Dispelling the Fog of Learning through SoTL

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Students, faculty, and administrators in higher education work in a pervasive fog, a state of diminished perception of those processes most relevant to learning, caused by a lack of information, unreliable information, and distorted information. SoTL can address this problem by clarifying providing needed information and helping to correct distortions.

Keywords

Fog of learning, Scholarship of teaching and learning, Information, Organizational change

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Introduction

> *[T]he general unreliability of all information presents a special problem . . . : all action takes place, so to speak, in a kind of twilight, which, like fog or moonlight, often tends to make things seem grotesque and larger than they really are.*

Every faculty member has surely had the experience. Immediately following a vivid and lucid explanation, setting the relative importance of issues and evidence in clear relief, a student raises his hand and asks "Will this be on the test?" Or if you have specifically warned against that formulation, perhaps it will take the form of "What are the most important points here?" Or, after leaving ample time for questions, no one has any, only to confirm on the quiz or in the papers that none of them really understood the concepts. It is a commonplace in faculty conversations that students, at least some students, seem to "walk around in a fog," can't get their bearings, ask the obvious questions but never ask the important ones. "What are they doing here?" we sometimes ask, "What are they thinking?"

The uncertainty of information, obscuring perception, distracting attention, creating illusion, is common to many human activities. In the passage above, Carl von Clausewitz (1976, p. 161) was writing about war, but this phenomenon of planning in a twilight or fog is not a product just of the violence of war but of the lack of reliable information. In their book *Co-opetition* (1996) Brandenburger and Nalebuff apply the principles of game theory to business. Business, they note, is not a zero-sum game like war, but "Games in business are played in a fog—not von Cluasewitz's fog of war, perhaps, but a fog nonetheless. That's why perceptions are a fundamental element of any game" (p. 198). Those of us in higher education see every day that perceptions are a fundamental element in the game of education.

I do not suggest here that education is either war or business. But as in both of those domains, the work of education is done in a figurative fog, obscuring perception, in a feeble light, making some things "seem grotesque and larger than they really are." Indeed, one of the definitive characteristics of the environment of undergraduate higher education is what we might call *the fog of learning*. Three closely related problems generate the fog of learning: (1) lack of information, (2) unreliable information, and (3) systematic distortion.

Lack of Information

We simply lack much of the information we need if learning is our purpose. The teacher developing a syllabus or preparing a lesson often knows very little about the experiences and expectations of students relevant to what she seeks to have them learn. And she knows little or nothing about what the students really believe or assume about her own intentions. She will note that those students often seem to be navigating the halls of academe with very limited visibility. For several years I followed the practice of asking students on the first day of class what their goals were for the class, aside from getting a good grade. The vast majority of the hundreds of students to whom I asked that question found it bewildering, even overwhelming. In a required general education class, they had no idea what they were doing there, no plan, no clear purpose. Yet much of my way of interacting with students, I discovered, was based on the assumption that they were much more purposeful that they turned out to be. Often the college dean or university provost is not much better informed when it comes to learning. The provost or president can tell you with great precision how many students are being enrolled in a given course. But they very often cannot tell you how students are being assessed in that course, what kinds of assignments the students are doing, or how the teachers are teaching. They often have no clear idea what students should learn in a given educational experience, and no idea at all whether they are actually learning. And in the case of faculty, students, and administrators alike, it isn't just that they aren't paying attention. They often don't know where to look, and very often the information that they need simply doesn't exist.

In the case of teachers, even the work of other teachers is invisible to them, and they must work socked in and isolated in the classroom. What Shulman (2004) has characterized as "pedagogical solitude" (p. 455) hides the work of one teacher from her colleagues. As Zemsky, Wegner, and Massy (2005) point out, this isolation "provides the necessary cover to explain both how and why most faculty and nearly all institutions have avoided almost all systematic explorations of the meaning and nature of teaching itself" (p. 125). Teachers work with only a view of the immediate workspace; all beyond is hidden, invisible.

