, in unexpected connections, chance meetings, and seeing the everyday and familiar in new ways.

The unpredictability of engaging the imagination makes it hard to adapt to classroom environments ruled by rigid assessment protocols. If we have decreed in advance the evidence we will use to measure whether or not learning has occurred, there is little room for divergence or the unexpected. This virtual outlawing of so many facets of creativity is one of the travesties of higher education. If education is supposed to draw students out, to help them understand new ideas, practice new skills, and make meaningful personal connections to learning, then it makes no sense to declare in advance that certain modes of expression are off the table.

To pose a provocative challenge: Why shouldn't doctoral science students dance their PhDs (Bohannon, 2011)? Why are we

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not open to varied expressive modes—video, art, drama, poetry, music—to gauge students' learning? If there are multiple intelligences (Gardner, 2011), if students' diverse histories, cultural backgrounds, racial identities, and personalities mean teaching and learning is inevitably complex (Allen, Sheve, and Nieter, 2010), then shouldn't our approaches to helping and assessing learning exhibit a similar variety? Even in something as highly structured as online education it's clear that creativity, variety, and imagination are crucial to retaining student interest and participation (Conrad and Donaldson, 2011, 2012).

This book is about finding ways to increase the number of imaginative moments that students encounter in contemporary classrooms. We both work from the assumption that when students learn something using different senses and when they study the same content through different modalities, there is a depth and complexity to their learning that is absent when only one format—filling in the lines next to PowerPoint slides projected during a lecture, for example—is adopted. For learning to "stick," whether it is understanding a complex new concept, applying existing knowledge in unfamiliar contexts, or honing a newly developed psychomotor skill, the fullest range of our imaginative faculties needs to be engaged. Both of us love listening to well-constructed and delivered lectures and reading well-written texts. Equally, however, we both know that the broader the range of imaginative activities we're involved in, the more engaged we are with the learning.

Allied to imagination is the notion of engagement. Exercising imagination is inherently engaging, so a classroom in which students use their imaginations to study content, play with ideas, and imagine new possibilities should be an engaging one. Engaging students is something we hear about all the time, but we know that some colleagues assume that student engagement means "teaching-lite." "Teaching-lite" is a view of teaching whereby teachers are deemed to use superficial activities, social media, and

games to convince students that learning is "fun," thereby securing favorable student evaluations. Effort, hard work, and struggle seem excluded in this stereotype. Colleagues subscribing to this caricature usually assume that *engagement* means going easy on students and never asking them to take on anything challenging. A false dichotomy is then created between engagement and "real learning"; that is, between learning that is superficial and that which is substantial, important, not much fun, and requires enormous effort.

We agree that learning sometimes is fun. But equally we know that learning is sometimes difficult, frustrating, and a long hard slog. We acknowledge that although classroom learning is certainly enjoyable at times, it also involves struggle, arduous work, and, yes, boredom. Before we can engage creatively and critically with ideas and practices, we often have to struggle to learn the fundamentals of a discipline, the grammar of a subject. We need to understand axiomatic principles, practice basic skills to a point of expertise, and assimilate foundational building blocks of knowledge. One of us (Stephen) teaches critical social theory, a dense, jargon-ridden body of work for which both a dictionary and considerable powers of perseverance are necessary to make progress. Stephen is the first to admit that his continuing struggle to understand this material is one that involves a lot of hard, and often frustrating, labor.

But living with frustration, motivating oneself for the long haul of learning, and negotiating continual challenges is helped considerably by moments of imaginative engagement. When we come at difficult material in new and unexpected ways, when we try to convey complex meanings visually or kinetically rather than through language (dancing our PhD!), and when we ask the question "What would this look like if...?," we often find our energy for the hard slog is renewed. The important point about using imagination is that we are using it to engage students with the most challenging, difficult, and substantial learning that we judge they need to undertake. Engagement is precisely what it says: helping students engage with knowledge, concepts, ideas, and skills to an

ever-higher degree of expertise. There is nothing inherently superficial or unchallenging about engagement; in fact it's the opposite of superficiality. Indeed, we would argue that it is the only hope of ever getting students to understand complex content or develop exemplary skillfulness.

