“A Slow Revolution”: Toward a Theory of Intellectual Playfulness in High School Classrooms

SARAH M. FINE
Harvard Graduate School of Education

In this essay, Sarah M. Fine explores the misalignment between instructional practices in secondary classrooms and the interests and capabilities of adolescent learners. Drawing on a series of ethnographic cases, she explores the potential consequences of this misalignment and attempts to conceptualize an alternate reality in which high school classrooms could become places where cognitive rigor and deep engagement function as mutually supportive priorities. Fine theorizes that a promising path forward would be pursuing instruction that involves intellectual playfulness—a construct that marries open-ended problem solving with opportunities for risk taking and flow. These same cases, however, illustrate that this pursuit would require profound transformations in the policies, practices, and perspectives that currently dominate the field.

The qualitative difference between a free and unfree society lies precisely in our ability to discover the realm of freedom in labor and not merely beyond it.

—Marcuse, The End of Utopia

The December day dawned clear and cold in the lower Midwest. My colleague and I, unprepared for the sudden arrival of winter, spent nearly ten minutes using our sleeves to scrape the frost off the windshield of our rental car. I was four months pregnant and completely exhausted. This was the last day of a weeklong trip to visit public high schools that aspire to engage all of their students in cognitively rigorous work—work that not only builds the basic literacy and numeracy skills targeted by standardized tests but also cultivates higher-order processes such as analysis, knowledge utilization, and creativity (Marzano & Kendall, 2007). This was one of many such trips that we had taken...
over the course of a two-year ethnographic research project investigating the opportunities and barriers associated with attempts to enact “deeper learning” at the high school level.

The school that we visited that day, Midwest Montessori, had recently relocated to one of the city’s more affluent neighborhoods. In many ways, it is a run-of-the-mill school: funding comes from the district, the staff reports directly to a central office, and the student body reflects the mixed demographics of the city. In other ways, it is unique, not least because it is one of only a handful of public Montessori secondary schools in the country. Although students take district-written tests at the end of each semester, instruction is focused on supporting them in exploring their identities and interests in the context of contemporary society.

I expected that the day would be a disappointment. My colleague and I had spent weeks arranging this visit only to have the principal tell us that the day was dedicated to reviewing for an upcoming set of district exams. We knew that this would afford us only a glimpse into the school’s instructional approach, but we had already made travel arrangements. We decided that a glimpse was better than nothing.

Within minutes of entering the school building, I knew that we had been right to come. Even without a strong sense of the instruction, there was something about the ethos of the school that moved me deeply—a palpable and powerful sense of engagement. The classrooms were messy in a well-loved kind of way; books lay open on every surface and student-created art covered every inch of wall. In one room, ninth graders clustered on a rug, their gangly limbs stretched out as they helped one of their peers lead a review of trigonometric proofs. In another, juniors listened to soft music as they hunched over a set of history texts and made annotations in the margins. Their focus was unwavering as my colleague and I moved around the room to look over their shoulders.

Later, a group of seniors described their experiences at the school. “Sometimes I think about what I would have been like if I hadn’t come here,” a soft-spoken girl reflected. “It’s pretty scary. I probably would have hated school.” She went on to describe the yearlong project that she had undertaken to meet the school’s extended essay requirement—in her case, a forty-page paper about nursing in which she synthesized information from a broad range of sources, including original research that she had conducted by interviewing stakeholders. Her friends nodded in agreement as she described how the project had been difficult but absorbing, helping her to explore a longtime interest as well as to build academic skills.

As the students continued to talk animatedly about their classes, I found myself fighting back tears—tears that spilled out in force as my colleague and I took a few minutes to ourselves later in the day. I was embarrassed; I am not usually prone to such emotion on the job. At that moment, however, all attempts at professionalism slipped away.
Some of those tears were due to exhaustion, but many of them—most of them—were expressive of sorrow and anger that had been building in me for a long time. In my role as an ethnographic researcher, I had spent almost five hundred hours in twenty different high schools around the country—schools large and small, middle class and poor, military-strict and loose-progressive. The goal of this work was to map the landscape of approaches to implementing what Cohen (1988) and others have referred to as “ambitious” instruction, instruction that is organized around what traditional learning taxonomies classify as higher-order cognitive processes (Bloom, 1956; Marzano & Kendall, 2007) and that is designed to support students who are grappling with complex essential questions (Sizer & Sizer, 2000). Such goals move well beyond the “back to basics” focus of current policies and high-stakes tests; thus, in order to be part of our sample, all of the schools that I visited were set apart by their unusually high aspirations.

Even so, on the whole, most of these schools were still fairly bleak places to spend time in. The tone of the teaching, as reformer Theodore Sizer (1984) and others have described, seemed to reflect an uneasy truce between the adults and their charges (Powell, Farrar, & Cohen, 1985). Most classrooms were spaces to passively sit and listen. Most work was comprised of tasks that asked students to recall or minimally apply what they had been told. At best, being in high school seemed to represent an investment in building an arsenal of facts and skills that might pave the way for interesting work in college and beyond; at worst, it was a way to wait out the four years before becoming a legal adult.

Without realizing it, I had become resigned to this grim reality. High schools certainly should strive to engage students in cognitively rigorous tasks, I had concluded, but the most feasible strategy for doing so would involve a version of what current policies encourage: muscling students toward mastery by tightly controlling the learning process (Mehta, 2013). To imagine classrooms and schools where students were not only doing rigorous work but also being pleasurably engaged in the process was asking too much; the challenge was too great given the combination of adolescent apathy and systematic constraints on curriculum and instruction. Grimness was simply the nature of the beast.