Unreliable Information

It is not just that we don't have enough information; it is that we don't trust much of the information we get. We know intuitively what Argyris and Schön (1974, 1978) demonstrated over thirty years ago: that most of us don't do what we believe we should do. We have two kinds of theories that "rationalize" work in an organizational setting. Our espoused theory, often sincerely held, guides our expression of what ought to be. But our theory-in-use, usually unconscious, governs our behavior. Most people in most organizations, not just higher education, do not do what they say they should. As Argyris (1982) puts it, "Although people [often] do not behave congruently with their espoused theories . . ., they do behave congruently with their theories-in-use, *and* they are unaware of this fact" (p. 85). Astin (1993) noted, speaking of colleges and universities, "Institutions espouse high-sounding values, of course, in their mission statements, college catalogues, and public pronouncements by institutional leaders. The problem is that the explicitly stated values—which always include a strong commitment to undergraduate education—are often at variance with the actual values that drive our decisions and policies" (p. 235). Institutions that have administered both the National Survey of Student Engagement (NSSE) to students and the Faculty Survey of Student Engagement (FSSE) have often found

that what faculty believe about the way they teach and what students believe about the way they were taught differ dramatically. So students do not take what teachers say at face value. Chickering and Reisser (Qtd. in Muscatine, 2009, p. 129) put it this way:

> The professor's rhetoric may call for critical examination of diverse ideas, for creating one's own analyses and syntheses, for originality and developing one's own perspectives. But often, wittingly or unwittingly, evaluation and grading emphasize getting the right words in rote order or simple memorization for multiple-choice exams. Students quickly spot the disparity. They deliver what gets the best grade.

Muscatine (2009), notes that "Even if unintended, this sort of implicit dishonesty—and it is widespread in the whole higher education environment—promotes anxiety, distrust, cynicism, gamesmanship, apathy, and student duplicity" (p. 127). And the student duplicity, of course, undermines the confidence of faculty in reading student intentions.

Even when professors announce clear objectives and purposes, students take them with a grain or two of salt. "Is that going to be on the test?" often expresses an underlying suspicion: "I know you said it's important, but I don't know if I can trust you. Will your actions confirm or contradict your words?" Just as students sometimes doubt the reliability of their teachers, institutional claims made to recruit students often have little connection with reality. Terpstra and Honoree (2009) surveyed faculty at a random selection of institutions in the United States and found "that lip service may be given to teaching as the most important faculty activity, but in actuality, the reward structure is still heavily based on research" (p. 174). Even when people say what they mean—and it is often hard to tell about that—we know that they may say one thing and do another. All wander in the fog, uncertain, doubtful; what people learn in such an environment is skepticism and wariness.

Distorted Information

Much that we see in the educational environment is distorted: some objects are magnified beyond their real dimensions, some unnaturally shrunken or concealed. The structure of our work tends to frame our perceptions and reshape events. Schools and colleges, departments and majors, and the academic disciplines themselves divide up the world into artificial categories that are useful for some purposes, but confusing and distorting for others. Consider two of the nearly ubiquitous features that frame the work of faculty and students in the United States and several other countries: credit hours and grades. Designed just about a hundred years ago to provide some standardization for the high school work of students applying to college, the credit unit quickly became the almost universal metric of academic value in the United States. Wellman and Ehrlich conclude in their 2003 survey of its history and use, "Despite a common folklore that ascribes certain meaning to the credit hour, there are no uniform or even consistent definitions for it. Like the laws of the Queen of Hearts' croquet court, it is often mandated but not defined. . ." (p. 119). So the credit hour, both vague and important, is the fuzzy rubric for college success. "The bachelor's degree is equated with the accumulation of 120 credit hours, whether or not the learning sequences make sense or add up to clearly defined results. . ." (Wellman and Ehrlich, 2003, p. 120). It has made individual classes fungible, indeed interchangeable, but it has no discernable meaning in terms of the learning functions that students perform in a class; these it conceals rather than reveals.