The Three Axioms of Student Engagement

In engaging students—in helping them to develop deeper levels of understanding and to demonstrate higher levels of accomplishment—we need to be imaginative in thinking about different ways to teach that provoke learning. Our position regarding the importance of imagination in teaching is built on three essential pedagogic axioms:

- 1. Student learning is deepest when the content or skills being learned are personally meaningful, and this happens when students see connections and applications of learning. Connections and applications occur when creative synthesis takes place, when people suddenly see unexpected patterns emerging, and when new questions are posed. Doing these things involves creativity and imagination.
- 2. Student learning "sticks" more (in other words, retention of knowledge and skill is increased) when the same content or skills are learned through multiple methods. A monochromatic approach that adopts one pedagogic strategy overwhelmingly (always using discussions, always lecturing, always studying independently, always using language to communicate learning) is at odds with the empirical reality of students' multiple intelligences, different models of information processing, and variety of culturally preferred learning styles.
- 3. The most memorable critical incidents students experience in their learning are those when they are required to "come at" their learning in a new way, when they are "jerked out" of

the humdrum by some unexpected challenge or unanticipated task. We naturally remember the surprising rather than the routine, the unpredictable rather than the expected. One of the best ways to create memorable learning moments is to ask students to use their imaginations to ask "What if?" Upending the normal and familiar can be threatening and confusing, but it is usually also unforgettable. So a large part of student engagement entails creating moments of productive discomfort when expectations are reversed and different faculties are called into play—as, for example, when students are asked only to draw or dance their ideas, or to use Legos to build a model of their developing understanding of a topic.

Our belief in the importance of engaging imagination rests on these three axioms, so let's say a little more about them.

Engagement Is Personally Meaningful

The first axiom focuses on meaningfulness, on students appreciating that the knowledge and skills being learned are important and necessary in some way. Now, importance and necessity are not the same as utilitarian. We can study something that has no immediate vocational application yet find it enthralling. An artist can be fascinated by the scientific principle of falsifiability (the idea that unless something is open to empirical disconfirmation it cannot be considered scientific), and a scientist can be enthralled by the creativity of a Cyril Power or the Clash. But we believe that the scientist and the artist in these two examples are captivated because something about scientific falsifiability or artistic creativity "speaks" to them.

In other words, some truth, which might not be able to be concretely articulated, rests in the respective objects of contemplation. Perhaps the artist finds falsifiability an interesting notion because it is so contrary to her experience, and therefore poses an interesting challenge. Or perhaps falsifiability is intriguing because its emphasis on the importance of direct experience is also compelling for her in artistic expression. The scientist, at the same time, may find that Power's linocuts, or Joe Strummer's vocals, prompt an immediate visceral response that is very different from the pleasure derived from science. Maybe there is a suggestion of the erotic or animal, or a fascination with line or form that seems totally unrelated to scientific convention. But in both instances the connections with new forms of understanding are personally meaningful; they are not apprehended at a distance, but rather felt as somehow personally significant.

Of course, it is much easier to see learning as personally meaningful in situations in which students understand that a direct application to their life, work, or self-awareness is entailed. Thus, studying philosophy is often justified as preparing students to work through ethical dilemmas or to live with the ambiguity they will find in adulthood. Social work or engineering courses are deemed to provide vocationally necessary skills that will secure employment and advance a career. Psychology is taught to help students develop insight into their own actions and the justifications for these so that they become more self-aware. Our position is that where such clear connections are absent, it is still pedagogically important to find imaginative ways of helping students discover personal meaning in learning.

Learning "Sticks" When Multiple Methods Engage the Imagination

This axiom regarding engaging imagination is much less philosophically dense than the first. As researchers into student engagement have shown (Barkley, 2009; Bean, 2011), asking students to "come at" the same knowledge or skills in different ways has multiple benefits. First, it is more successful in promoting "deeper" learning (Ohlson, 2011); that is, learning where students understand the complexity of content and the contextual application of

skills, and where they can reinterpret experience to change their understanding of the world. It also keeps student interest at higher levels. The more you change up different teaching methods and ask students to try out different classroom, online, or homework activities, the more they stay awake and involved. Alternating verbal and visual modalities, silent and oral ways of communicating, individual and group activities, kinesthetic and cognitive activities, and abstract and concrete ways of processing information keeps the class moving as it calls on different elements of students' personalities and skill sets.

