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TEACHING

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At Top Hat, we're committed to helping you create an agile classroom.

In software-building circles, agile has become a well-established methodology. The idea behind agile is that we don't get things perfect the first time. That learning—and mastery—is an iterative process. That a continuous feedback loop—learn/try/fail—is the fastest way to acquire knowledge and improve.

Of course, agile is not a new idea in education. It goes back 2,000 years, to Socrates. The Socratic method of teaching was all about continuous feedback—about asking students questions and using their feedback to gauge their knowledge.

But somewhere along the line, higher education moved off this path. As university became something for the masses and enrollment swelled, it was no longer possible to teach in an agile way. With the exception of small, upper level seminar courses, teaching became lecturing—one-way instead of two-way.

More recently, the pedagogical concept of "active learning" has been used to address the drawbacks of a passive teaching environment. With active learning, courses are designed to increase connections between the student and the material being learned, ultimately driving higher student motivation, engagement and outcomes.

Today virtually every student enters the classroom with an Internet-connected smartphone in their hands. By harnessing that technology, we have been able to re-create—and even improve upon—that classroom of 2,000 years ago. Professors can now know who has done the reading, what they understood and where they had challenges before students even set foot in the classroom.

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Technology has enabled the Socratic method to work at scale. By applying an agile ideology to the way we teach and build our courses, we can more quickly address student needs and, ultimately, improve outcomes. **And isn't that the goal?**

The Top Hat Team
tophat.com

Introduction

Teaching and learning are central missions for higher education. That has always been the case. But what is taught? And how is the material delivered? These are questions for which the answers are changing all of the time.

Innovation takes place in individual classrooms and in how the curriculum is organized. Some changes are unique to individual professors and institutions. Other changes reflect broad shifts in academe. And even amid all of this change, experts continue to identify teaching and curricular approaches that may be ripe for transformation.

The articles in this booklet explore the approaches being used in classrooms and throughout colleges. *Inside Higher Ed* will continue to track these changes. We welcome your feedback on this compilation and your suggestions for future coverage.

--The Editors
editor@insidehighered.com

Asking Essential Questions at Ursinus

College doubles down on its residential liberal arts mission with new core curriculum.

By Colleen Flaherty // October 15, 2018

A Common Intellectual Experience class at Ursinus College

SOURCE: URSINUS COLLEGE

Ursinus College's Common Intellectual Experience has long been one of its crown jewels. So when it came time to rethink Ursinus's core curriculum, it seemed natural to draw inspiration from the year-long sequence, which asks freshmen to ponder some of life's biggest questions with readings that stretch from Plato and Sappho to Ta-Nehisi Coates and Alison Bechdel.

The result of Ursinus's years-long core revision is a curriculum based on four questions, to be asked throughout one's time on campus, in the classroom and elsewhere: What should matter to me? How should we live together? How can we understand the world? And what will I do?

Basing a curriculum on four enduring questions may seem innovative, and in many ways it is. But it's also a doubling down on what Ursinus already thinks it -- and liberal arts colleges generally -- does best.

"One way of looking at this is, it's less about content than it is about transformative personal experience," said Mark Schneider, vice president of academic affairs and dean. "I see so much potential here to capitalize on the residential liberal education experience in ways that we haven't done before."

Some questions are bigger than any one class:
What should matter to me?
How should we live together?
How can we understand the world?
What will I do?

Ursinus's Open Questions Core, adopted this year for incoming students, seeks to improve on a previous core by being a fundamentally iterative process. The idea is that everyone on campus knows these four questions, reflects on them often and takes note of their evolving answers.

Beyond that, the new core has a linked inquiry requirement to promote team-taught or paired courses that emphasize interdisciplinary learning communities. There is also a core capstone requirement, among other features.

The core starts with the two-semester Common Intellectual Experience, which for two decades has asked Ursinus freshmen to consider versions of the questions that now undergird the entire curriculum.

