APPROACHING THE INEFFABLE: FLOW, SUBLIMITY, AND STUDENT LEARNING

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"I GET IT!" "THAT'S IT!" "I FIGURED IT OUT!" Anyone who has ever focused unwaveringly on solving a problem, anyone who has all at once understood the real stakes of an issue or an argument, anyone who has suddenly answered a seemingly unanswerable question will understand the excitement of those magical moments when—apparently out of nowhere—the right answer presents itself. And anyone who has ever taken a class, or taught one, will know that those moments do not—in fact—come out of nowhere, that they are nonetheless elusive in their workings and difficult (at best) to engineer. And so the question arises: do such moments have any place in our thinking about the goals of education? Is it legitimate to build into a class or program or entire curriculum an expectation that students will pursue intellectual inquiry with a passion that leads them to insight?

Not everyone thinks so. Take, for example, Alan Bennett's play *The History Boys,* which is about a group of teachers preparing a class for the Oxford / Cambridge entrance exams. At stake is what they teach and how, with the inspirational but decidedly unorthodox methods of Hector being played off against those of the sexy, young Irwin and the not sexy, not young, but ever solid Mrs. Lintott. The play prevents us from easily championing Hector's mode of teaching by also making him something of a sexual predator, but as far as debates about educational goals, methods and outcomes go, the headmaster—less than inspirational though he may be—sums it all up well when he says:

> Shall I tell you what is wrong with Hector as a teacher?
> It isn't that he doesn't produce results. He does. But they are unpredictable and unquantifiable and in the current educational climate that is no use. He may well be doing his job, but there is no method that I know of that enables me to assess the job that he is doing.
> There is inspiration, certainly, but how do I quantify that? (67)[1]

The word "inspiration" here is resonant, meaning—in its Latin roots—to "breathe … into"; to "infuse some thought or feeling into," especially "by

divine or supernatural agency" (one thinks of poets being inspired by their muses); to "arouse, awaken" or even "kindle" " in the mind or heart" ("Inspire," def. I.1, II.4, 4a, 5b). The notion of inspirational teaching as "kindling" students' intellects calls to mind language often used by W. Robert Connor, who—when he was president of the Teagle Foundation—liked to characterize a good college experience as one that helped students "catch fire." While one might smile at a phrase that conjures Monty Python-like scenarios of students aflame, it is also clear what he meant by it. He was talking about the same kind of inspirational experience that Hector aimed to conjure for the history boys, the same kind of intense engagement leading to insight that is the subject of this essay. And in an argument that complements Connor's essay in this collection—even as it counters Bennett's headmaster—I want to argue that the inspirational and the assessable are not so much opposed as complementary: the inspirational need not be as unpredictable as the headmaster implies, even as the assessable need not be as reductive.

In making this argument, I am countering not only Bennett's headmaster as he dismisses a pedagogy he views as unassessable, but also those on the other side of this debate, who fear assessment methodologies that can not capture the fullness, the subtlety, the "ineffability" of genuine learning experiences. Here I am encouraged by the work of Elaine Showalter, whose book *Teaching Literature* formulates both a specific overall learning goal for the field of literary study ("to train our students to think, read, analyze, and write like literary scholars, to approach literary problems as trained specialists in the field do, to learn a literary methodology ...") and a set of common "competencies and skills" that "we want students to learn" (25-26).[2] One could agree or disagree with her formulation, but the very fact of its existence makes clear that literature classes and classrooms are built around quite specific goals (they just might not be shared). Creating "catch fire" experiences for her students is not one of Showalter's, but if we hold on to the idea—if we assume that experiences of intense engagement leading to insight can be at the heart of a classroom learning experience—we can still ask: are they truly as elusive as all that? Do we really have no way at all to talk about them, understand them, maybe even shape them to some extent?

I contend that we do, and in what follows, I make this case in an argument that develops through several stages. Beginning with the concept of "flow" in psychology, I build on the work of L. Dee Fink to argue that flow experiences can help shape particularly intense forms of student engagement in learning, and move on to consider such engagement as not only affective but also as cognitive and even creative experience. Proceeding to the second stage of my argument, I contend that aspects of flow experiences are analogous to—perhaps even synonymous with—the experience of the sublime, which has been powerful within the field of literary study, and again consider the affective, cognitive and creative dimensions of that experience. Finally, I turn to the question of whether sublime experiences can be not only intentionally shaped in a classroom setting but also assessed. Drawing on existing research that points to the possibility of accomplishing this seemingly impossi-

ble task, I consider what it would take to develop such an assessment mechanism—one that would gauge the extent to which students engage so intensely in their work as to achieve not only affective but also cognitive results—and raise the possibility that disciplinary experts and assessment experts could work together on such a project.[3] This kind of assessment could tell us a great deal about when and why students experience the remarkably intense form of engagement and learning that is the focus of this essay, and so make it a more regular and replicable part of their education.