Stephen has spent twenty years collecting data from students across multiple disciplines and institutions regarding their reactions to classroom learning. Through the use of a Critical Incident Questionnaire (CIQ; http://stephenbrookfield.com/ Dr. Stephen D. Brookfield/Critical Incident Questionnaire. html)—an anonymous student response form—he has found that the most enduring reality of college teaching is that the greater the modality of teaching methods used, the higher the level of student engagement; that is, the more students were successful in actively striving to comprehend material, make connections, and apply concepts. The CIQ specifically asks students to identify moments when they were most and least engaged as learners, and actions that helped or hindered this engagement. Repeatedly, students say that the classes where they were most engaged were those where three or four different teaching modalities or learning activities were used.

Students Are Engaged When Something "Jerks" Them Out of the Routines

The most charismatically engaging lecturers and the most responsively alert discussion leaders can still occasionally fall victim to routine. For students, nothing wakes up attention to learning more than being asked to do something unfamiliar and expected. When a student is asked to represent his or her understanding of

a concept by building a Lego model, or when a group is asked to draw the discussion they have just had for the whole class to interpret, a level of productive dissonance, of helpful creative panic, is introduced. The disorienting nature of a surprisingly new learning task or unanticipated classroom activity is always vividly remembered, precisely because of the risk involved. Risk is inherently unsettling, and adrenalin runs as we go into retreat or avoidance. But it is that same adrenalin-infused panic that makes the activity, and then the resultant learning sticks.

Whenever the two of us use activities and approaches that seem like an entertaining distraction from routine, we always have a deeper intent. We want to jolt ourselves, and students, out of our normal and routine ways of understanding and practicing. In this we build on Herbert Marcuse's (Reitz, 2000; Miles, 2012) argument that aesthetic experiences induce breaks and ruptures from the familiar. When students who are used to reading texts and following PowerPoints while listening to lectures switch into a different mode they are learning very differently and temporarily estranged from the familiar routines of learning. This is startling and memorable, a classroom equivalent of the kind of "disorienting dilemma" Jack Mezirow (1991) regarded as the precursor of transformative learning.

One way to help students manage their feelings of danger and risk is by modeling our own willingness as teachers to do exactly what we are asking of them. Instead of standing at the side and observing while students take all the risks, we need to take them first in front of the class. For example, as this chapter was being written, Stephen Brookfield was running a professional development workshop with his sometime co-author Stephen Preskill in which they asked students to summarize their small-group discussions visually or musically. The two Stephens then tried to model stretching themselves in this activity in front of the class by drawing their discussion in terms of a surfer riding the infamous "mavericks" wave off Santa Cruz, as they sang a reworked version of the Beach Boys' song "Catch a Wave."

How Does Engaging Imagination Connect to Reflection?

How does engaging imagination connect to reflective thinking? We think there are two categories of connection—one for teachers, one for students. For teachers our notion of imaginative teaching necessarily entails them trying to see their pedagogic actions and reasoning in new and creative ways. This requires them to pay attention to the myriad of ways that different students understand, experience, and respond to the same curricular content or classroom activity. We need also to solicit different colleagues' readings of our practice. One of the joys of team teaching is that you have a built-in observer (your colleague in the team) who will notice things you miss, provide different interpretations of what went on that day in class, and open you up to new aspects of the material you are teaching. Both of us learn so much from the colleagues we teach with. In fact, we rely on them to keep the content fresh for us.

Teachers also can have their familiar perspectives and assumptions challenged and upended by literature. For example, Stephen's study of Michel Foucault (1980) was an imaginative stretch for him that provided a wholly new and very different perspective on his practice. Things that to Stephen had seemed wholly positive examples of empowering students—for example, using discussion circles or refusing to develop curricula in an attempt to encourage student empowerment—were challenged by Foucault's analysis. Stephen began to understand that to some students the circle was an unwarranted attempt to coerce students into participating in the class and an experience in surveillance. Similarly, refusing to develop curricula or specify evaluative criteria was likely to be seen by many students as evasive, as holding back or playing a game in which students were disempowered because they were not privy to the rules Stephen was keeping to himself. This analysis sparked Stephen's imagination and caused him to rethink completely the dynamics of small-group discussion, and to work very differently when clarifying his power and authority. Now, instead of being coy about his power, and pretending almost to be a friend of the students, Stephen is eager to make an early disclosure of how he seeks to exercise the positional authority he has, and to encourage students (through the CIQ) to critique his use of power.

For students, engaging imagination requires an attempt to see things from multiple, and very different, perspectives, and to be open to multiple ways of learning something. Before we explain in detail how imagination enhances reflective thinking in students, we need to explain what we mean by that term.