"At a certain point, we thought, 'Why don't we take the principles of the first-year course, specifically the question-based approach?'" said Paul Stern, a professor of politics who helped revise the curriculum. "So now the entire core is oriented on what we think are four essential human questions."

He added, "These are genuine questions. We don't think it's our

job to prescribe the answers and we don't necessarily have the answers -- if we did, we could hand them out on the first day of class and save everyone a lot of effort."

The Common Intellectual Experience, which is limited to 16-student sections that sometimes meet together as a class, still introduces students to all these questions via a shared curriculum that is built by faculty consensus. But its signature question is now, "What should matter to me?"

Students hopefully gain self-knowledge, to help them develop, in Ursinus's words, "a considered, independent and responsible life." Critical reading and writing, making arguments and discussion skills are emphasized.

Requiring students to look outward, to questions of community, large and small, Ursinus also requires that students take three courses addressing the question "How should we live together?" These courses must satisfy the following learning goals: engaging diversity and inequality, examining global interconnections, and considering related "obligations." No more than two classes can be taken within a student's major.

"How can we understand the world?" is addressed, part, by the linked inquiry requirement. Students generally must also take one course that satisfies each "Ways of Asking" requirement -- similar to distribution requirements elsewhere. These are humanistic inquiry, deductive reasoning, quantitative reasoning, social scientific inquiry, scientific or experimental inquiry, and art or performance.

A two-course sequence in the same foreign language also is required.

Students return to more individ-ualistic inquiry via the final question, "What will I do?" An experiential learning project, including a post-project reflection, and a core capstone are required here. Core capstone courses are designated as such, and Ursinus sees much room for experimentation and innovation.

Schneider, a physicist, co-taught a pilot capstone last year with a colleague, focusing on health care in the U.S. Schneider recalled that one group of seniors decided to pitch a multicultural education requirement for health-care providers in Maryland, one group member's home state.

"This is an opportunity to draw on all of these diverse experiences, so you're really making sense of everything you have learned," Schneider said of the capstone. The group aspect also is key, he said, as students gain experience in project management and consensus building with peers from different departments. Ideally, these capstones will have some real-world application.

Asked how many credits the core takes up, Schneider said there's no exact number: students may double-count courses to fulfill various requirements. But most students will spend about one-quarter to one-third of their total credits pri-or to graduation explicitly working within the core, he said, underscoring the Ursinus's goal that students will be asked to consider all four questions beyond the core, as well. Faculty members within students' majors, along with academic and career advisers, staff, peers, and extracurriculars all may play a role, he said.

"This is going to be our biggest challenge -- how do we enforce that in a way that is meaningful, as opposed to just window dressing?" Schneider said.

Stern suggested that much will come down to communication. "Something we're obligated to do as a liberal arts college is actually have the faculty say what we think a liberally educated person should learn and think about while they're here. And we need to explain that first of all to ourselves, and then to students and prospective students. What is the driving impulse? Why do I have to do that?"

He added, "If we want students to be reflective about their education, we ought to have some very good explanation as to why we're doing this."

Jonathan Marks, chair of politics, who was not directly involved in revising the core, and who described himself as a curricular revision "skeptic," said there's evidence to

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believe that the approach is working as envisioned at Ursinus. This semester, for example, Marks said he was working to publicize an event on free speech and hate speech and was told by a student affairs staff member "that I'd have an easier time if I could explain how the event related to at least one of our four questions."

Marks also said he now sees that the core communicates the institution's "Socratic mission," in that it "puts fundamental questions -- what should matter to me, how should we live together, how can we understand the world, and what will I do? -- at the center" of everything.

While Ursinus says its questions aren't a direct response to the current political moment, Marks suggested that they do speak to the current discourse in terms of what ails it: it's "not that people lack reasoning skills," since they're "often quite good at poking holes in other people's arguments." Rather, he said, "not many of them have experience or take pleasure in pursuing the kinds of questions about which reasonable people disagree, in trying to follow arguments where they lead and in shaping what they think and do on that basis."