In experimenting with this approach to understanding student learning, I aim first of all to advance the discussion of teaching and learning in the literature classroom. Further, I hope to move discussions of disciplinary assessment in a direction somewhat different from—and I hope complementary to—those that we have and are developing. Good disciplinary assessment is certainly taking place at institutions across the country, and one can learn a great deal from current scholarship and reporting on this subject.[4] What seems still underdeveloped in the literature and practice of assessment are efforts to bring the language and tools of a specific discipline to bear on the assessment of student learning in that discipline. In experimenting with such an approach, my intention is to explore the extent to which a disciplinary vocabulary can energize and help with the work of assessment, and perhaps also bridge the gap between scholars / scholarship in a field such as literary study and in the fields of institutional and educational research.

"Flow" and Student Learning

I begin outside the discipline of literary study, with the work of psychologist Mihaly Csikszentmihalyi, whose notion of flow—as L. Dee Fink has argued before me—speaks implicitly to the work of classroom teaching (Fink 152-54). Csikszentmihalyi developed the concept of flow from his study of "people who seemed to be doing things that they enjoyed but were not rewarded for with money or fame." He worked with "[c]hess players, rock climbers, dancers, and composers [who] devoted many hours a week to their avocations," and asked:

> Why were they doing it? It was clear from talking to them that what kept them motivated was the quality of experience they felt when they were involved with the activity. …[I]t often involved painful, risky, difficult activities that stretched the person's capacity and involved an element of novelty and discovery. This optimal experience is what I have called *flow*, because many of the respondents described the feeling when things were going well as an almost automatic, effortless, yet highly focused state of consciousness. (110)

Further, he writes, "[t]he flow experience was described in almost identical terms regardless of the activity that produced it. Athletes, artists, religious mystics, scientists and ordinary working people described their most rewarding

experiences with very similar words. And the description did not vary much by culture, gender, or age …" (110). The nine repeatedly identified qualities of the flow experience are:

- "There are clear goals every step of the way."
- "There is immediate feedback to one's actions."
- "There is a balance between challenges and skills."
- "Action and awareness are merged."
- "Distractions are excluded from consciousness."
- "There is no worry of failure."
- "Self-consciousness disappears."
- "The sense of time becomes distorted."
- "The activity becomes autotelic." (111-13)

This list begins with what one might describe as the structure of the experience: "clear goals," "immediate feedback," and "a balance between skills and challenges," all of which are reasonably easy to create and control. As one moves down the list, though, the characteristics of flow become ever less easy to structure: "action and awareness are merged," "distractions" disappear, along with "the worry of failure." That merging of "action and awareness" signals a blurring of boundaries that becomes more intense in subsequent items, and by the time one reaches the point of self-consciousness disappearing, the flow experience seems to describe the subject's relationship to what s/he is doing in a way that signals not just engagement, but an absorption by one's tasks that might even be described as a form of self-transcendence (or self-loss). Describing what it means for self-consciousness to disappear, Csikszentmihalyi writes: "[A]fter an episode of flow is over … [w]e might even feel that we have stepped out of the boundaries of the ego and have become part, at least temporarily, of a larger entity. The musician feels at one with the harmony of the cosmos, the athlete moves at one with the team, the reader of a novel lives for a few hours in a different reality" (112-13). The distorting of time goes hand in hand with this dissolution of self, and the sense of the activity itself as autotelic or "an end in itself" reinforces this understanding of the flow experience as something that takes one out of oneself.

To this point, flow experiences would seem to be the province of individuals. Fink has noted that such experiences can perhaps be created in the classroom, arguing that "if teachers design their instruction properly, they can create the conditions in which flow activities are likely to occur" (154). In so doing, he picks up on an important aspect of Csikszentmihalyi's thinking, which positions flow as an aspect of creativity, and sees creativity not in "traditional" terms, as something that characterizes individuals, but as a process that takes place within a system.[5] That system involves not only the individual, but also an established "domain" (a specific knowledge base "nested" in a larger "culture") and "field" (his term for the "gatekeepers" that allow the knowledge base to change) (Csikszentmihalyi 27-28). The classroom "system" certainly modifies the one Csikszentmihalyi describes, for a student's insight will not

necessarily constitute an original and enduring contribution to a domain, but it is still valuable to consider that moment of insight in the context of the classroom "system" in which the established domain is shaped and advanced by the teacher and ideally by peers as well (the "gatekeepers"). This is the creative work of teaching and learning in a collaborative environment.