What Does It Mean to Be Reflective?

According to the Oxford English Dictionary, reflection is simply serious thought or consideration. Among the many who amplify this rudimentary understanding Dewey suggests reflection is the "active, persistent and careful consideration of any belief or supposed form of knowledge in the light of the grounds that support it...and the further conclusions to which it tends" (Dewey, 1933, p. 18). This is something that both parents and natural scientists understand. These two groups build knowledge by continuously subjecting their theories to empirical scrutiny, and they change those theories as they find evidence to refute or modify them. But although experience provides the vital raw material for reflection—its evidence, if you will—on its own, it does not suffice as a basis for learning. It is what we do with that experience—how we convert its complex constituent elements into knowledge or understanding—that constitutes learning.

Perhaps the most influential work on reflection in the past few decades has been that of Donald Schön (1987), who differentiated between *reflection-in-action* (conscious, critical thinking that simultaneously reshapes what we are doing as we are doing it) and *reflection-on-action* (a post facto evaluation of behaviors and decisions that have taken place). Related to this distinction is

the difference he drew with Chris Argyris between espoused theory and theory in use (Argyris and Schön, 1974). At its most simple, this can be described as the tension between what we say we believe or do and how we live out, or deviate from these beliefs, in particular contexts. Argyris and Schön also argued that two forms of reflective practice were apparent, based on single- and doubleloop learning. Single-loop learning built on Kolb's (1984) notion of the learning cycle as a means of reviewing how things are done and how they can be bettered. Double-loop learning moved reflection to a process through which things might be transformed rather than just improved (Brockbank, McGill, and Beech, 2002). Subsequent critiques of these models suggest that their neatness does not allow for nonlinear, multidirectional, and multilayered manifestations of reflection, nor do they take account of the opacity and mess that often surround the chiseling out of new insights or paradigm shifts.

Educators typically envisage reflection as a cognitive process, yet humans perceive through all our senses (see Robinson, 2011) in an embodied, mobile existence; consequently we reflect through all of these senses too. There are variations in the rhythms of reflection, the ebb and flow between purposive and judgmental kinds of thinking and those that are fluid and undirected. Reflection involves multiple pursuits and responses: mulling over, letting go, chasing after, homing in, asking why, leaving be, pulling apart, reassembling, stirring, sifting, critiquing, analyzing, evaluating, observing, intuiting, looking, feeling, waiting. It may involve conscious or unconscious decisions to deliberate in the hope of forcing insights, or walking away from an internal wrangle, thereby loosening the pressure valves of concentration in the hope that a solution will naturally present itself. Having probed our experiences we may reassemble them in a different configuration and find that our initial readings of a situation have shifted shape, perspective, and intensity as a result.

Claxton has an interesting categorization of these variances in our patterns of thought, idea, and response, between when we are deliberating and when we decide to let go. He calls this the difference between "hard" and "soft" thinking. Hard thinking—purposeful and deliberate—is sometimes experienced as an antidote to innovation. When we try too hard, or put pressure on ourselves, this "leads to self-consciousness, tension and a loss of expertise" (Claxton, 1999, p. 149). Our attention narrows when we reflect to order, against the clock, or within the confines of a learning situation that is not conducive to us. Claxton cites stress as an inhibitor of learning and evokes the pitfalls that can arise when we are too conscious of what we are doing, or when reflection is a form of compliance to meet external performance appraisal or accreditation.

Soft thinking, however, involves being in a relaxed state, able to allow one's thoughts to bubble up and disperse freely, without nailing them down or only allowing in the ones that fit with a preset framework. It is a process that takes time to emerge and cannot be rushed. In describing a study involving fine art students in Chicago, Claxton (1999) noted that the most successful students were identified as those who "played with more objects, and in more imaginative ways, before choosing which they wanted to paint, and their choices were more unusual" (p. 156). Taking the time to mull over their choices and change their minds was part of the slow thinking required to achieve better results in the long run.

Pink (2011) and Kane (2004) are also spiritually aligned with the value of soft thinking, noting that the first solutions generated or the most swift, articulate answers provided are not necessarily the best or right ones. Both authors recognize that intuition is both undervalued and underdeveloped in formal education. We agree and argue that we need to make space for and honor our inner voices, personal antennae, and gut feelings. While the sense of this is something all teachers can recognize, we are equally aware that our educational climate today does not favor the slow approach or value intuition. Rather it encourages technical rationality, analysis, and logic over other kinds of knowing.