And then, unexpectedly, I found myself at a place that blew open this cynicism. Midwest Montessori had its share of unambitious teaching (this emerged more clearly during a return visit), but the school nevertheless had figured out something essential about how to infuse the learning process with interest and pleasure. Students described their teachers as allies, not as nemeses or taskmasters. They alluded to their futures, but they also talked about the connections between their academic work and their present identities. Most notably, the word *boring* was markedly absent from their descriptions of classroom tasks. “The work is interesting because we work on stuff that has purpose,” one student told me. “Even writing papers is more fun.”
This, then, is why I was crying: not because the school seemed like some kind of utopia but because it made me realize that I had fallen into the trap of narrow-minded thinking. Cognitive rigor matters deeply, but so does the affective experience of engaging pleasurably in academic work. To ignore the importance of either of these dimensions when it comes to secondary learning is to do students a grave disservice, one that I could not imagine tolerating when it came to the child that I was preparing to welcome into the world, and one that nobody else’s children should have to endure either.

This essay is grounded in these convictions. It is not, as the opening story might suggest, an exploration of the Montessori Method. Rather, it is an effort to build outward from instances of current practice in order to explore what it might mean for high school teachers to treat cognitive rigor and pleasurable engagement as mutually supportive priorities. Too often in the schools where I have spent time, demoralized educators have shared my conclusions that these two goals are impossibly disconnected. As one school leader told me, “You have to solve the problem of rigor before you can start to work on joy.” The sector at large seems to have found itself in the same place, evidenced in part by the disjunction between conversations about rigor and conversations about authentic engagement when it comes to secondary instruction. While each of these conversations is rich and expanding, cross-references are few and far between.

In an attempt to begin to fill this gap, I strive here to imagine secondary instruction that is intellectually playful—defined in this case as instruction organized around tasks that are open-ended in that they have many valid strategies and answers, absorbing in the sense of supporting immersive “flow” experiences (Csikszentmihalyi, 1997), and, finally, punctuated by opportunities for social and/or intellectual risk taking. Connected by theoretical and empirical research with a variety of positive learning outcomes, these three qualities provide a promising platform for conceptualizing a pedagogy that marries engagement and cognitive rigor in a way that aligns with the needs and capabilities of adolescent learners. More broadly, the language of playfulness is metaphorically rich, helping to revitalize the conversation about how to create American high school classrooms that are not just effective in terms of establishing order and meeting quantitative benchmarks but also more broadly good. This conversation, initiated in the 1980s by Lawrence-Lightfoot (1983), Sizer (1984), and others, has been eclipsed in the past decades by the unrelenting focus of the policy and research communities on schools that produce high standardized test scores (Mehta, 2013).

I describe here a range of different instructional scenarios that serve as entry points for such theory building. None of these scenarios embodies the three dimensions of intellectual playfulness simultaneously or in fully realized measure. Each classroom, my own included, is as much an illustration of limitations as of possibilities. But this, too, is part of the point. In the absence of “ideal-type exemplars,” we must weave together what is with what could be—to
use imperfect but aspirational places such as Midwest Montessori as launching pads for exercising greater pedagogical imagination. To do so is to both illuminate and transcend the constraints of the current system and, ultimately, to take a step in the direction of the deep learning that all of our students deserve.

What Would Happen If . . . ?

My engagement with the possibilities associated with playful learning began at an urban charter high school where I taught English and later worked as an instructional leader. The school’s four hundred students, nearly all black or Latino, came from the city’s poorest neighborhoods. The school could make few claims to greatness, but it was safe and making a good-faith effort to get students into college, and, given the overcrowded and chaotic nature of the local district schools, this was more than enough to attract local families.

I joined the school’s staff fresh out of college, infatuated with the idea of energizing my students around language and literature. Like all new teachers, however, I struggled to reconcile my ideals with the challenges of running a classroom. Many of my students were reading at about a fifth-grade level. Most had withdrawn their attention from their academic work. I periodically dreamed of infusing my classroom with greater intellectual vitality, but learning to manage the room and to teach foundational literacy absorbed all of my time, and these dreams faded into the middle distance. There was work to do.

It was not until my fourth year in the classroom that things began to change. Early in the spring semester, my course partner and I decided that the final task of a unit on injustice should be a tenth-grade poetry slam contest. Our students had been analyzing the ways that authors use literary devices to convey thematic messages about injustice, so their task was to identify an injustice and then to draft, revise, and perform a poem in which they employed a range of devices to communicate their ideas.

The process was messier than we anticipated. A few students balked at the assignment’s lack of specificity. Others wrote their initial drafts in a burst of inspiration and insisted that they were finished. Gently, sometimes painfully, my colleague and I tried to push the envelope in the direction of conscious authorial choices. “What would happen if . . . ?” became the teaching phrase of the moment. What would happen if you tried starting with the middle stanza? What would you lose and gain in terms of tone? What if you used a different metaphor at the end—how would that shift the message? For a week the phrase became so central that my students started using it ironically. “What would happen if I didn’t do the assignment?” several of them asked.

Quips aside, it was through this persistent focus on “what if?” thinking that something began to shift. Gradually, my students seemed to notice the possibilities that language offered them. There were, inevitably, a handful who continued to muddle through the assignment with no apparent interest. But
some were more like my student Jason, a low-skill reader who had slouched through the first semester of my course without ever seeming to wake up. As Jason worked on his poem, he appeared increasingly engaged in bringing his mind to bear on an academic task. He asked questions. He rearranged phrases and words, trying out different sounds. One afternoon, he lingered after the final bell to finish a new draft and perform it for several classmates, who reciprocated by performing theirs.