Is it realistic to think colleges and universities could foster such a paradigm for teaching and learning, and even if they did, would it really be effective? Here it is helpful to relate the notion of flow—understood as a process of intense engagement in a task or activity that, I would argue, ultimately leads to insight—with recent research on student learning that also links engagement with attainment. George Kuh and his colleagues at the National Survey of Student Engagement (NSSE) have argued—in their study *Student Success in College: Creating Conditions that Matter*—that

> student engagement has two key components that contribute to student success. The first is the amount of time and effort students put into their studies and other activities that lead to the experiences and outcomes that constitute student success. The second is the ways [*sic*] the institution allocates resources and organizes learning opportunities and services to induce students to participate in and benefit from such activities. (9)

Like the creativity that is nurtured by the flow experience, student engagement hinges on the work of an individual in a system (the classroom as well as the college or university as a whole), and can open up multiple paths to success in college. Kuh et al. offer a number of recommendations for creating especially strong forms of student engagement in learning, including one that reads like a recipe for creating flow experiences. The injunction to "Make Talent Development a Central Tenet in the Institution's Operating Philosophy" advises educators to "[s]et performance standards for students at high but attainable levels consistent with their academic preparation," "[p]rovide generous amounts of helpful, constructive feedback," "[b]alance academic challenge with adequate support," and "[u]se pedagogical approaches that complement students' learning styles" (300-02). And there is no doubt of the effectiveness of engaged learning methods: "engagement increases the odds that any student—educational and social background notwithstanding—will attain his or her educational and personal objectives, acquire the skills and competencies demanded by the challenges of the twenty-first century, and enjoy the intellectual and monetary gains associated with the completion of the baccalaureate degree" (Kuh, *High-Impact* 22).

If it is fair to correlate experiences of flow with student engagement as understood by Kuh and his colleagues (and I would argue that it is, though flow is perhaps a more intense form of engagement than most), then fostering flow experiences can indeed lead to student success. Still, the question remains: what exactly do students gain? Flow experiences are anchored in a

series of recognizable intellectual or cognitive moves (articulating goals, offer-ing feedback, defining an appropriate level of intellectual reach) and con-clude—at least some of the time—with intellectual or cognitive gain. Importantly, Csikszentmihalyi elaborates on the "autotelic" nature of flow with reference to science, saying:

> Scientists often describe the autotelic aspects of their work as the exhilaration that comes from the pursuit of truth and of beauty. What they seem to describe, however, is the joy of discovery, of solving a problem, of being able to express an observed relation-ship in a simple and elegant form. So what is rewarding is not a mysterious and ineffable external goal but the activity of science itself. It is the *pursuit* that counts, not the attainment. (122)

Translating this insight to the literature classroom, one can argue that the essence of flow comes in the intensity of the learning process itself, the intensi-ty of the engagement with the text and the questions it raises. At its heart is the intellectual "pursuit" of learning: "discovery," "solving a problem," and "express[ing] an observed relationship in a simple and elegant form." Flow thus seems to encompass and drive the rational, the analytical, and to point to the *generation* of such outcomes as being at the heart of the kinds of learning described here. Indeed, one might go so far as to say that the engagement cre-ated by flow experiences is—at its most developed—not just a means by which one moves towards learning, but a learning outcome in itself (a subject to which I'll return later).[6]

Even as flow and the engagement it describes can be seen as enmeshed in the work of cognition, they are also are clearly affective as well, and I want to argue that affective experiences can also have a place in a classroom. I am hardly the first person to have made this claim. Benjamin Bloom and his col-leagues' still influential *Taxonomy of Educational Goals* addressed not only the cognitive domain but the affective as well, noting the close connection between the two.[7] More recently, L. Dee Fink has argued for a revision of Bloom's cognitive outcomes in particular, observing that "individuals and organizations involved in higher education are expressing a need for important kinds of learning that do not emerge easily from the Bloom taxonomy, for example: learning how to learn, leadership and interpersonal skills, ethics, communications skills, character, tolerance, and the ability to adapt to change" (29). Further, and importantly, Fink states:

> My interpretation of the aforementioned statements is that they are expressing a need for *new kinds* of learning, kinds that go well beyond the cognitive domain of Bloom's taxonomy and even beyond cognitive learning itself. This suggests that the time may have arrived when we need a new and broader taxonomy of sig-nificant learning. (29-30)

The development of that "taxonomy of significant learning" is the subject of his book of that name, and it has six major categories: "foundational knowledge," "application," "integration," "human dimension," "caring" and "learning how to learn."[8] At a first reading, one wants to zero in on those learning experiences that seem particularly focused on outcomes that are other than cognitive as those that most obviously revise Bloom's list: caring, for example, and the learning experiences that engage the "human dimension," which Fink describes as "address[ing] the important relationships and interactions we all have with ourselves and others" (44). Fink himself does not distinguish cognitive and other kinds of outcomes so easily, though, guiding us to see this taxonomy as "not hierarchical but rather relational and even interactive," so that "achieving any one kind of learning simultaneously enhances the possibility of achieving the other kinds of learning as well" (32).