Fourteen Elements of Reflective Thinking in Students

Based on the foregoing analyses, what should teachers look out for as examples of reflective thinking in students? We believe that reflective thinking happens when students do one or more of these fourteen things:

- 1. Check the assumptions that inform their actions and judgments
- 2. Seek to open themselves to new and unfamiliar perspectives
- 3. Attempt intersubjective understanding and perspective taking—trying to understand how another person reasons, understands content, or views knowledge
- 4. Make their intuitions and "gut" feelings the focus of study
- 5. Study the effects of their actions with a view to changing them
- 6. Look for blind spots and omissions in their thinking
- 7. Identify what is justified and well grounded in their thinking
- 8. Accept and experiment with multiple learning modalities
- 9. Value emotional dimensions of their learning as much as the purely cognitive
- 10. Try to upend their habitual ways of understanding something
- 11. Connect their thinking conducted in one domain to thinking in another
- 12. Become more aware of their habitual epistemic cognition—the typical ways they judge something to be true
- 13. Apply reflective protocols in contextually appropriate ways
- 14. Alternate cognitive analysis with an acceptance of an unregulated, unmediated flow of emotions, impulses, intuitions, and images

Encouraging these fourteen elements of reflective thinking is what the rest of this book is about. In the subsequent chapters we look at specific approaches and particular activities that encourage these different aspects of reflective thing. Our survey covers a range of different approaches such as Lego model building, story, metaphor, labyrinth walking, visualization, inflatable pods, and clean language. But before we start to delve into particular activities and exercises, we want to say a few things concerning the dynamics of teaching imaginatively.

Creativity and Playfulness Are Important

Whenever the term thinking is employed, the discourse typically lurches immediately to mental maps, cognitive pathways, ladders of inference, and so on. In this discourse, thinking is typically equated with purposeful analysis tied to some predetermined goal. However, as David Lodge's novel Thinks (2001) nicely demonstrates, even supposedly rigid formulaic thought is continually interrupted by images that pop into our heads and take us by surprise, by random questions that suddenly surface, by an awareness of smells, by the way the touch of a keyboard produces a misspelling that leads to a new line of analysis, or by a pre-conscious process of biofeedback when our bodies move into lulls or come alive with adrenaline. At one point in Thinks the protagonist (a university-based cognitive scientist) decides to study, deliberately and purposefully, his own thoughts. He is shocked at how random these are and how little control he has over them.

In this book we emphasize these creative, playful, and imaginative elements. The discourse of cognition with its formal mental protocols gets enough coverage, and we value it and learn from it. But we want to explore alternative approaches to engaging student reflection. By working with visual, auditory, kinesthetic, discursive, and written modalities of teaching and learning, we hope to show how learners can broaden and deepen their understanding of knowledge and open their minds to other ways of construing the world and their futures.

A Degree of Student Freedom Is Essential

No matter how charismatic, knowledgeable, and gifted teachers might be, they cannot make every student learn in the ways they expect. The approaches and activities we explore presume an element of freedom for students in trying out and adopting reflective techniques and environments. Take reflective writing as an example. Journaling, writing up learning logs, keeping portfolios, compiling critical practice audits are all things Stephen has explored, because this is both familiar territory to him and constitutes the most organizationally accepted mode of recording reflection. This is also precisely how accreditation agencies define evidence of students' developing reflective capacities.

But although writing has many advantages and attractions, a significant number of students find the process of textual reflection a turn-off. Requiring a certain number of pages to be turned in documenting the student's engagement in appropriate reflection can be constraining and deadening. If we are to challenge the hegemony of written representations of learning, we need to insist on a degree of freedom for students to document their learning in alternative formats. Poetry, music, artworks, video, collage, graphics, drama, dance—some students will find some of these a far more interesting way of communicating what meanings they have drawn from content, or what skills they are developing, than a written assignment.

This does, of course, raise political problems for teachers. What if our head of department has told us that the impending accreditation visit requires that we apply written protocols to collect evidence of student progress? If we refuse to comply we are imperiling our future contract renewal, jeopardizing our tenure, as well as earning a reputation for ourselves as institutional loose cannons. Then again, we may have little or no experience in working in alternative formats. Stephen, for example, has had no training in using anything other than written evaluations of student learning. For him, evaluating

poetry, collage, or video is very intimidating. We explore how to negotiate this dynamic at various points in this book.