At the final slam performance, which took place at an all-school assembly, the finalists were met with an unprecedented show of support by their peers. The energy was palpable. One student’s poem raised questions about whether society should blame teen mothers; another tackled the oppressiveness of the local police. The audience listened rapely, responding aloud to powerful images—including during Jason’s wanderingly existential piece, which included the following stanza:

The world can be called many things but I think the best word to describe it is this:

Unkown.
Yeah that’s what the world is. Sometimes I sit back and worry how we even got here!
The truth is no-one sees the world how I see;
Honestly it’s like the colors are blinding me.
Maybe it’s the dro’ that I smoke
That’s got my eyes weak and makes me walk the streets half asleep.

The poem had moments of real narrative power. As Jason spun out the similes and alliterative phrases that he had added to the piece, the English major in me glowed with pride. Just as captivating was how alive he seemed. He paced back and forth across the stage, his gaze boring into the front row.

The qualities that the poetry slam task attempted to embody serve as a starting point for what I mean by instruction that is intellectually playful. Such instruction is, first of all, about designing tasks that involve a real measure of open-endedness—where there is a constellation of valid approaches rather than a predetermined solution. The slam assignment was such a task; students had to grapple with the complex challenge of conveying their perceptions to others in powerful ways. It is important to note, however, that the task was not entirely amorphous. Simply asking students to write about injustice would have led to divergence and potentially to engagement, but it would not have been enough to ensure cognitive rigor. Rather, the fixed parameters of the assignment gave students a framework by which to engage in cognitively rigorous thinking: they had to take into account the rhythmic and sonic considerations of poetry, make use of their knowledge about literary devices, and come up with multiple ways of articulating their ideas and then evaluate among them. For at least some of my students, this interplay between open-endedness and
constraints led to improvisational thinking—for playing with the possibilities opened by the question, “What would happen if . . . ?”

This kind of thinking was not only cognitively rigorous but also cognitively absorbing. In the best moments, when my students were working on their poems, their whole bodies spoke of engagement. They hunched over their drafts and leaned over to their friends to read lines out loud. Like Jason, some of them lingered long after the bell to keep working. I would contend that they were experiencing pleasure not in the sense of fun but in the sense of flow, which involves the experience of satisfying absorption; individuals who find flow lose track of time due to the presentness of being engaged in a task that requires them to work at the edge of their knowledge and skills (Csikszentmihalyi, 1997). In the case of the slam poems, the focus on injustice tapped into a compelling topic, which may have helped to reinforce the focus and energy that many students brought to the task.

Finally, the task entailed a small but real measure of risk for students—in this case, social risk. On the one hand, there was no wrong way to go about the assignment, beyond ignoring its parameters or blowing it off entirely. On the other hand, significant peer accountability lay in the fact that all students had to stand up in front of their classmates and deliver their poems, and those voted as finalists faced the prospect of performing in front of the whole school. These types of bounded risks are particularly well suited to adolescent learners.

The poetry slam task was in many ways a one-off moment in my abbreviated teaching career. My students still completed grammar worksheets and focused on reading comprehension. The word boring still periodically haunted my classroom, a proxy for confusion, disaffection, and anger. Even the slam task itself could have been truly divergent and/or involved more opportunities for higher-order thinking. Were I to do it again, I decided, I might encourage students to express their ideas in an array of different modalities and, afterward, require them to accompany their products with analyses where they explained the thinking behind their choices and revisions. Nevertheless, something about the experience empowered me to imagine and aim toward a more vital kind of instruction, one rooted in the power and pleasure of playing with words.

Robust Roots

Why use the word playfulness to refer to this kind of instruction? Part of what makes the term so evocative is its nonliterals. Existing well beyond the world of pedagogy and theory, it has an indelible association with both positive engagement and open-ended thinking (Huizinga, 1971; Hunter & Csikszentmihalyi, 2003); to take a playful stance is to depart from what is predictable or mandated in order to engage in pleasurable improvisation. At a more concrete
level, however, there is also a tradition of empirical research that connects the divergent nature of playful activities to academic learning in young children, as well as an emerging conversation about the need for professional workers who possess skills associated with playfulness. Exploring these two strands of literature reveals a puzzling gap surrounding playfulness when it comes to adolescent learners and strengthens the argument that aiming toward intellectually playful instruction might be a promising way to infuse high school classrooms with opportunities that support both rigor and pleasure.

The recent origins of the study of play in early childhood can be traced to the 1920s, when Swiss psychologist Jean Piaget began the project of observing his own children—a project that became one of the bases for modern understandings of child development (Bjorklund & Blasi, 2012). The functions of play that Piaget (1962) and those who extended his work identified are complex, but their outline is well known by early childhood experts and loosely familiar to many educators. By experimenting with objects, enacting imaginative stories, and engaging in cooperative games—activities that both require and support absorption in open-ended thinking—children learn both how the world works and how to navigate within it. Exploratory play leads them to new understandings; repetitive play supports them in strengthening newly acquired skills. None of this diminishes the pleasurable nature of engaging in play, but it confers weight on activities that might otherwise seem purposeless. Far from frivolous, play is an integral part of the work of growing up (Brown, 2010).

Between the 1960s and the 1980s, a strand of research sprang up that specifically explored the intersection of play and elementary-level academic learning. Studies found that play in elementary classrooms is associated with the development of abstract thinking (Vygotsky, 1976), creativity (Li, 1978; Sutton-Smith, 1968), cognitive flexibility (Lieberman, 1965), and social perspective taking (Smilansky, 1968), all of which fall under the umbrella of higher-order cognitive processes (Marzano & Kendall, 2007). For example, children who play with unstructured materials tend to develop greater divergent thinking skills—the ability to come up with multiple strategies or solutions when presented with a problem—than those who play with lifelike toys (Pepler & Ross, 1981; Pulaski, 1973). Children given time to play freely with academic materials before solving a problem with them are more able to transfer their solutions across contexts than those who have no time to play (Pepler, 1987). Recent research has extended these findings, linking play to a host of skills related to critical and creative thinking (Fisher, Hirsch-Pasek, Golinkoff, Berk, & Singer, 2010). In aggregate, this research provides a robust warrant for arguing that playful exploration can involve a great deal of cognitive rigor, building conceptual understandings as well as developing the disposition to approach open-ended tasks with interest and skill.