Without that kind of experience -- which the core facilitates -- disagreement is often avoided, he said, by finding a "way not to listen" or overpowering or "shutting up" one's opponents.

Asked what he thought colleges should prioritize in curricular reform, Marks hesitated to generalize. But he ventured that colleges and universities would "do well to build on their existing missions," as is the case at Ursinus.

While rolling out a new curriculum, sooner rather than later, seems to be part of a "consulting playbook," he said, the new core was born of a real desire that the "spirit" of the Common Intellectual Experience "inhabit the rest of the college. We don't think that we're likely to do better in this environment by panicking and changing course."

That doesn't preclude a hope that students love the core and enroll in "droves," however, Marks added.

In a challenging time for many small, private colleges, Stern said, "the best thing we can be is exactly what we are. We were set up to provide exactly this kind of education, as a residential college that asks students to think about how to lead the best life."

Louise Woodstock, chair of media and communication studies, said that the Common Intellectual Experience "reflects the view that a liberal arts education should be about open-ended exploration of challenging ideas and questions." And the Open Questions Core extends that "focus on inquiry into the curriculum in a holistic way."

Woodstock noted that research

indicates that metacognitive skills, or students' ability to understand their own learning process, are "a powerful determinant of academic success." And the core "fuses" an emphasis on metacognition with the liberal arts tradition, she said.

Roosevelt Montás, director of the Center for the Core Curriculum at Columbia University, has previously praised Ursinus's Common Intellectual Experience. He said recently that organizing a curriculum around the experience "forces faculty to think outside of their own specialization and fields of interest, and to consider the broader aims of an undergraduate education."

Echoing Stern's comments about the role of the liberal arts faculty in shaping the curriculum, Montás asked, "What kind of knowledge is most valuable when you consider the students' entire education -- and life -- and not just their training in your field of expertise and interest?" The commitment to a common intellectual experience demands of the faculty an answer to the question, "What should students learn?" and provokes a conversation "about the meaning of education that is all too rare in today's academy," he said.

That makes the shared intellectual experience as valuable for faculty as it is for students, who gain a "foundation to speak across difference," he added, since the "benefits accrue across the entire culture of an institution." ∎

https://www.insidehighered.com/news/2018/10/15/college-doubles-down-its-residential-liberal-arts-mission-new-core-curriculum

Connecting Data Science to 'Almost Every Domain of Inquiry'

As reach of big data and AI grows, UC Berkeley and Massachusetts Institute of Technology unveil plans for major expansions.

By Greg Toppo // November 2, 2018

SOURCE:
MIT/CHRISTOPHER HARTING

If you don't believe that big data and artificial intelligence are here to stay, just ask Alexa: "What academic disciplines this fall are driving two major research universities to reorganize?"

The University of California, Berkeley, and Massachusetts Institute of Technology are doing just that, creating entirely new institutions within their campuses to come to terms with the ubiquity of data and the rise of AI -- and to accommodate a surge in popularity that these fields are generating among students and employers.

Berkeley on Thursday said it plans to form an entirely new division, to be tentatively called the Division of Data Science and Information, that will engage faculty members and students across the flagship UC campus. The division, officials said, will be led by a new associate provost and connect departments as disparate as UC's College of Engineering and its College of Letters and Science.

The announcement follows a similar one last month at MIT, which unveiled plans to build an entirely new, $1 billion college devoted to AI, data science and related fields. MIT said it had already received a "foundational gift" of $350 million from Blackstone co-founder Stephen A. Schwarzman. The new college, on MIT's Cambridge, Mass., campus, will bear his name.

MIT Schwarzman College of Computing will create 50 new faculty positions, both within its walls and across other departments, MIT said. It will "reorient MIT to bring the power of computing and AI to all fields of study," nearly doubling the institute's academic computing staff and giving its five schools "a shared structure for collaborative education, research and innovation in computing and AI."