Fink's understanding of cognitive and non-cognitive outcomes as connected taps into the same long history of research on the relationship of cognition to affect that Bloom invoked, and leads one to see—as others have argued—that the distinction between the cognitive and non-cognitive realms is perhaps not even sustainable. As early as the nineteenth century, William James argued that physical experience can cue a specific emotion without the involvement of consciousness, or in other words, that "we feel sorry because we cry, angry because we strike, afraid because we tremble" (qtd. in Dawes 455).[9] Literary critic James Dawes notes that "contemporary neural science" validates this view when it demonstrates that "emotions can overwhelm cognition" (455, 457), and Antonio Damasio—who makes scientific research on this subject available to an audience of non-scientists—pushes even farther when he argues that "the reasoning system evolved as an extension of the automatic emotional system, with emotion playing diverse roles in the reasoning process" (xi-xii).[10]

That feeling and thinking are connected seems at this point indisputable, and what this line of thought urges us to consider is the possibility that emotion—feeling that is grounded in bodily experiences such as crying and striking (to return to the examples of my last paragraph)—is not only intertwined with cognition, but is actually a form of cognition, a way of coming to knowledge. Recent work on what the field of cognitive psychology labels "grounded cognition" helps to make this case. In a valuable overview of this work, Lawrence W. Barsalou draws together a range of research that challenges the notion that cognition is distinct from "perception," "action" and "introspection" (617) and states: "'Grounded cognition' reflects the assumption that cognition is typically grounded in multiple ways, including simulations [of perceptual, motor, and introspective states],[11] situated action, and, on occasion, *bodily states*" (619, italics mine). What this perhaps means for classroom teaching is that students' "gut feelings" and affective responses to texts can be understood as valuable in themselves and as pushing into the realm of cognition.

And here I want to turn from psychology and neuroscience back to the discipline of literary study and ask whether we can not get an even better understanding of this aspect of classroom teaching by working with a tool that

literary critics use often: theories of the sublime. Sublime experiences are intense affective experiences whose connection to the work of the intellect has been an ongoing subject of discussion. And sublime experience is a valuable lens through which to understand those key moments in a literature classroom in part because literature itself so often seeks—more or less explicitly—to generate them.

Creativity and the Sublime

Sublime experiences are helpful in thinking about the teaching of literature because they engage exactly that moment—a moment that can arise in reading, in teaching, and in learning—when one's relationship to one's subject is all consuming. Whether one is overwhelmed by a novel, or whether one suddenly sees all its moving parts fall into a kind of order, that interaction is all that matters.[12] Characterized by a blurring of boundaries between an individual and the world around her that echoes key aspects of the flow experience described by Csikszentmihalyi, they might also be described as being at the heart of what Csikszentmihalyi called a "traditional" understanding of creativity. "The creative process has traditionally been described as taking five steps," he writes. "The first is a period of preparation, becoming immersed, consciously or not, in a set of problematic issues that are interesting and arouse curiosity"; "[t]he second … is a period of incubation, during which ideas churn around below the threshold of consciousness"; "[t]he third … is insight, sometimes called the 'Aha!' moment"; "[t]he fourth component is evaluation, when the person must decide whether the insight is valuable and worth pursuing," and "[t]he fifth and last component of the process is elaboration. It is probably the one that takes up the most time and involves the hardest work" (79-80).

This is a vision of creativity that focuses not on systems but on individuals—a vision that Csikszentmihalyi does not discount, but complicates, in part by insisting that we see this individual creativity in a systemic context—and efforts to account for the "aha!" moment at its heart have, not surprisingly, been many. A line of increasingly scientific research offers explanations from fields ranging from psychoanalysis to cognitive neuroscience; insofar as theories of the sublime can also be helpful here, the humanities also have a role to play in understanding the heart of these moments of insight.[13]

Theories of the sublime attempt to understand exactly what happens in moments of intense engagement between a subject and an object. They cannot capture such a moment precisely, but they can approach it—define the conditions under which it occurs, the connections between people and things that shape and are shaped by it, what the experience looks like before and after. In their ability to shadow but not fully capture those moments, theories of the sublime are like asymptotic curves, always approaching but never actually meeting the lines toward which they seem inevitably headed. Still, they have the potential to be powerful levers for pedagogy and that possibility is what I'd like to explore, drawing on Edmund Burke's *Philosophical Enquiry into the Origin of our Ideas of the Sublime and Beautiful* and Immanuel Kant's "Analytic

of the Sublime," in his *Critique of Judgement*—still two of the most important treatises on the sublime—to do so.