Play would not be play, however, without also involving pleasure, the subjective experience of positive engagement. When it comes to free play in early
childhood, this engagement often derives from the experience of interacting in a realm that is voluntary and consequence free; the risks associated with experimentation are balanced by the reassurance that the activity exists beyond the boundaries of real life (Finkelstein, 1987). As children get older, however, required tasks can become pleasurably “playlike” (Block, 1987, p. 257). Research by King (1987), for example, finds that kindergarten children easily categorize school-day activities as work or play using universal criteria: activities required by the teacher are labeled work while activities that are voluntary are labeled play. By contrast, however, upper elementary children apply more personalized criteria; mandated academic activities might be perceived as work, play, or a combination of the two.

This potential for blurring work and play extends to professional experiences in adulthood. Csikszentmihalyi, having spent a career interviewing high-profile professionals, reports that “they all say in one way or another: ‘You could say that I worked every day of my life, or you could say that I never worked one day in my life, because what I was doing to me didn’t feel like work. What I was doing was exploring possibilities’” (personal communication, October 15, 2012). This intuitively makes sense. Professional work often includes some elements of drudgery, but at its best it also involves pleasurable opportunities for improvisation and open-ended problem solving. These opportunities, which often lead to flow experiences, go hand-in-hand with working at the edge of one’s knowledge and skill; engagement comes through rigor, with the two dimensions becoming mutually supportive (Csikszentmihalyi, 1997).

There are also economic imperatives attached to the skills associated with playfulness. As Brown (2010) describes, one of the United States’ premier engineering firms recently found itself facing a staffing crisis related to play. Although the firm was hiring engineers who were qualified based on their résumés, few were able to tackle problems with flexibility. After extensive consultation with experts, executives at the firm realized their most successful employees were those who had spent time tinkering with mechanical equipment as children. They began to incorporate questions about childhood play into interviews and found that they could more easily identify candidates with the capacity to think open-endedly. Other employers have gone so far as to weave a playful ethos into the design of the work itself. At Google, for example, employees are encouraged to spend up to a fifth of their time on open-ended projects of choice, a practice that boosts engagement and periodically yields innovations (Pink, 2011).

The twenty-first-century “knowledge economy” means that there is a widespread need for flexible thinking throughout the labor force. This represents a profound shift; during the industrial era, factory labor required only basic literacy and numeracy, and the work itself was monotonous (Cohen, 1998). While such jobs still exist, they represent a shrinking portion of the American economy, with fewer and fewer carrying the promise of a living wage (Murnane & Levy, 1996). In order to succeed in contemporary workplaces and to
negotiate modern life more generally, adults need skills and dispositions that allow them to tackle complex problems in creative ways (Kegan, 2003; Trilling & Fadel, 2009). They need to be able to think critically, to imagine multiple approaches to problems, and to improvise when existing solutions do not suffice. They also need to be engaged in the tasks that they tackle, because, as Hunter and Csikszentmihalyi (2003) point out, “Interest provides concentrative ‘staying power’ in the face of difficulty” (p. 28). Even if these economic conditions were not the case, one would hope that all adults are able to find meaning in their work—to discover “realms of freedom” in the activity that likely dominates a significant portion of their time (Marcuse, 1967, as cited in Csikszentmihalyi, 1975, pp. 12). To experience one’s work as void of opportunities for rigorous engagement is to face decades of boredom and resentment, a reality that nobody deserves.

As the nation’s one truly common institution, public schools play a critical role in helping students—all students—develop these skills and dispositions. It follows, then, that the content of the work that students are required to complete over the course of twelve years should be both rigorous and engaging, equipping them to tackle open-ended tasks with confidence and interest. By the time they graduate, they need to know how to read, write, and compute—but they also need to know firsthand what it feels like to take pleasure in the process of communicating ideas that matter to them, of puzzling over difficult problems, of producing something unique.

Realizing this vision would go a long way toward ensuring that all students are prepared to meet the demands of modern life as well as infusing schools themselves with greater richness and meaning for those who teach and learn within their walls.

Disheartening Realities

When it comes to pursuing this vision, elementary schools, for all of their imperfections, provide a promising platform. Not all schools or teachers are explicitly focused on open-ended tasks, but a number of pedagogical traditions and school reformers insist that instruction should involve not only explicit instruction around basic skills but also exploration and problem solving (Barron et al., 1998; Meier, Engel, & Taylor, 2010). On top of this, as a result of the history of research on the role of play in child development, playfulness has a robust place in the early and elementary education discourse. Education bookstores are full of volumes that counsel teachers of young children in how to craft playful opportunities that support development (see, for example, Jones & Reynolds, 2011). Advocacy associations such as Playworks (2013) have sprung up around the shared belief in elementary and middle school children’s “right to play.” The current policy environment is troublingly misaligned with such emphases, but at very least there is a strong basis for conversations about the interlocking roles of rigor and pleasure in the learning process.
Unfortunately, high schools provide far less fertile ground for such conversations—not least because the practices that accompany them are conspicuously absent. When it comes to cognitive rigor, a rich literature describes the dominance of low-level cognitive tasks as a mainstay of American secondary education (Cohen, 1988; Lynd & Lynd, 1929; Rice, 1893). Despite the fact that changes to the frontal cortex mean that adolescents are more able to engage in abstract thought than their younger peers (Chapman, Gamino, & Anand Mudar, 2012), in most high schools only select students have the opportunity to engage in cognitively ambitious curricula, such as those supported by the Advanced Placement and International Baccalaureate programs (Powell et al., 1985; Sizer, 1984). Students in lower tracks and in higher-poverty schools—many of whom are poor and/or students of color—are least challenged (Anyon, 1997; Oakes, 1985). The persistence of low-level tasks across the board was most recently documented by the large-scale Measures of Effective Teaching project, which found that while the majority of American teachers are competent at maintaining order in their classrooms, less than one-third are proficient at teaching higher-order skills (Kane & Staiger, 2012). The country’s lackluster performance on international tests bears out this pattern: American fifteen-year-olds from all but the top quartile of socioeconomic status fall behind on problems that require higher-order thinking (America Achieves, 2013; Fleischman, Hopstock, Pelczar, & Shelley, 2010). Thus, while high school teachers may yearn to create instruction that supports complex thinking, it is clear that their aspirations often remain unrealized.