Marty Schmidt, MIT's provost, has said 40 percent of MIT undergraduates now major either in computer science or earn a joint degree that includes computer science. Teaching all of those students puts a strain on MIT's existing computer science faculty, he said.

But these students "don't want to code for life," Schmidt said. "They want to gain these skills that allow them to apply them in their discipline."

To that end, MIT also is pushing faculty members to become what it calls "bilinguals" who have a foot both in their discipline and in computation. "That creates individuals who can really bring these advanced tools to the disciplines," he said.

MIT previously has created interdisciplinary research labs but struggled to bring that approach to instruction, Schmidt said. To make it happen on a large scale, MIT decided it needed a new college, not just an expanded computer science department.

Berkeley provost Paul Alivisatos said that simply expanding the university's existing computer sciences department would not be enough to match the surge of interest.

"Pretty much any field of inquiry and knowledge connects to [data science]," he said. "We wanted to create a structure that would allow

Connecting Data Science to 'Almost Every Domain of Inquiry'

that new methodological development to grow more, but also allow it to be widely used everywhere, where it can be beneficial."

He said Berkeley envisions incorporating faculty members from fields as varied as sociology, public health and physics into a kind of "data science commons" to deepen their research. "From what we can tell, pretty much every part of this university wants to be involved, which is great."

The field, Alivisatos said, is forcing other disciplines to come to terms not just with the widespread availability of data from diverse sources, but with "new methods that allow it to be sifted and analyzed."

David Culler, Berkeley's interim dean for data sciences, said the new division will be a peer of the university's other schools and colleges. "But rather than standing apart from them, it's really integrated with them," he said, since these days, data science "touches almost every domain of inquiry."

Culler said Berkeley, like most major universities, has been "grappling with this for at least five years" as it tried to figure out how to fit new computational disciplines into the broader world of other academic fields.

"The frontiers of knowledge are extremely integrative, and yet to a large extent, institutions of higher learning are very hierarchical," he said.

Berkeley officials said another reason for the new division has been the sheer popularity of data

science among students: two recent data science courses have turned out to be among the fastest-growing ever, they said.

One of them, Foundations of Data Science, saw enrollment grow from 100 in 2015 to 1,300 this fall. Its more advanced follow-up course, Principles and Techniques of Data Science, grew from 100 students in 2016 to 800 this fall. Berkeley this fall also announced a new integrative data science major.

"The moment we opened up the major, we started getting a flood of predeclarations," Alivisatos said, noting that 1,070 students have already said they plan to major in data science after their first year of preparatory course work.

Alivisatos said he was talking last Monday with a biology student who told him he'd taken the data course and decided to use what he'd learned to more closely analyze data sets on bird flight. Another, who is earning a Ph.D. in law, said he'd become convinced that big data represents the future of the legal profession.

"My sense is that this is not a casual transformation," he said. "This is something that's going to be here a very long time."

Recent research has suggested that a shortage of job candidates with fluency in data science and analytics is among the nation's most yawning of skills gaps. The Business-Higher Education Forum, a nonprofit membership group of Fortune 500 CEOs, college leaders and the consulting firm PricewaterhouseCoopers, found last year

that by 2020, about 2.72 million new job postings will seek workers with skills in data science and analytics.

Cathy O'Neil, a onetime MIT postdoc and hedge fund "quant" who launched a data journalism program at Columbia University's Graduate School of Journalism in 2014, said the expanded academic offerings at Berkeley, MIT and elsewhere must also focus on digital ethics and accountability. "If it's going to happen anywhere, it's going to happen in academia," she said, noting that large investments in these fields, to date, that don't address ethics are "going in the wrong direction."

The issue of ethics, she said, is being sidestepped at almost every turn by efforts like these, in favor of international economic competitiveness with China, among others. "It's about power, it's about control -- and it's not at all good news for the public if we keep going like this."