As theorized by Edmund Burke, sublime experiences erase subject-object boundaries (Heiland 33).[14] Burke writes:

> The passion caused by the great and sublime in *nature,* when those causes operate most powerfully, is Astonishment; and astonishment is that state of the soul, in which all its motions are suspended, with some degree of horror. In this case the mind is so entirely filled with its object, that it cannot entertain any other, nor by consequence reason on that object which employs it. Hence arises the great power of the sublime, that far from being produced by them, it anticipates our reasonings, and hurries us on by an irresistible force. (57)

Sublime experience for Burke is one in which the mind is overwhelmed by an external force, and his description of the process suggests considerable passivity—indeed, "paralysis of our rational faculty" (Ryan 271)—on the part of the person having the experience.[15] Still on the same subject, Burke later cites Milton's "portrait of Satan" from *Paradise Lost* (I, 589-99) as a source of sublime experience, writing that "[t]he mind is hurried out of itself, by a croud [*sic*] of great and confused images; which affect because they are crouded [*sic*] and confused" (62). This example is particularly interesting from a pedagogical perspective, suggesting that sublime experiences can be sparked by the act of reading, but describing them in such a way—as initiated by confusion and characterized above all by chasing away rationality—that one has to wonder whether such an outcome is in any way desirable in a classroom. Sublimity in this form would seem to consist of a turn away from active reasoning to passive feeling that would seem very far from what most of us would consider a desirable form of student engagement and entirely divorced from learning.

At the same time, though, Burke's description of sublime moments—those moments of total absorption by something outside oneself—are very close to the heart of what Csikszentmihalyi describes as the experience of flow. And as Burke probes the "efficient cause" of sublime experiences, he approaches the ground so recently mapped by neuroscience, arguing that the mind-body relationship is at the heart of those experiences: "Our minds and bodies are so closely and intimately connected," he writes, "that one is incapable of pain or pleasure without the other" (129, 133), and he spends considerable time trying to discover "what affections of the mind produce certain emotions of the body," as well as "what distinct feelings and qualities of body shall produce certain determinate passions in the mind" (129). Vanessa Ryan comments that Burke's "physiologism … has invited criticism and ridicule not only in his own time but also in our own" (269-70), and a twenty-first-century reader will almost certainly smile at his description of how "mimicking the looks and gestures, of angry, or placid, or frighted [*sic*], or daring men" has led him to experience the very "passion whose appearance [he] endeavoured to imitate"

(Burke 133).[16] Then again, in that description, does Burke not anticipate Barsalou's understanding of "grounded cognition" by over two centuries? Here one might want to say, with a nod to Jonah Lehrer, that Burke was a neuroscientist, or at least a cognitive psychologist, and anyone in a literature classroom—teachers and students alike—will benefit from the historical perspective that Burke brings to discussions of those moments of intense engagement and insight that are his subject and mine.[17]

Where Burke understands sublime experience as an intense affective experience through which one is entirely absorbed by something external to oneself, Kant significantly revises this formulation when he identifies sublime experience as a function of the human mind above all. "The sublime in Kant is the resistance against that which had been previously considered sublime," writes Ryan (278). Rather than being overwhelmed by that which is outside itself, the mind asserts its superiority, and in that assertion lies the sublime experience. Kant explains it like this: "*Sublime* is the name given to what is *absolutely great*" (94.§25). However, that which is "absolutely great" is "not to be looked for in the things of nature" (whose parts are all relative to each other), "but only in our own ideas" (97.§25). In other words, sublime experience takes place when we understand that we will never see absolute greatness in the world around us, but we nonetheless conceive of such a thing in our minds. And in still other words, sublime experience takes place "at the point where pure reason transcends the sensuous" (Ryan 278). At that point, the mind not only realizes its own capacity, but understands itself as independent of that which would overwhelm it and so "saves humanity in our own person from humiliation" (Kant 111.§28). Sublimity for Kant, then, is not about self-loss but about self-assertion and is intimately tied to the exercise of our mental capacities. Where Burke's analysis of the sublime can perhaps help us understand something about how affective experience can contribute to student learning—by framing, for example, what happens when a student loses herself in a text or a painting in a kind of sympathetic identification with it—Kant shows us how the individual regains mental control over that kind of intense experience, and is thus valuable in understanding how an experience of intense engagement with an object of study might be linked back to the development of one's cognitive capacities. His moment of mastery corresponds very roughly, perhaps, with the fourth and fifth components of those "traditional" theories of creativity described above, when the individual evaluates and elaborates on the insight of the "aha!" moment.

My argument has moved from a description of "catch fire" moments in student learning, through analysis of the psychological concept of flow to provide a framework for understanding the process inaugurated by those moments, and finally to a discussion of what I see as the culmination of the flow experience: that complete absorption by something beyond oneself that is described in the literature of the sublime. Sublime moments, as I read them, are without doubt a part of the flow experience—part of what makes creative, cognitive insight possible—and perhaps also the insight itself (or the nearest we can get to a representation of it). Even as light is both wave and particle, sublimity is both experience and insight.

