

A Debate on Intentional Learning

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Resolved: *Intentional Learning is impossible without in-class concurrent and collective reflection on out-of-class experience.*

Background. The more we emphasize the need to teach practicality in the classroom, the less likely it is that our students will acquire practical skills or combine them with traditional classroom learning. This session foreshadows a resolution of this paradox through a debate suggesting that intentional learning is impossible to accomplish without exposure by students to real-world experience combined with concurrent and collective reflection on that real-world experience.

Recent scholarship on contextualized or situated learning suggests that intentional learning may be difficult to accomplish, if not impossible, without exposure on the part of students to real-world experience, but even more importantly, to concurrent and collective reflection on that real-world experience. Yet, it appears that this very scholarship is often not heeded in the world of higher education (even by the AAC&U). The associated field of adult learning, applying as it does to postgraduate students and beyond, appears to appreciate many of the principles and practices of situated learning.

So, we appear to have a paradox. There is an attempt to educate students to become more intentional learners through new teaching strategies and curricular designs that add an element of practicality to the classroom. Although such experiments are applauded, they may do no more than assist students to become masters of verbal representation or of simulation. A student may win the “Office Management Decision Game,” but may subsequently fail at the game of life. Yet, when it comes to intentional learning, we aspire to have our students master practical as well as intellectual skills and to not only know *a priori* about their social and civic worlds, but to know how to inquire about them continuously while in them.

The Debate. Our debate has two teams, the *Avant-Garde* who argue for the resolution above and the *Realists* who argue against the resolution. The following summarizes key points in the debate.

Avant-Garde. I’d like you to come with me into the cave Plato describes in his *Republic* [Republic]. A dark home to prisoners who have never had the freedom to venture outside, the cave is lit only by a large fire which casts shadows on the wall of all the comings and goings of life beyond the cave. Because they have known no other life, the prisoners believe the shadow to be the thing itself, never realizing that there is reality beyond the shadows.

You might assume that the humanities would be the last hold out to alternative, innovative ways of teaching—we roam around in history and theory, and, the assumption goes, never see the light of day. But, following Plato’s descriptions of knowledge and learning the humanities, like other disciplines, is compelled to begin with the student’s experience and move from experience into theoretical, albeit philosophical pursuits. Plato argued that the way to ‘knowledge’ is to begin with experience. Any other path, he argues will fail.

The prisoners in Plato's cave serve us as a twofold metaphor. The first, sadly, is the professor imprisoned in a mode of pedagogy that does not engage the student in the experiential realm but rather provides the details of the material with the hope that the students will somehow apply what they've learned when they venture into the world beyond the pale. But like the shadows on the wall, theory without the experiential component is simply illusion. Theory points to reality, to be sure, but it is our task to make theory participate in the reality to which it points. The second function of the metaphor is to see our imprisoned students. Trapped in the classroom of shadows that are devoid of experiential reflection, the students may learn something but the dialectic between theory and application will be harder to engage. To free and enlighten our students we must bring their experience directly into our classrooms. To launch the appropriation of theory to the workplace, we must begin with experience. As Plato notes, if someone looks in the wrong direction, in this case, toward the shadows, he or she will continue to mistake illusion for reality.

Let me illustrate the point I am making by drawing from the area of applied ethics. A typical way of teaching ethics to the professions is to introduce students to the code of ethics particular to their respective professions and then to develop the complexities of ethical theory with heavy doses of philosophical works. The codes of ethics, some short some quite extensive, closely resemble each other in form even though the styles and language each profession uses sometimes differ sharply. All professional codes include the following:

- 1) The (insert name of profession) should always uphold his/her duty to the patient/client;
- 2) the _____ should always follow the directions of his/her supervisor;
- 3) the _____ should never do any action that contradicts the best interests of the client/patient.

It is relatively simple to go over the components of these codes of ethics. One could even devise a multiple choice or better yet a true and false exam to test their familiarity with the facts of their particular codes. Thus, armed with the codes and lengthy readings from the corpus of ethics, the student could march into their professional arena fully armed with ethical theory.

The student would quickly discover, however, that ethical theory and codes of ethics are like the shadows on the cave wall and that real world produces ethical dilemmas with the brightness of the sun illuminating all the complexities that theory and codes at best hint at and at worst completely disguise.