O'Neil, author of the 2016 book *Weapons of Math Destruction: How Big Data Increases Inequality and Threatens Democracy*, noted the $1 billion price tag for the new MIT college and compared it to a much smaller, $25 million "AI for Social Good" grant program recently offered by the search and advertising giant Google.

"People who are actually worried about society and tech need a billion dollars," she said. "We need a billion-dollar investment, and $25 million isn't big enough right now." ∎

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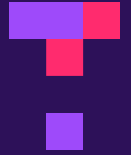
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Lecture Instruction: Alive and Not So Well

New study of undergraduate STEM courses finds that lectures remain dominant -- despite finding after finding questioning their effectiveness.

By Scott Jaschik // April 2, 2018

Marilyne Stains (in rear) watches a science class.

SOURCE:
UNIVERSITY OF NEBRASKA AT LINCOLN

You've heard about the revolution in STEM teaching? About how professors are retooling their courses to focus on active learning? About how the flipped classroom has made the traditional lecture obsolete?

It turns out that the revolution hasn't quite taken place, at least broadly, in higher education.

A new analysis (summary available here) of more than 2,000 classes in science, mathematics and technology, at a range of colleges and universities in the United States and Canada, has found that the lecture remains dominant -- in 55 percent of the classrooms, class time was spent on "conventional lecturing."

Another 27 percent of classes were based on lecturing but also had some interactivity, such as students answering multiple-choice questions during class via clickers.

Only 18 percent of classes could be classified as emphasizing "a student-centered style heavy on group work and discussions."

The findings suggest that major efforts to promote improved science teaching -- such as those by the Association of American Universities -- may not have reached most professors.

The study, published in *Science*, is significant because of its approach. And that may be part of the explanation for why you are hearing more talk about reform of college-level STEM teaching than may actually be reflected in the classroom.

Many past studies have surveyed faculty members on their use of various teaching strategies. This study was based on observations of actual classes -- many of them more than once. The *Science* article states that it is the largest ever observational study of science teaching at the college level.

The findings should concern educators, the authors write, because so much research has found that reliance on the traditional lecture is far less effective at promoting student learning than are "active learning" strategies.

Marilyne Stains, associate professor of chemistry at the University of Nebraska at Lincoln and the lead author of the study, said via email that the findings point to the challenges of any large-scale change in pedagogy.

"I think there is a growing awareness and recognition among the STEM professoriate of the benefits of active learning strategies on students' learning and attitudes toward STEM," she said. "However, there are numerous factors that can preclude faculty from adopting these practices even if they recognize their value."

Faculty members have to not only know that certain teaching techniques are preferable, but they need to feel confident in their ability to use those techniques, which they may have never experienced when they were students, she said.

Stains cited an article (abstract available here) of which she was co-author in *The Journal of Research in Science Teaching* that found that "instructors' confidence and beliefs about teaching related

Lecture Instruction: Alive and Not So Well

to their instructional practices."

That is why, she said, the paper urges colleges and universities to focus more on training faculty members in active teaching methods, not just sharing articles about their effectiveness.

Interviews with faculty members found that many of them said they agreed in theory with the idea of active teaching and learning but felt that implementing the style of teaching was impossible because they teach large courses. And indeed, at many colleges and universities, introductory STEM courses are among the largest classes taught.

"When you talk to faculty, you often hear, 'I teach in an amphitheater. I could never do group work; it's just not practical. But if I had a small class, I could do it,' " Stains said

Stains said that prior surveys have also found that faculty members "perceive" that class size and classroom layout block active approaches to teaching and learning. But she puts the emphasis on "perceive," which she said does not necessarily reflect the potential for changing the way science is taught.

She noted that 12 percent of the large classes observed in this study were based on active teaching and learning techniques.

"This demonstrates that it is possible," she said. "STEM faculty are implementing active learning strategies in large classes."

She said that her advice for those trying to adjust their teaching styles in large classes is "to start with one change at a time. Do not try to change everything you are doing at once." In addition, she said that professors can start with a small change.