Not only is a degree of freedom important to students, but teachers also need to have mind-sets that are open to possibilities. Much of the work around encouraging student reflectivity involves trying to create an openness to methods of learning that sometimes appear to be unconventional or "abnormal" for their field. Of course, this is not to say that only unconventional approaches instigate imaginative or more engaged learning. Slavishly and uncritically applying divergent strategies is as narrow minded and unresponsive as only sticking to lectures. But we both feel it's important to ask the questions whether and where imaginative engagement may be missing from student reflection and why this might matter.

The Hegemony of Written Reflection Must Be Challenged

This problem was touched on in the preceding paragraphs. In some measure writing has become synonymous with "degree-ness"—a sign that academic thresholds have been crossed and intelligence suitably demonstrated. Students' ambivalence over writing is not just confined to one single sector, or simply a matter of specific learning difficulty. It crosses disciplinary boundaries and educational levels. Avoiding writing for whatever reason may also have been a deciding factor in the choice a student has made of a degree program, community college certificate, or further education course. One of Stephen's friends has built an enviable and flourishing academic career analyzing poetry because it involved less writing and reading than conducting literary analysis of novels. Other students choose STEM (scientific, technical, engineering, and mathematics) subjects because these don't require much writing. Sometimes academic writing is demoralizing:

"It feels like when I put my thoughts on paper and try to fit them into the structures and rules of academic writing, my own thoughts become alien to me and I no longer understand them or see the logic of them in the same way" (from Line, a student of Alison's from Scandinavia).

With the advent of Web 2.0 technologies there has been an increase in the use of other modes of reflecting, including podcasts, video and audio diaries, and social media; however, the dominant mode of expression is writing, not least where evidence of reflection is required for assessment. Reflective activities that are commonly used include producing accounts of self-assessments of reflective skills and capabilities, compiling reflective curriculum vitae, writing personal platforms, assembling reflective portfolios, or completing learning audits. Some of the materials used have been designed for specific professional sectors, such as health care and education, and are related to particular aspects of professional practice—dentistry is one example.

Faced with the task of writing reflections, students are not always sure what they should write about and how. They ask whether they can use "I," if they can relax their observation of academic conventions (such as avoiding theoretical references), or if a more colloquial voice is permissible. How they are advised on these matters will depend on local circumstances and protocols, or the criteria specified for the reflective task. For example, Stephen has built on Robert Nash's idea of scholarly personal narratives (Nash, 2004; Nash and Bradley, 2011; Nash and Viray, 2013) to supervise dissertations that follow a personal narrative format. However, along the lines advocated by Nash, he requires that such narratives contain regular citations of relevant theory and research that illuminate the story's arc. He is well aware that without these being included, students would have a much harder time convincing potential committee members of the academic legitimacy of their work.

Students who are highly articulate verbally and who can talk imaginatively and with passion about their work are not automatically or necessarily fluid writers, although we frequently assume that one goes with the other. Compared to writing, less attention appears to have been paid to the other kinds of reflective practice that people engage in, and of alternative ways of evidencing this. This is a recurrent issue in the creative arts and design, where there is a higher proportion of students with dyslexia than in other disciplines. Their preference for visual or kinesthetic activity, as opposed to reading or writing, and their discomfort in producing written reflective accounts show that an opportunity is being missed to play to these students' strengths. We note too that in the world of work some of the behaviors most often identified with good leadership and organizational effectiveness—chairing a meeting well is a prime example—have nothing to do with the capacity to write well academically.

A Degree of Resistance Is Normal

Students schooled in top-down, instrumental ways of working, when the question at the forefront of their minds is "Is this on the test?," may well see reflection as pointless, "touchy-feely," and "soft," compared to traditional academic conceptions that learning is always textually based and reproduces what an expert does or says. They dismiss reflection as narcissistic navel gazing or directionless dithering. However, as Atherton (2012) recognizes, the importance of reflection is to some extent decided by the discipline—in some it is integral to academic study and practice, while for others it may appear irrelevant and inappropriate.

Telling students that we are opening up opportunities for them to practice reflective thinking will not always be welcomed. Students may take a purely instrumental approach to this, slipping quickly into a "Just tell me what you want me to do and how you want me to do it" mode. Being imaginative is probably not the first thing that springs to students' minds when they are asked to reflect on their learning. And things become even more complex when they are told that being reflective involves elements of self-appraisal. Students underwhelmed by the prospect of a foray into

their own metacognition may prefer an instrumental approach concerned with "getting reflection done" as opposed to fully exploring all its possibilities. Our book tries to counter this instrumentalism by shifting the spotlight onto imagination and its counterparts of creativity and play.