I'd like to draw on a classroom experience to demonstrate the points I am making. Because our university is located near an abundance of medical facilities, many of our students find themselves on co-operative education jobs supporting the wide range of experimental protocols taking place in the Boston area. One such student took on an exciting and prestigious placement working with a team running an experiment on hypothermia. The subjects were eighteen and nineteen year old male volunteers. As part of the class reading, we had examined codes of ethics, theoretical materials and the major codes dealing with experimentation, namely the Declaration of Helsinki (in all its permutations) and the Nuremburg Code. Like professional codes of ethics, the experimental guidelines of Nuremburg and Helsinki consist of admonitions not to do certain things such as putting other interests before the patient and running an experiment where the subjects are coerced. Experimentation is, in general, rife with ethical conflict

because the good of the many is the aim but the experiment is conducted on individual patients. To be sure, the codes acknowledge this but they cannot demonstrate how complicated this might be for an individual working for the experimental team. The student working with the experiment began to share with his classmates two main concerns. First, he wondered if the high payment the subjects received for their participation was high enough that it was, in fact, coercive. Second, he realized that if he focused on the goal of the experiment which was a clearer understanding of hypothermia, he did not have the best interests of the subject in mind. His code of ethics told him to report his concerns to his supervisor—so did the Nuremburg and Helsinki codes. This would not have been prudent, as you can imagine. What seemed like a simple situation became, for him, increasingly complex. His discomfort with the experiment was something he felt before he understood why. Through his reading and discussions in class he was able to articulate the problems in this particular case and in experimentation in general. In response to this experience, other students began to reflect on their own ethical dilemmas, to analyze and assess the situations in which they found themselves. By integrating their reading and experience, the students developed a deeper understanding of both theory and experience; they were able to diagnose and analyze with fluency the complexities of ethics in the world.

In the closing paragraphs of his discussion of the Cave, Plato notes that on being freed from the cave the prisoners do not trust their new experience, believing instead that the shadows are the reality. But once they become acclimated to being closer to the truth, they come to value the closer proximity to the truth of their new way of seeing.

Realists. The argument made by the *Avant-Garde* has the potential to lead us to repeat recent history rather than learn from it. To see this, consider the report [Integrity] of the Association of American Colleges. The date of this report, 1985, marks the midpoint between the sixties and the present. As noted in the report, during the nineteen seventies and into the eighties, what passed for a college curriculum could be characterized by “almost anything goes” [Integrity, p. 2]. The report notes that the loss of integrity in the college curriculum resulted from a loss of rigor that “encouraged the false notion that there is such a thing as effortless learning” [Integrity, p. 3].

As we seek to have our students become intentional learners and achieve the outcomes for students listed in [Greater Expectations], we must be mindful of the recommendations in [Integrity] and the history that spawned them. (See also [Third Way].) Among the recommendations in the Integrity report is that students should “experience study in depth, concentration in a discipline or group of disciplines” [Integrity, p. 23]. From this the following two lessons can be learned by students:

1. “The joy of mastery, the thrill of moving forward in a formal body of knowledge”
2. “no matter how deeply and widely students dig, no matter how much they know, they cannot know enough, they cannot know everything. Depth is an enemy of arrogance.” [Integrity, p. 24]

My point is threefold; namely, the strategies of the *Avant-Garde* (a) are absent of meaning without intellectual rigor, (b) are misleading because they can tempt us to replace intellectual rigor with an effortless, anything goes attitude without acknowledging it and thus, (c) can doom us to repeat the loss of rigor in the college curriculum of the seventies and hence repeat, rather than learn from, past experience.

Avant-Garde. I would like to demonstrate our position by conducting an actual experiment in reflective practice. Rather than “tell” the audience how practice-oriented models can enrich our learning from the conference or presenting a case that illustrates the benefits, I ask the attendees to form small groups of 3-4 and, in turn, dialogue about two questions:

1. What have you learned so far in this conference about how to help students become more intentional learners?
2. What one or two practices or tools, if any, have you taken away from this conference that you plan to put immediately into use when you return to help deepen student learning?

In using this approach, I am attempting to demonstrate that learning can indeed occur in the midst of practice rather than more conventionally as a representation transmitted from teacher to student. Instead of banking knowledge into one’s mind, knowledge can be viewed as an interactive contention among a community of inquirers who share meanings, interpretations, and ideas.