As an example, she pointed to a technique developed by Eric Mazur, the Balkanski Professor of Physics and Applied Physics at Harvard University. The approach starts with clicker-style questions but then goes further.

He asks a question of the students in the class. If some students appear not to be understanding whatever the question is about, he doesn't explain it himself. But he asks students to talk among themselves in small groups and then to vote on the question again.

He generally finds that students have successfully taught fellow students the concept. (Details on the approach are available here.)

"The process takes about five minutes," Stains said. "At first you can do it once a week. Then as you become more familiar, you can start doing it once every class, and so on."

The research team included professors from Armstrong State, Auburn, Otterbein, Saint Mary's (Halifax) and Simon Fraser Universities; and the Universities of British Columbia, Calgary, California (Los Angeles and San Diego campuses), Colorado at Boulder, Iowa, Maine, Michigan and Virginia. ∎

7 Hours a Week on Existential Despair

New Penn course is one of several efforts at colleges to try to get students to engage in quiet reflection and to set aside their phones and careerism.

By Emma Whitford // October 23, 2018

Workshop No.1 at Princeton

SOURCE: VINCENT PO

Ask any college student how their day is going and they'll likely say, "It's busy."

"My students have résumés and CVs that are longer than most adults' when they're 18," said Justin McDaniel, a religion professor at the University of Pennsylvania. "They have internships up the ass, they shadowed this person, they won on the debate team."

Taking time for silence, self-reflection and introspection doesn't top students' to-do lists, and neither does seeking out mental health services, McDaniel said. "They look at it as taking up time."

Several programs -- including McDaniel's course at Penn, a student group at Princeton University and a contemplative studies course at Vassar College -- share a common goal: encourage students to slow down, relax and learn how to manage the problems they'll face outside of college.

McDaniel teaches a course that meets once a week for seven hours, with no homework, no tests and no syllabus. Instead, every Tuesday he hands students a book upon arrival, which they read from cover to cover. After four or five hours of silent reading time, the group discusses the book.

The 300-level course, called "Existential Despair," isn't about anything, McDaniel said; it's a place where students can "learn for the sake of learning, reflect for the sake of reflection and talk about issues that will actually come up as adults."

Such issues include addiction, a cancer diagnosis, the death of a loved one or losing a job. In past semesters, McDaniel assigned *Junkie* by William Burroughs, *The Bluest Eye* by Toni Morrison, *The Sailor Who Fell From Grace With the Sea* by Yukio Mishima and *The Wonder* by Emma Donoghue.

"They can all reflect upon [the book] because they're all experts on that book," he said.

Leveling the playing field was a priority for McDaniel, who noticed that students without a humanities background often shy away from taking literature courses for fun.

"They go into these classes and they feel intimidated because they don't know Foucault's latest theory on Shakespeare ... then they get resentful of the people who actually didn't do the reading but [participate] in discussion," he said.

He's noticed a huge difference in the quality of class discussions, in and outside class.

"In 17 years of teaching, there is no comparison," he said. "It's the best conversation I've ever had in a classroom."

The students are graded on attendance and participation, and they're required to write a two- to three-page journal entry each week, which they often complete in class. They also contribute to an online, weeklong discussion forum.

In his other classes, McDaniel

said, "I pose questions online and people would write two or three lines to get their five points. Now, I'm getting five to six pages from each student, and they're responding to each other."

He also observed a gender flip during conversations. Women are speaking up more often than men, the reverse of the norm at Penn.

Each reading period includes a 20- to 30-minute dinner break, and McDaniel collects students' cellphones at the beginning of class. Students spread out across three floors of a building and bring tea, coffee and food for a partner McDaniel assigns.

"We say these kids are addicted to technology -- they're not. When I started this class I thought there was going to be tons of napping, and there's not. It's so rare, so rare," he said.

Alec Gewirtz, a senior religion major at Princeton University, had a similar goal. Last February he founded Workshop No. 1, a student group that meets on Saturday mornings to work through questions and problems students confront outside of their academic lives.