Reflection Can Be Used for Control

Another cause of resistance to reflective practices is the notion that this is being used to control students. In *Beyond Reflective Practice* (Bradbury, Frost, Kilminster, and Zukas, 2010), the book's contributors draw on Foucault's work to argue that reflection, far from being a liberating experience in expanding perspectives and transformative realizations, is an example of disciplinary power in which people keep themselves in line because they feel themselves under the threat of constant surveillance.

Disciplinary power is the power we exercise on ourselves to make sure that we do not transgress acceptable boundaries of thinking and acting. When we monitor our own conduct out of fear of being observed by an unseen, powerful gaze, then the perfect mechanism of control—self-surveillance—is operating. There is no need for the coercive state apparatus to spend enormous amounts of time and money making sure we behave correctly because we are watching ourselves to make sure we don't step out of line. What makes us watch ourselves so assiduously is the sense that our attempt to stay close to the norm is being watched by another, all-seeing, presence. We carry within us the sense that "out there," in some hidden, undiscoverable location, "they" are constantly observing us. It is hard to deviate from the norm if you feel your thoughts and actions are being recorded (figuratively and sometimes literally) by cameras hidden in every corner of your life.

Formal protocols of reflection carry within them the possibility of controlling self-surveillance. When an institution decides what you will reflect on, and prescribes the mechanisms by which that reflection will be carried out, there is clearly the possibility of a controlled abuse of power. This is not always the case, though. After all, insisting that students reflect on the ways they have uncritically accepted social norms, how far dominant ideologies (patriarchy, White supremacy, and so on) have got their hooks in them, is a form of directed reflection that challenges dominant power.

Much of the mandated reflection the two of us have come across is tied to institutional goals, which are themselves tied to the kinds of learning outcomes that accreditation and licensing bodies desire. Performance appraisal formats typically require that the employee reflect on his effectiveness in the preceding year, and that he set goals for the coming year based on that reflection. The reflective effort is completely framed by the judgment of how well the individual serves institutional ends. Nowhere have we come across performance appraisals that ask for a reflection on the degree to which the sponsoring organization is racist, sexist, homophobic, ableist, and so on. In the American and Canadian universities where Stephen has worked, the tenure process typically involves the candidate submitting a number of reflective selfevaluations on her development as a professional. He has never read an evaluation in which the compiler focused on her success in challenging and subverting organizational norms and practices; neither has Stephen ever submitted such a reflection.

Any time we tie reflection to the evaluation and assessment of students' reflection it becomes an exercise of teacher power. Of course, pretty much anything we do in our formal role as teachers is an exercise of power, and often this power is used for good, is enacted ethically, and is fully justifiable. But we should also always remember that when we require students to reflect, and when we grade their efforts, we are not working solely from a student-centered ethic. Certainly we hope students will learn from their mandatory reflections, but it is naïve and disingenuous for us to pretend that there is not the continual potential for students to experience those same reflections as a constraining and controlling exercise of teacher power.

Summary

Having enumerated several difficulties of getting students to think reflectively, at about this point you may be wondering "Why bother?" Rest assured the chapters following this one answer that question and provide multiple examples of activities and exercises that students have found helpful. We end this opening chapter, however, by stressing the importance of teacher modeling. By *modeling* we don't mean providing an exemplary demonstration of something so students can aspire to emulate our flawless perfection. Indeed, one important aspect of modeling reflective thinking is demonstrating that it has uncontrollable aspects, long pauses, and regular episodes of confusion.

We need always to remember that for many students the different aspects of thinking reflectively are inherently intimidating, particularly if students are encouraged to experiment with imaginative approaches that don't use writing or follow preset and familiar protocols. As teachers we need to demonstrate for students that we also find this difficult, but that we believe strongly enough in the benefits of using imaginative approaches that we voluntarily and publicly commit to doing everything we are asking students to—and doing it first.

Throughout this book the two of us—Alison and Stephen—try to model how we implement and adapt the exercises we describe. In doing this we adhere to the same modeling dynamic that students say they appreciate. We assume that you as a reader will appreciate our doing our best to model for you how we try out the various activities we propose.