The picture when it comes to engagement is equally bleak. On the one hand, neuroscience research suggests that the hypersensitive reward system of the adolescent brain yields disproportionately pleasurable responses to curiosity-impelled behaviors (Galván, 2012). Teenagers are thus eager to engage in tasks, intellectual and otherwise, that involve uncertainty and risk. Nevertheless, as parents and teachers know all too well, boring is the teenage word of choice for their school experiences. Hunter and Csikszentmihalyi (2003) write, “It is not atypical to imagine a teenager bored and despondent . . . school for most young people is a dull and uninspiring place” (p. 28). The National Survey of High School Student Engagement substantiates this vision, revealing year after year that almost three-quarters of adolescents find their classes lacking in challenge, authenticity, or relevance (Yazzie-Mintz, 2010). It is not difficult to sketch some preliminary reasons for these grim realities. To start, engaging students in open-ended tasks requires time that many high school teachers simply do not have. Compared to their elementary school counterparts, they teach many more students total and see each student for many fewer hours each day, making it difficult to create opportunities for sustained inquiry. On top of this, strong disciplinary traditions paired with the pressures posed by college entrance exams encourage teachers to cover as much content as possible. These pressures have amplified in recent years, but they are part of a long-standing cultural tradition that configures mastery of
disciplinary content as a central value of schooling, secondary schooling in particular (Cohen, 2011). According to this tradition, teachers are conceptualized as keepers of what Cohen (1988) calls a “scholastic inheritance,” which they are responsible for transmitting to their charges through a process of “teaching as telling.” This vision flies in the face of contemporary theory, which has established that students learn best when they actively engage in the process of meaning-making and focus on depth rather than breadth (Erdogan & Campbell, 2008; Gordon, 2009), but it remains pervasive—in part because most teachers emulate the ways that they themselves were taught (Lortie, 1975). Emphasizing content mastery also serves to reinforce the message that schooling is merely a means to an end; the payoffs in terms of being able to engage deeply in “real work” begin only after years of closed-ended tasks.

Finally, and perhaps most importantly, high schools seem to reflect the profound discomfort that characterizes our society’s stance toward adolescents. This stance, which grew in part from the psychological theories of Hall and Erikson (Baxter, 2008), sees the teenage years as a time of turbulence and responds by asserting top-down control (Irwin-Devitis, 2010). Nowhere is this more apparent than in the way that high schools tend to treat play, which, far from being leveraged into deep learning, is seen at best as peripheral and at worst as deviant. Adult-sanctioned play opportunities are often highly regulated and relegated to the margins: the student lounge, the auditorium, the soccer field (Kleiber & Roberts, 1987). Teenagers are expected to sit for hour after hour passively receiving “serious” academic content, but they are seldom engaged in tasks that involve real room for exploration. Nevertheless, as a society we tend to attribute boredom and rebellion wholly to our adolescents, ignoring the role that our institutions might play in creating or exacerbating these dispositions.

Admittedly, there are some valid justifications for this perspective. Adolescents are indeed developmentally primed to be more interested in testing boundaries and in engaging with each other than in doing what adults ask them to do (Chapman et al., 2012). Compared to younger children, adolescents are not as overtly interested in the way things work when it comes to the physical universe (Reio, 2010). Yet, anyone who has spent extensive time with teenagers knows that alongside their notorious bouts of rule hating, they harbor a deep curiosity about the worlds they inhabit. What motivates people to behave in the ways they do? Where does power come from? Or, as my student Jason asked in his poem: How did we even get here?

What would happen if high school teachers approached these curiosities as assets, if they continued to support students in building foundational skills but also took seriously the idea that their students are ready and eager to tackle open-ended challenges that entail real uncertainty and risk? What would it look like to make this shift, and what would it take to accomplish it? It is in exploring these questions that we return to the idea of intellectually playful
instruction—and to the profoundly play-averse climate that currently characterizes the American K–12 sector.

Playing with Constraints

Room 403 of Downtown Collegiate Charter High School is in many ways unremarkable. The furniture is spotlessly clean. The whitewashed walls are mostly bare. The windows, which look out at the tenements that punctuate the city’s skyline, are usually shaded. The result is a sense of severity that mirrors the “no excuses” approach of the school as a whole, one that has received a great deal of recent press (Matthews, 2009; Whitman, 2008). Approximately 80 percent of Downtown Collegiate’s students qualify for free or reduced-price lunch, and few students have parents who graduated from college. In recent years, the school has earned a reputation for its unprecedentedly high test scores. In 2012, all tenth graders scored proficient or advanced on state-administered tests, a pattern that, unfortunately, is quite rare in schools serving mainly poor and minority students. As at many other such schools, these results go hand-in-hand with rigid control of behavior, an intense focus on testable skills, and a pervasive sense that students are not ready to be given real latitude when it comes to their learning. For some observers, me included, these assumptions are particularly troubling in the context of teaching poor and minority students.