"Students didn't have a place where they could reflect on how to build more fulfilling lives," Gewirtz said. "They often found that they couldn't do that in the classrooms, and students who weren't involved in religious groups didn't have a place where they can do that."

Gewirtz likened the workshop to religious communities that people lean on for support and guidance, but the group has no religious ties or requirements to join. At each meeting, a student presents on a topic or problem they are facing in their own life -- such as building a meaning-ful relationship with their parents as adults, handling the death of a loved one or navigating some part of their career. Then, others will chime in about how they've confronted a similar problem. Discussions last about an hour.

Over 100 students are part of Workshop No. 1, and about 60 to 70 students attend the hourlong meetings any given week. In addition, they have the option to break into small groups of four members that meet on their own time to identify goals, create a plan and hold each other accountable.

Sophie Steinman-Gordon, a junior politics major, joined the workshop earlier this fall.

"I love it. I think that especially at a place like Princeton where your day-to-day life can get so consumed with school and stress that comes from school, it's really important to have a space to step back," she said.

In one meeting, Steinman-Gordon recalled a member who spoke about relationships and how to be vulnerable without relying too heavily on another person.

"The member who presented ... her boyfriend was in the room," she said. "That just is indicative about how healthy of a space it is, if someone can share something about an intimate relationship while their partner is in the room."

Jaime Cuffe, a senior computer science major, said the group has fostered a fierce sense of community.

"It can be difficult to get a group of 50 people to commit to anything at Princeton, but what Alec has been able to create here as been really, really powerful," he said. "There's a saying that 'we're the average of the five of our closest friends.' When I look around the room in any of the workshop sessions, I think, 'I would be lucky to be the average of any of these five people.'"

At Vassar College in New York, Carolyn Palmer, a psychology professor, debuted an Introduction to Contemplative Studies class this fall. Each week, students in the class are introduced to different methods of contemplation and introspection -- everything from social justice and pilgrimage to journaling and meditation.

"People are thirsty for the tools and the experiences that broaden our lives, and the ways in which we can keep asking important questions of ourselves and of each other," Palmer said.

In addition to regular classroom periods, students meet for a "lab" period once a week, similar to science course schedule. One day, a music professor walked students through the "soundscape" and asked them move slowly, focusing on their balance and what they heard. During another lab, a staff member at the counseling center led the students through meditation.

Ten students make up the pilot class, which is a typical class size for Vassar, and Palmer hopes that more students will be interested in the course once word spreads.

"They're experiencing a wide variety of practices, and they're reflecting on this for themselves. They are also interviewing other people about those people's experience with contemplative practice, and then they do half-a-semester-long personal project that they want to explore in more depth," Palmer said. "They're getting first-person, second-person and third-person experience with contemplative studies." ∎

Teaching Eval Shake-Up

Most institutions say they value teaching. But how they assess it tells a different story. University of Southern California has stopped using student evaluations in promotion decisions in favor of peer-review model. Oregon seeks to end quantitative evaluations for holistic model.

By Colleen Flaherty // May 22, 2018

SOURCE: GETTY IMAGES

Research is reviewed in a rigorous manner, by expert peers. Yet teaching is often reviewed only or mostly by pedagogical non-experts: students. There's also mounting evidence of bias in student evaluations of teaching, or SETs -- against female and minority instructors in particular. And teacher ratings aren't necessarily correlated with learning outcomes.

All that was enough for the University of Southern California to do away with SETs in tenure and promotion decisions this spring. Students will still evaluate their professors, with some adjustments -- including a new focus on students' own engagement in a course. But those ratings will not be used in high-stakes personnel decisions.

The changes took place earlier than the university expected. But study after recent study suggesting that SETs advantage faculty members of certain genders and backgrounds (namely white men) and disadvantage others was enough

for Michael Quick, provost, to call it quits, effective immediately.