In developing this line of thought, I have been trying to come to terms with what is often seen as most elusive about the learning experience: what engages students in the first place and what happens when their engagement leads to those seemingly sudden moments of insight, those moments when they magically seem to "get it." Fink has argued that one can structure classes so that students are likely—though not guaranteed—to experience flow in the classroom: getting to know one's students well enough to set goals for them, ensuring that those goals are ambitious enough to "stretch" students but not so ambitious that they'll be frustrating, providing "*teaching and learning* activities that will offer learners the right level of challenge along with proper support" (all of these steps relate to what Csikszentmihalyi describes as finding "a balance between challenges and skills" [111]), and providing prompt feedback on their work (Fink 152-54). That process can create the utterly focused experiences that Csikszentmihalyi describes, the loss of self that seems to mimic the sublime experiences that Burke and Kant describe, and I would further suggest that, if one can increase the likelihood of a flow experience, then one can also increase the likelihood of a sublime insight or "aha!" moment. And one can—and must—develop ways of assessing whether those experiences have been achieved and what students have learned as a result.

Can We Assess Sublime Learning?[18]

Existing assessment methodologies perhaps begin to give us ways to understand when and why students experience the kind of learning I have described here. Charles Blaich points out that the "Need for Cognition" Scale (see fig. 1)—which measures "the tendency for an individual to engage in and enjoy thinking" (Cacioppo and Petty 116)—offers a possible first step. A "tendency" is a "disposition" rather than an outcome, but even a "disposition" to the kinds of thinking specified by this particular scale suggests a pleasure in immersing oneself in intellectual activity that is reminiscent of flow experiences and the sublime learning that I've been arguing is at their heart. And if this is the case, then what are we to make of the fact that—according to data collected through the Wabash National Study of Liberal Arts Education—there is a group of students whose "need for cognition" actually grows over the first year of college (Blaich)? And that this growth can actually be predicted by students' scores on a group of twelve questions—NSSE's "deep learning" scale[19]—which ask about how frequently or to what extent students have:

1. Analyzed the basic elements of an idea, experience, or theory, such as examining a particular case or situation in depth and considering its components;
2. Synthesized and organized ideas, information, or experiences into new, more complex interpretations and relationships;
3. Made judgments about the value of information, arguments, or methods, such as examining how others gathered and interpreted data and assessing the soundness of their conclusions;

4. Applied theories or concepts to practical problems or in new situations;
5. Worked on a paper or project that required integrating ideas or information from various sources;
6. Included diverse perspectives (different races, religions, genders, political beliefs, etc.) in class discussions or writing assignments;
7. Put together ideas or concepts from different courses when completing assignments or during class discussions?
8. Discussed ideas from [their] readings or classes with faculty members outside of class;
9. Discussed ideas from [their] readings or classes with others outside of class (students, family members, co-workers, etc.);
10. Examined the strengths and weaknesses of [their] own views on a topic or issue;
11. Tried to better understand someone else's views by imagining how an issue looks from his or her perspective;
12. Learned something that changed the way [they] understand an issue or concept.[20]

In other words, the twelve educational experiences identified in this group of questions make it more likely that students will experience a greater "need for cognition," and—again—if we can even speculatively link the "need for cognition" with the intensely engaged flow experiences that I have been discussing

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1. I would prefer complex to simple problems.
2. I like to have the responsibility of handling a situation that requires a lot of thinking.
3. Thinking is not my idea of fun.*
4. I would rather do something that requires little thought than something that is sure to challenge my thinking abilities.*
5. I try to anticipate and avoid situations where there is likely a chance I will have to think in depth about something.*
6. I find satisfaction in deliberating hard and for long hours.
7. I only think as hard as I have to.*
8. I prefer to think about small, daily projects to long-term ones.*
9. I like tasks that require little thought once I've learned them.*
10. The idea of relying on thought to make my way to the top appeals to me.
11. I really enjoy a task that involves coming up with new solutions to problems.
12. Learning new ways to think doesn't excite me very much.*
13. I prefer my life to be filled with puzzles that I must solve.
14. The notion of thinking abstractly is appealing to me.
15. I would prefer a task that is intellectual, difficult, and important to one that is somewhat important but does not require much thought.
16. I feel relief rather than satisfaction after completing a task that required a lot of mental effort.*
17. It's enough for me that something gets the job done; I don't care how or why it works.*
18. I usually end up deliberating about issues even when they do not affect me personally.

*Reverse scoring is used on this item.

Fig. 1. 18-Item Need for Cognition Scale, Cacioppo et al. "The Efficient Assessment of Need for Cognition" (307). Reprinted with permission of the authors.

(and at this stage this line of thought is no more than speculation or suggestion, an invitation to research), then we are on the road to assessing the frequency and effectiveness of sublime learning in a classroom.