In a subtle but important way, the ethos shifts when Ms. Hart and her ninth-grade physics students are in the room. On a basic level, the class’s routines mirror those that characterize the rest of the school. Ms. Hart, a young white woman whose freckles and braces belie her eight years’ experience, greets her students with handshakes as they line up outside the door. Class begins with a silent “do now” activity that must be completed before a timer buzzes. End-of-term assessments are structured to reflect the physics SAT II exam. Beyond these routines, however, something is different from the instruction that characterizes most of the school’s other classes. To start, Ms. Hart seems completely at ease with her students. She often pokes fun at them, especially when they are not being as thoughtful as she believes they can be. Her students sit forward in their seats, seemingly unafraid to participate. The teacher who shares the room with Ms. Hart describes this dynamic with wistful admiration: “In my class it’s so work oriented . . . but in her class I see the kids having fun. I see them smiling, their hands are up, they get into it.”

This infusion of pleasure into academic work is grounded not only in Ms. Hart’s personality but also in the tasks that lie at the heart of her instruction. In large part she adheres to the school’s dominant pedagogy, which specifies that teachers should break testable skills into their smallest component parts and require students to practice them until they demonstrate mastery. Within the context of this pedagogy, however, Ms. Hart attempts to create opportu-
nities to bring what she calls “the good kind of messiness” to tasks that would otherwise be lifeless—an attempt that strains toward intellectual playfulness.

One of the humid June weeks that I spent at Downtown Collegiate, for example, was devoted to reviewing for the school’s end-of-year exams. Most teachers designed activities that were entirely closed-ended and rote, such as flashcard drills. Ms. Hart, however, reserved a portion of each day for groups of students to draft, revise, practice, and perform their “physics jamz,” songs that they rewrote to review concepts and equations. I got wind of the task from the students themselves, who brought it up in interviews as an example of work that they found to be challenging and interesting. When they asked if I would observe one of the performances, I readily agreed:

When I enter Ms. Hart’s room shortly before the end of the period, the class appears to be transitioning from one activity to the next. Three girls in front of me quietly practice their song together; they murmur the words and rhythms together, giggling and gesturing. Carl, one of the students who invited me to come, spots me and tells me that I have arrived just in time. He is in charge of handing out rubrics, which ask students to evaluate the performers on two major dimensions—delivery and physics content—each of which is broken into subcategories.

Ms. Hart tells the class to focus and the room immediately gets quiet. The three girls sitting in front of me walk to front of the room. “We’re talking about kinematics,” one of them announces. “The name of our song is ‘Super-A,’ and it’s about a boy who failed all his physics tests and this will help him ace it.” The audience-members sit forward in their seats. One of the performers, a strikingly tall girl, holds a rolled-up paper to her mouth like a microphone. Once Ms. Hart has turned on the video and backup music, the girl springs into action, striding back and forth as she raps out the lyrics to the song. The other two girls dance backup and chime in on the refrain.

Last night I was drowning in my books
Studying for my test
Kinematics, vocab sheets, ohhhh it was a super mess!
Last time I averaged a 45—yeah, that’s super weak
Can’t you really tell I’m trying to pass this with a 90?
\[v_f = v_i + at\]
\[v_f^2 = v_i^2 + 2ad\]
\[D = t \text{ times both } v\text{'s over two}\]
Super A, there’s only two more to do!

There are cheers when the song is over, and several students chant the refrain. Ms. Hart, beaming, gives the class a minute to revel in their enthusiasm. She then asks the three performers to lead a quick debrief. One of the two backup singers asks the class shyly, “What did you guys think went well?” Half the hands in the room shoot up and the facilitator gestures toward a girl sitting near the back of the room. The girl practically gushes: “Y’all did such a good job! Y’all had so much physics, and it flowed!” There is a wave of laughter, which I suspect reflects a good deal of pride. (field notes, June 12, 2012)
On one level, the physics jamz assignment represents a far cry from the kind of open-ended exploration that one might hope to see in an inquiry-based science classroom, and, as such, it fits with what I see as Downtown Collegiate’s profoundly utilitarian vision of teaching and learning. The process was about mastering established disciplinary content, the rubrics reinforced the school’s insistence on micro-level accountability, and the ultimate goal was success on a pen-and-paper test. Like most of the other instruction at the school, the task was circumscribed within a largely closed-ended framework for what students should learn and how they should demonstrate mastery—and the fact that it was one of the few assignments that students found to be both interesting and challenging speaks volumes about the school’s general lack of playfulness.

On another level, however, the task spoke to a desire to bring life to work that might otherwise be entirely rote and deadening. With respect to the requirements of the assignment, the process of drafting the songs required students to tackle puzzles that were in some respects open-ended. What are the most critical equations and terms to emphasize? How can we express them in a way that is economical and memorable? Making these choices required students to incorporate foundational knowledge into unique product and to collaborate while doing so. Beyond this, the task was simply fun. As an observer of the performances, I could not help but notice and share in the enthusiasm in the room. The students appeared to be enjoying themselves not only because the assignment provided a change of pace, but also because it invited them to express their learning in a mode that involved their out-of-school identities. They had to bring together two disparate ways of knowing, and the combination proved pleasurable.

Perhaps most important of all, the task, like the poetry slam in my own classroom, involved a small but real measure of social risk. For her part, Ms. Hart did not know what her students would come up with as they worked; the assignment left more room for uncertainty than a traditional review session would have done. In order to ensure that the assignment was adequately rigorous in the face of such uncertainty, she needed to employ a number of technical tools: precise planning, established routines, clear expectations, and more. For the students, performing their songs and being seriously evaluated by their peers heightened the stakes of the assignment, eliciting excitement and adrenaline in equal measure. The playful ethos associated with the task helped keep these pressures in check; the risks entailed in performing the songs were real, but not too real.