Of course, the credit hour is not a free-standing structure. It enters the student transcript only when accompanied by a grade. A letter grade indicates the completion of a course and

some sort of quality modifier. But to what does the modifier apply, and just how? Like the credit hour, the grade, having no standard definition, is important but vague. Combine the two, for a series of courses, and you have a transcript, a frame for the ghostly data that the institution reifies as the criteria for reward.

What the transcript reports about the student who receives a "B" in a three-unit class is a mystery that will be forever beyond interpretation, perhaps even by the student and teacher involved. But credit hours and grades, because they can be seen clearly, because they are set forth in the transcript, "seem grotesque and larger than they really are." The deceptive clarity of grades causes both students and teachers to act on them, even to act against their own interests, and against the interests of learning. In a fascinating study, Pollio and Beck (2000) surveyed students and faculty, using the LOGO (Learning Orientation-Grade Orientation) instrument, to discover whether students were more oriented to learning the material in courses or to getting good grades. They found that students tend to be more grade-oriented than learning-oriented, *and that they wish they were not*. Likewise, faculty believe students are more grade-oriented than learning-oriented, *and wish they were not*. In general, the students blame the faculty for this while the faculty blame the students: "both students and professors want the same changes—stronger emphasis on learning, weaker emphasis on grades—and both seem to hold the other responsible for the present. . . situation—weak emphasis on learning and strong emphasis on grades" (p. 98). One explanation Pollio and Beck offer for this paradoxical situation is "a belief in the validity of numbers in disregard for how they are produced. . . [This] seems to operate on the assumption that if a number can be applied to some phenomenon, it must refer to something real in a precise and meaningful way" (p. 100). Credit hours and grades, lacking any clear definition, fail to refer to any consistently identifiable reality. But because the institution reifies them and counts them, they become larger than life, and emerge, vast, distinct, and enumerated, from the surrounding fog that shrouds the reality and substance of learning.

The Role of SoTL

The fog of learning—obscuring the vision, slowing the progress, and deadening the hope of nearly everyone connected with colleges and universities—is not an inevitable feature of the academic climate. It is a product of the failure to cast a light on what is important and relevant to student learning. One of the chief means of shining the light where it properly belongs is the scholarship of teaching and learning (SoTL). But if SoTL is to disperse the fog and make the learning process more visible, we should pursue it with that priority in mind.

First, SoTL should seek to reveal what is now hidden, should seek to counteract and diminish the fog of learning. That means especially that it should explore the way students learn, their attitudes and expectations about learning, and the way the academic environment affects their choices about learning. When students wander about in a fog, we should study the fog, and then study what is behind it. Hence we should avoid excessive reliance on information defined by organizational structures rather than learning processes. When we learn that a given pedagogical practice leads students to get higher grades, what have we learned? Not much, unless we can say what those grades mean, on what assessments they are based, and how students changed to achieve them. Testing a given process with grades is likely to move the confusion around rather than dispel it. In contrast, Schroeder (2007) describes how the University of Wisconsin-Milwaukee has linked SoTL projects to the NSSE Benchmarks, such as Active and Collaborative Learning or Level of Academic Challenge. This process, rather than framing what we learn with undefined

organizational icons, ties the specific research projects to a larger body of research that can anchor our new understanding. Likewise, where an institution has developed and adopted learning outcomes, using SoTL to refine, explore, and evaluate those learning outcomes is an approach grounded in real learning processes.

Second, research about learning should extend beyond the classroom; it should address the learning students do outside the classroom and fundamental institutional processes. Hutchings and Shulman (1999) suggested a decade ago that classroom researchers needed to "go meta": "with an eye not only to improving their own classroom but to advancing practice beyond it" (p. 13). This is implicit in the idea that SoTL should entail the publication, in some form, of its results. Consistent with this idea, they proposed that we reengineer "institutional research" to address the core questions. Today, institutional research is mainly research about the structures and functions that the organization has reified: grades, degrees, retention. Indeed, a great deal, perhaps most, institutional research consists of manipulating data derived from transcripts. This tends to reinforce the false gigantism of the organizational features, distorting or obscuring the learning process.