Blaich's data map one possible path to assessing whether we are creating the conditions for flow experiences and sublime learning. His research has a complement in that of Thomas Nelson Laird and his colleagues, who have shown that those same NSSE questions cited above correlate positively with students "critical thinking dispositions" (Nelson Laird et al., "Predictive Validity"; Nelson Laird, "Unpacking") which Nelson Laird describes as "much like need for cognition" (E-mail to author). Both Blaich and Nelson Laird, then, are pointing to practices—those identified by NSSE's deep learning scale—that help make flow experiences and sublime learning possible, and still more direct measures of those outcomes can be imagined. One might ask, for example: "Have you ever been so totally absorbed in a book / poem / class discussion that you lost track of time?" Given that such experience can lead to cognitive insight (solving a problem, seeing a truth) that in turn should lead to a sorting, sifting and development of ideas of a recognizably academic sort, we could also inquire about the follow-up: "Did that experience give you insight into the central ideas of the book / poem / discussion" and "Were you were able to develop that insight in a class discussion / paper / exam"? In this way, we would begin to develop a way of measuring the seemingly unmeasurable, of furthering our understanding of that which has seemed to define an outer limit of what can be articulated and understood about learning.[21]

And so I conclude with a question: can we go still further down this road? If the answer is yes, then I would also ask whether those who would argue for this intensely engaged form of learning as a crucial part of undergraduate education could combine forces with those whose expertise would help us assess its effectiveness. Could disciplinary experts collaborate with assessment experts to develop a way of gauging whether students are experiencing flow and gaining the insight that can come with it?[22] Such learning is not just a means to an end but also an end in itself, a learning experience and learning outcome rolled into one, and while I do not know of a single instrument that measures both engagement and cognition—the linked characteristics of flow experiences and of sublime experience that have been the focus of my argument—that is just what is needed here.[23] Such an instrument could surely help us as we work to create sublime learning experiences and to assess exactly what is gained through them. That gain would certainly include the lessons of the task at hand (that is, the exercise around which the flow experience is structured), as well as the methods and subject matter of the discipline(s) in which the work is situated, to some degree at least, and may even reach more widely. Csikszentmihalyi links experiences of flow to happiness, and an education that can foster happiness—a happiness tied to learning—can sound clichéd but is surely a good thing. Such an education speaks to the whole person, and to a central goal of liberal education today. To the extent that the teaching of literature can contribute to those—even help to shape them—both the discipline and the larger project of liberal education benefit.

NOTES

1   These remarks on *The History Boys* are drawn from a presentation I initially made to the Council of Independent Colleges in 2007, and have repeated in other talks, for the American Philological Association, in 2008, and the American Council of Learned Societies, in 2009.

2   Thanks to Steven Mintz, Director of the Graduate School of Arts and Sciences' Teaching Center at Columbia University, for making me aware of Showalter's work on this subject.

3   Thanks to Charles Blaich, Director of Inquiries at the Center of Inquiry in the Liberal Arts at Wabash College and Executive Director of the Higher Education Data Sharing consortium (HEDS), for directing me to the concept of "flow" and for invaluable help in thinking through some of the issues I engage in this essay.

4   See especially Banta's *Assessing Student Learning in the Disciplines* (a volume that reprints articles from Banta's *Assessment Update*) and the program, departmental and disciplinary efforts catalogued by the National Institute of Learning Outcomes Assessment (NILOA).

5   Cole's essay in this volume also discusses this point.

6   Thanks to Charles Blaich for helping me understand this point.

7   Bloom and his colleagues' taxonomy of cognitive skills (published in 1956) still resonates today, mapping out development from simple to complex ways of knowing: knowledge, comprehension, application, analysis, synthesis and evaluation. Their discussion of affective goals, which appeared eight years later, is focused on the development of an internalized system of values via a five-step process that begins with "receiving" of "stimuli," moves through "responding" to them, "valuing" them, "organizing the values into a system" and finally "reach[ing] a point where the individual responds very consistently to value-laden situations with an interrelated set of values, a structure, a view of the world" (Krathwohl et al. 34-35). The second taxonomy has clearly not sparked the same interest as the first, perhaps for the very reasons that the authors identify when they discuss the "[e]rosion of [a]ffective [v]alues" in the articulated goals of a number of courses he and his colleagues studied: difficulty in measuring such outcomes, the time it seems to take to reach them, the "privacy" of one's personal values, and the fear that an education focused on affective outcomes would amount to "indoctrination" (Krathwohl et al. 16-18). That said, Bloom and his colleagues' identification of these two taxonomies is valuable, as is their acknowledgement of the fact that "cognition and affect can never be completely separated," and "the possibilities that one is in large part the effect of the other" (Krathwohl et al. 85).

8   Fink introduces his taxonomy on pages 30-31 and works with it throughout the book.

9   Krathwohl et al. discuss James' argument for the connection of the affective and cognitive domains as well (46-47).

10   For more on the line of thought that extends from James through Damasio, see Jonah Lehrer's discussion in *Proust* 15-22.

11 In this context, simulation is "the reenactment of perceptual, motor, and introspective states acquired during experience with the world, body, and mind" (Barsalou 618).