Our “avant-garde” side is not denigrating experiential activities within the classroom; it’s just that we wish to do more. We want more for our students than helping them become masters of verbal representation or of simulation. It’s not so much winning the “office management decision game,” but as intentional learners – who can adapt skills learned in one setting to problems encountered in another (as in the workplace or in the community) – it’s about winning the game of life.

In mastering practical skills, we hope that our students will know not only *a priori* about their social and civic worlds, but will know how to inquire about them continuously while in them.

Realists. The classroom can be an exciting place of rigorous thinking and engagement. Consider; for example, a course titled *Science in Confrontation with Authority: the Drama, the History, and the Science*. This course, offered in the Spring of 2004 at Brown University, has the following course description: “Scientists and scientific ideas have had well publicized confrontations with authority. Among the most famous are those of Galileo and Darwin. Current examples include arguments over stem cell research, as well as the creationist/evolution controversy. In this course through a study of the science and the history, we will explore the nature and/or the necessity of these confrontations.” This course, taught by a Nobel Laureate in Physics, offers the prospect of developing an intellectual rigor that yields a deep perspective on current issues that you won’t get any other way. As noted in [Greater Expectations] the intentional learner is empowered through intellectual skills.

Here is a second example. Eric Mazur teaches Physics at Harvard. He makes a number of efforts to engage the students actively with the class material including using remotes to gather opinion on the correct answer to a problem, creating opportunities for students to briefly consult with their neighbors in the seat next to them (peer learning); etc. He also walks up and down the aisle and listens in on these discussions for insights into the wrong answers as he claims to find that instructive in teaching. These and other devices are designed to engage the student so that the material penetrates to the point that the students can use it, even with common sense, to solve problems.

The famous example from his book of students learning but not knowing what they learned is when he found after one quiz that a good percentage of his students got the

answer correct when asked to use formulas to analyze changes in a parallel electronic circuit, but failed to get the simpler answer right when asked to say whether a light bulb got brighter or dimmer when a switch was closed. The devices described above are designed to prevent this kind of superficial learning from happening.

(See www.columbia.edu/cu/gsap/BT/RESEARCH/mazur.html)

My general point is that this learning is what experiential education teaches – how to put your knowledge to use. I would not want to suggest that experiential education should be replaced, but my point in our debate is to not allow sub-optimal teaching to be excused when experiential education is also applied. We need to do both well.

Closing. The moderator of the debate concluded the session by indicating that all four of the debaters, regardless of what they may have said during the debate, are supporters of experiential education. But all four also believe that experiential education alone cannot provide the sole basis for a complete education. It is experience beyond the classroom, generally beyond the campus, combined with a safe environment that allows the student to reflect upon what she or he has observed, noticed, and participated in, that contributes significantly to a traditional classroom education. It is helpful in this protected haven to share with peers who are supportive and can also share their experiences. In this environment, students can relate their experiences to material they have read, to theories they have discussed, and experiments or simulations from the classroom experience. It is the experience of all of our debaters that experiential education and reflection, combined with classical education develops students with greater analytical skills, a stronger ability to problem solve, and the poise to interact and communicate with more experienced adults as equal peers.

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The following page is a handout given to participants in the session.

Substantive Themes from the “Debate on Intentional Learning”

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The Realists	The Avant-Garde
Learning occurs in the classroom	Learning occurs in the midst of practice
Learning occurs as a transfer of representations	Learning is constructivist
Learning begins with text	Learning begins with experience
Learning results from mind expansion	Learning results from observation and selective retrieval of salient information
Learning is private or individual	Learning is collective
Learning is static	Learning is interactive
Knowledge is deployed either before or after practice	Knowledge is deployed in conjunction with practice
Knowing is a didactic practice	Knowing is a dialectical practice
A faculty member’s primary identity is research in the discipline	A faculty member’s primary identity is as a facilitator of student learning
Students should learn a discipline in depth	Student learning should be trans-disciplinary
Knowledge has value in its own right	Knowledge is to be used in service of action
Learners learn how to ask critical questions	Learners become critical

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Also see the link to the Center for Work and Learning’s Practice-Oriented Education Bibliography:
<http://www.poe.neu.edu/resources/bibliography.html>