> Imagine, instead, [Hutchings and Shulman suggest] a kind of institutional research that asks much tougher, more central questions: What are our students really learning? What do they understand deeply? . . . How does our teaching affect that learning and how might it do so more effectively? . . . If we reconceived "institutional research" to be about such questions, . . . then the scholarship of teaching would not be some newly conceived arena of work, or a new route to tenure, but a characteristic of the institution that took learning seriously. (p. 15)

Just as SoTL should not be bound to the classroom, it should not be bound to the discipline. Weimer (2008) has pointed out that much SoTL is conducted within disciplines, published in disciplinary publications that are generally read only by members of the discipline, and largely redundant of research already done in other disciplines. So the reach of such scholarship is limited. "Good discipline-based scholarship," she writes, "is seen by a very few when it is relevant to very many" (p. 1). One of the attractions of discipline-bound scholarship, of course, is that it is more likely to appear relevant to discipline-bound tenure and promotion decisions. New faculty will find research more appealing if they can approach it with the tools they have learned in their disciplines. But SoTL is not fundamentally about academic disciplines; it is about learning, with adjustments for academic disciplines. If the credibility of research about learning ultimately derives from the discipline, then learning is always in the background, likely to be fogged in and left out. "Your typical professor," Muscatine (2009) notes, "is hardly aware of new thinking in education, does not read educational periodicals, and rarely goes beyond the academic department in discussing problems of teaching and learning. The dominant idea is that professors deal with subject matter; 'education' is for high-school teachers" (p. 97). While I believe that SoTL is changing this, it will change faster if we come to see that research about learning is foundational and trans-disciplinary; disciplinary research on learning needs to be built on the foundation of trans-disciplinary research common to all fields. Therefore, the preparation of graduate students for teaching careers should prepare them to see the relevance and connection of research that casts light on the learning process.

Finally, if we self-consciously seek to disperse the fog of learning, then we should approach SoTL as part of a larger project of organizational transformation. I have suggested before that institutions need systematically to provide better information than they have in the past (Tagg, 2003, 2008). SoTL is an irreplaceable part of that process. Most faculty members who do SoTL do so in large measure to teach their classes better. That is as it

should be.   But one of the lessons we are learning from these efforts is that the classroom experience of students is not simply a product of a single teacher's decisions but is shaped, and often warped, by the expectations that the larger college environment creates. Imagine the difference it would make if students entered each class understanding what they were there for, seeking to achieve some personal purpose that gave value to the project from the outset, and believing that the teacher shared and supported that purpose. Students learn information and skills in classes, to be sure. But it is through the combination of classes, the sequence of classes, and the experiences outside of and between classes that students learn the strategies they will follow as learners. What if the lesson they learned in their first semester was not that every class must be approached as if a different country and a different culture—What does *this* teacher want?—but that each class builds toward a common goal, that they are connected in ways that aren't magical and mysterious and ultimately impossible to fathom, but in ways that are vivid and meaningful and lead someplace that students want to go?

We have adopted the word *curriculum* from Latin, where it referred to a race or a racecourse. Today, we ask students to run the race in the fog, without a clear view of either the course or the finish line, and too often they wander aimlessly—because they can't see what to aim at. SoTL can help us to show them the way, but if it is to do so we must put the parts of it together and follow the lessons it teaches, to cast light on the whole, not just the parts of this great enterprise. When they were surveyed in 2004, half of the participants in the Carnegie Academy for the Scholarship of Teaching and Learning (CASTL) believed that in the next ten years SoTL would "contribute to widespread change in how student learn in postsecondary classrooms" (Huber & Hutchings, 2005, p. 126). That should be the project: not to muddle through a little better, but to light the way to transformational change.

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