12 Connor's essay in this volume offers a complementary perspective on the sublime.

13 Csikszentmihalyi discusses major lines of research in this area, pointing to (a) psychoanalytic explanations that see "the curiosity at the roots of the creative process—especially in the arts" as "triggered by a childhood experience of sexual origin, a memory so devastating that it had to be repressed" and "the creative person" as "one who succeeds in displacing the quest for the forbidden knowledge into a permissible curiosity," using the "incubation" period to tap into subconscious concerns that are at the heart of the creative endeavor (101); and (b) research based in cognitive theory, which also "assume[s] … that some kind of information processing keeps going on in the mind even when we are not aware of it," but views connections between ideas as forming "more or less randomly," with those that are "robust surviv[ing] long enough to emerge eventually into consciousness" (101). He himself offers a third possibility, speculating that the distinction between "serial and parallel processing of information" may provide an analogy for how the brain seeks to solve problems, breaking them up into component parts so that it can work on them separately and in non-linear fashion (110-11).

 More recently, research in cognitive neuroscience has taken strides to understanding exactly how "aha!" moments work. Summarizing this work, Jonah Lehrer argues that the "insight process … is a delicate mental balancing act" that begins with focused "attention on a single problem" but then demands a time of "relaxation" (as researcher Mark Jung-Beeman, qtd. in Lehrer, put it), of "letting the mind wander," which creates the neurological conditions for insight to occur ("Eureka Moment" 43). That time of wandering is interestingly accommodated within the flow experience. Csikszentmihalyi quotes Freeman Dyson identifying the moment of relaxation, "shaving or taking a walk" as part of what allows the "merging of action and awareness" in the flow experience (119). Such moments open the mind to "unconventional ideas" and to the sudden "burst of brain activity" that, we now know, inevitably accompanies the "aha" moment ("Eureka Moment" 43), and are—I would argue, extrapolating from what Csikszentmihalyi writes—quite different from the sorts of distractions (thinking about "health or tax problems," for example) that disrupt the process of flow (Csikszentmihalyi 112).

14 In my discussion of Burke and Kant, I work with some of the ideas and that I developed in *Gothic and Gender: An Introduction*, making some of the same points and moving beyond/revising them on occasion.

15 Vanessa Ryan reads Burke much as I do, arguing that "Burke minimizes the role of the mind in the experience of the sublime and that he characterizes the sublime as a natural force that is by its very definition beyond man's ability to control" (267). She argues that a history of "[r]eading Burke from

a Kantian perspective has led critics to deemphasize the physiological basis of Burke's theory and has given rise to the view that he associates the sublime with an act of mastery and a sense of self-exaltation" (270).

16 As Ryan also notes, Thomas Weiskel comments on this aspect of Burke's writing on the sublime (270).

17 Lehrer's *Proust Was a Neuroscientist* makes a persuasive case for the ways that literature anticipates the development of neuroscience, and his opening chapter on Walt Whitman specifically takes up the question of mind to body, and of feeling to thinking.

18 "Sublime learning" is a phrase—and an idea—with a history, both of which I have pondered for some time. Laura J. Rosenthal and I used "sublime learning" in our 2007 "Request for Proposals" to this volume, and W. Robert Connor engages the idea in the Teagle Foundation's *Liblog* entry entitled "Magical Rationalism" (Sept. 9, 2009).

19 Nelson Laird, Shoup and Kuh discuss the development of the NSSE deep learning scale and place the scale in the context of other research on "deep learning." In contrast to "surface-level processing," in which students "focus on the substance of information and emphasize rote learning and memorization techniques," "deep-level processing" is "focus[ed] not only on substance but also the underlying meaning of the information." Deep learning is active and engaged, "represented by a personal commitment to understand the material which is reflected in using various strategies such as reading widely, combining a variety of resources, discussion [of] ideas with others, reflecting on how individual pieces of information relate to larger constructs or patterns, and applying knowledge in real world situations." Finally, "deep learning" involves "integrating and synthesizing information in ways that become part of one's thinking and approaching new phenomena and efforts to see things from different perspectives" (3-4).

20 See Nelson Laird, Shoup and Kuh for this table (24). Note that the table includes three additional items which were dropped, due to space constraints, in 2005.

21 In this volume, Walvoord's essay also arrives at a formulation of questions along these lines—numbers 8 and 9 of her list of proposed learning goals for undergraduate literature majors, and Sarah Goodwin's essay speaks directly to the question of sublime learning and its assessability. Charles Altieri's essay resonates with these and with mine in interesting ways.

22 Rachelle Brooks' study of liberal education outcomes in the disciplines of classics and political science (discussed in this volume) begins to model this kind of collaboration, though the outcomes on which that study focuses are critical thinking and post-formal reasoning.

23 While no one instrument assesses both engagement and cognition, Nelson Laird has commented that "[d]eep approaches to learning, as a construct, likely sits between common measures of engagement (time on task, frequency of contact with faculty, etc.) and the 'intense engagement'" that is my focus (personal communication).

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