This balance between risk and support, iterated throughout Ms. Hart’s class, obviously struck a resonant chord for her students. The class did not transform them into playful intellectuals or equip them to tackle truly open-ended challenges. It did not support them in learning to construct understandings of scientific phenomena through inquiry. It did, however, stick with them in some important ways. Many found physics to be the most memorable part of their ninth-grade experience, and many reported considering college
majors and careers in the sciences as a result. “Physics is hard, but it goes really fast because [Ms. Hart] makes it enjoyable,” one student told me. “My other classes just drag out.”

Problems of Policy and Perspective

I did not describe Ms. Hart’s class in such depth because it stands out as one of the most intellectually vital high school classrooms I have visited. It does not. It stands out, rather, because the context that frames Ms. Hart’s work illuminates the climate that characterizes the current American K–12 education sector as a whole—a climate that emphasizes greater precision with respect to instructional practice but overlooks the roles of open-endedness and engagement when it comes to setting the stage for deep learning. Thus, Ms. Hart’s efforts to infuse her instruction with greater vitality, in their very smallness, help to illuminate barriers to playful instruction that compound the long-standing problems of structure and practice.

Mapping the current landscape of education policy making in detail is beyond the scope of this essay. In essence, however, schools like Downtown Collegiate are the darlings of the education reform movement because their approach reflects a successful effort to use top-down control to achieve the politically agreed-on “ends” of K–12 schooling, which in this era means ensuring that all students graduate with functional levels of literacy, numeracy, and content knowledge as measured by standardized tests (Graham, 2005; Mehta, 2013). The pedagogy associated with this approach, as sketched earlier, involves a model that breaks academic tasks into their smallest components (see Conzemium & O’Neill, 2005; Lemov, 2010). Teachers, whose work is seen as a science, gather discrete pieces of data that allow them to refine their plans and provide students with feedback. These practices receive heaviest emphasis in schools that cater to poor and minority students (Whitman, 2008), but they have found their way into many of the classrooms where I have spent time.

This trend is by no means trivial. As many have pointed out, K–12 education has been troubled by a lack of coherence with respect to means (Horn & Gardner, 2007). Most teachers agree that their primary responsibility is to support their students’ learning (Horn & Gardner, 2007), but no professional practice exists to ensure that teachers share a core set of knowledge and skills by which to actualize this commitment (Elmore, 2003). Given this backdrop, the technical specificity of the pedagogy described above is, in one sense, a promising development, suggesting that for the first time in its history the field may be moving toward a practice that can make good on the promise that few students will be “left behind” when it comes to foundational knowledge and skills. If this proves to be true, the past several decades will represent an important step in the direction of coherence and equity.

That said, the new model of instructional practice is silent when it comes to the potential interrelationships between rigor and engagement. It helps teach-
ers hone in on skills with razorlike precision, but it does so in a way that leaves little room for open-endedness, flow, and risk taking—important potential sources for pursuing the engagement and rigor that high school classrooms tend to lack. The new model thus reifies a one-dimensional perspective that is closed to the possibilities offered by playful learning and that is often out of sync with what adolescent learners desire and need.

The interviews that my colleague and I conducted with teachers and staff at Downtown Collegiate exemplify the limitations posed by this one-dimensionality. Many of them described a vision of academic engagement that involves compliance rather than in authentic meaning-making. “Nobody here is pretending that the work is meaningful beyond the scope of preparing for college and the AP tests,” one teacher said. Beyond this, the school’s focus on control seemed to go hand-in-hand with an aversion to incorporating open-endedness or risk into instructional tasks. For the most part, teachers embraced the idea of designing instruction around foundational knowledge and skills. Some, however, talked about the limitations of this model. As one of them put it, “We control instruction so carefully that sometimes I worry that our students sometimes don’t have [an opportunity to develop] intellectual curiosity.”

Such concerns did not seem to inform Downtown Collegiate’s administrative team. Ms. Hart, despite the modest nature of her attempts to infuse her instruction with playfulness, posed a challenge to the school’s tightly controlled model of instruction. Her students loved her class, and many of her colleagues looked to her for help, but the administration could not find a way to make room for her aspirations in their vision. Rather than trying to support her efforts to craft more engaging and rigorous tasks, they saw her practice as threateningly off-script. When she decided to leave the school after two years, the school’s leadership did not try to convince her to stay—and the principal suggested that at least part of this decision was rooted in a negative view of her instruction. “[Ms. Hart] does some things that are just not aligned with us,” he told me. “Physics is difficult, but it’s not conceptually complicated. She overcomplicates the whole thing...[Her practice] gummed up the system.”

In Pursuit of Multidimensionality

Since the purpose of this essay is to encounter bleakness with resistance rather than resignation, I would like to take one last glimpse at playfulness in a classroom setting. In this case it took the form of a conversation between two ninth-grade boys at Technology High, a socioeconomically diverse urban high school in southern California. Like Downtown Collegiate, the school as a whole has seen high levels of success in terms of postsecondary outcomes; 77 percent of graduates have finished or are currently enrolled in postsecondary education (Mehta and Fine, 2012). Unlike Downtown Collegiate, however, the school eschews high-stakes tests in favor of an interdisciplinary and project-
based curriculum. In the class I observed, the boys were brainstorming for a media arts assignment that involved creating a short stop-motion film made by rapidly stringing together photographs. This was the first day of the project, and the teacher spent the first part of the block screening several examples of stop-motion films and explaining that the students would be learning how to use the necessary technology as they worked through the project. She then gave them an hour to come up with concepts for their films and begin drafting proposals. “Make sure that you play around until you’re sure your concept is solid,” she told them.

I settled myself near the two boys. They sat easily at a small table in the corner of the room, ignoring the hubbub of the other conversations. One of them, a studious boy with glasses, sketched ideas along the way. I was impressed by their focus as well as by the collaborative nature of their dialogue:

“We could smash something and then we could play it backwards, so it looks like it’s putting itself back together.”

“What should we smash, though?”

“Maybe clay?”

“Maybe we build a castle, and then we smash it.”

“That would be awesome! But can we build a castle out of clay? What about Legos?”

“You can’t smash Legos though.”

“Yeah . . . What if instead of a castle we made a monster and used clay?”

The conversation continued and, with some brief input from the teacher, the idea evolved. The boys seemed entirely un-self-conscious about their enthusiasm. Even as I recognized that the project ultimately would require them to learn how to use sophisticated digital media software, the context melted away, and I could see them as five-year-olds playing in a sandbox.

In many ways, this instructional scenario could not have been more different from the one I described in Ms. Hart’s class. There was no test to take at the end. There was no traditional disciplinary content involved—at least not the kind that appear on standardized assessments. There was far more time for students to experiment, to hit dead ends, to “mess about” (Hawkins, 1974). And, in the end, the playing was more about generating ideas than about building targeted skills; the opportunity for open-ended ideation set the stage for cognitively rigorous work, rather than serving as a direct part of it. Underneath it all, however, the two classrooms shared something essential. Both involved tasks that attempted to invite adolescent students into the world of pleasurably open-ended thinking. Both involved an ethos that conveyed trust and excitement in terms of what students could produce when given real latitude. Both were led by teachers who consciously attempted to navigate the lines between planning and improvisation, control and autonomy, certainty
and open-endedness. As a result, the students in both places were not just on task; they were in task in a way that is as moving as it is rare.

None of these examples represents a fully realized or exhaustively researched model of intellectually playful instruction. Rather, each captures playful moments and attempts to create playful tasks, shaped by the particulars of the context in question. They do not prove anything in a scientific sense. But together, when combined with the research literature about play, adolescent development, and professional work in the twenty-first century, they suggest that intellectual playfulness might form a promising platform for engaging high school students in more cognitively rigorous tasks. They also raise a host of other questions. What kinds of instructional designs enable playfulness to create cognitive rigor versus merely supporting it? What is the nature of the relationship between playfulness and curiosity, interest, and intrinsic motivation? Does engaging in pleasurably open-ended tasks support the building of divergent thinking and creativity for adolescents in the same ways as it does for younger children? These questions deserve unpacking through both theoretical and empirical inquiry.

But there is more to it than this. The underlying motivation for this essay, after all, is not as much about playfulness per se as about imagining what it might look like to infuse instruction at the high school level with greater intellectual vitality. As such, the examples I describe serve as a kind of existence proof that the quest to create such vitality is not an abstractly idealistic notion. There are real teachers who are grappling with difficult questions about how rigor and engagement can support each other and who, despite widespread pressures to the contrary, have begun to make at least some headway toward inviting adolescent learners into a mode of learning that marries the two. As a field, we can learn a great deal from these teachers—from the tasks they design, from the beliefs and practices that they model, and from the ways that their students talk about the work. In so doing, we can begin to develop a richer understanding of the practices that schools might adopt in order to support and extend such work—and perhaps to push back against one-dimensional notions of what constitutes effective instruction.

My search for deeper learning in high schools has been, at times, profoundly demoralizing. At one particularly low moment I wrote to scholar David Cohen lamenting the scarcity of instruction that invited students into pleasurably open-ended thinking. He responded:

It would be appropriate to think of yourself [and your colleague] as explorers searching for a very unusual species: it is so rare that few people know what it looks like and often mistake something else for it, and so difficult to find that one should be delighted to find a single member of the species rather than feeling dismal that so few exist. The sort of teaching you are trying to find will be less rare only as the result of a long and probably slow revolution in thought and education, and we are still near the beginning (personal communication, March 14, 2012).
He’s right. In some ways, it seems that high schools are farther than ever from having the kind of intellectual vitality that adolescents deserve. In the long run, however, there has never been as urgent a need to shift our aspirations in the direction of a more ambitious and multidimensional vision of teaching and learning. Perhaps the first step involves what one seasoned school leader shared in a moment of reflectiveness. “Most schools and classrooms are set up in ways that trigger adolescents to resist,” he said. “What we need to do is to trigger their instinct to contribute.”

Notes
1. In order to protect privacy, the names of schools and individuals have been changed.
2. In using my experiences as an educator as a starting point for inquiry, I draw on the tradition of self-study embedded in methodologies such as action research (Anderson & Herr, 1999; Peshkin, 1988), in-depth case study (Stake, 1978), and portraiture (Lawrence Lightfoot & Davis, 1997).
3. For a salient example of how higher-order skills such as problem solving play into the hiring practices of industries that employ large numbers of blue-collar workers, see Murnane and Levy’s (1996) study of Toyota factories in the United States.
4. These results are consistent across five rubrics: “MET project teachers tended to do fairly well at behavior management and time management. However, scores were lower in areas such as problem solving (CLASS), effective discussion (FFT), intellectual challenge (PLATO), richness (MQI), and investigation (UTOP)” (Kane & Staiger, 2012, pp. 25).
5. Contrary to previous assertions that the low performance of the most disadvantaged students skews these results, recent re-analyses of the 2009 PISA combined with a new pilot OECD study confirm that these patterns hold true for middle-class students as well (America Achieves, 2013).

References