'I'm Done'

"He just said, 'I'm done. I can't continue to allow a substantial portion of the faculty to be subject to this kind of bias," said Ginger Clark, assistant vice provost for academic and faculty affairs and director of USC's Center for Excellence in Teaching. "We'd already been in the process of developing a peer-review model of evaluation, but we hadn't expected to pull the Band-Aid off this fast."

While Quick was praised on campus for his decision, the next, obvious question is how teaching will be assessed going forward. The long answer is through a renewed emphasis on teaching excellence in terms of training, evaluation and incentives.

"It's big move. Everybody's nervous," Clark said. "But what we've found is that people are actually hungry for this kind of help with their teaching."

SETs -- one piece of the puzzle -- will continue to provide "important feedback to help faculty adjust their teaching practices, but will not be used directly as a measure in their performance review," Clark said. The university's evaluation instrument also was recently revised, with input from the faculty, to eliminate bias-prone questions and include more prompts about the learning experience.

Umbrella questions such as, "How would you rate your professor?" and "How would you rate this course?" -- which Clark called "popularity contest" questions -- are now out. In are questions on course design, course impact and instructional, inclusive and assessment practices. Did the assignments make sense? Do students feel they learned something?

Students also are now asked about what they brought to a course. How many hours did they spend on coursework outside of class? How many times did they contact the

professor? What study strategies did they use?

While such questions help professors gauge how their students learn, Clark said, they also signal to students that "your learning in this class depends as much as your input as your professor's work." There is also new guidance about keeping narrative comments -- which are frequently subjective and off-topic -- to course design and instructional practices.

Still, SETs remain important at USC. Faculty members are expected to explain how they used student feedback to improve instruction in their teaching reflection statements, which continue to be part of the tenure and promotion process, for example. But evaluation data will no longer be used in those personnel decisions.

Schools and colleges may also use evaluations to gather aggregate data on student engagement and perceptions about the curriculum, or USC's diversity and inclusion initiatives, Clark said. They may also use them to identify faculty members who do "an outstanding job at engaging students, faculty who may need some support in that area of their teaching, or problematic behaviors in the classroom that require further inquiry."

Again, however, SETs themselves will not be used as a direct measure in performance evaluations.

More Than a Number

While some institutions have acknowledged the biases inherent in SETs, many cling to them as a primary teaching evaluation tool because they're easy -- almost irresistibly so. That is, it takes a few minutes to look at professors' student ratings on, say, a 1-5 scale, and label them strong or weak teachers. It takes hours to visit their class-

> **We must renew our focus on the importance of teaching and mentorship, putting into place the systems necessary to train, assess, and reward exceptional teaching.**

rooms and read over their syllabi to get a more nuanced, and ultimately more accurate, picture.

Yet that more time-consuming, comprehensive approach is what professors and pedagogical experts have been asking for, across academe, for years. A 2015 survey of 9,000 faculty members by the American Association of University Professors, for instance, found that 90 percent of respondents wanted their institutions to evaluate teaching with the same seriousness as research and scholarship.

The survey gave additional insight into the questionable validity of SETs: two-thirds of respondents said these evaluations create pressure to be easy graders, a quality students reward, and many reported low rates of feedback.

Echoing other studies and faculty accounts, responses to the AAUP survey suggested that SETs have an outsize impact on professors teaching off the tenure track, in that high student ratings can mean a renewed contract -- or not.

The AAUP committee leading the 2015 study argued that faculty members within departments and colleges -- not administrators -- should develop their own, holistic teaching evaluations. It also urged "chairs, deans, provosts and institutions to end the practice of allowing

numerical rankings from student evaluations to serve as the only or the primary indicator of teaching quality, or to be interpreted as expressing the quality of the faculty member's job performance."

Faculty committees at USC also have worked to address teaching excellence for the past five years, recommending that the university invest more in teaching, adopt incentives for strong instruction, and move toward a peer model of review.

USC's teaching evaluation plan reflects some of those recommendations -- as well as a new emphasis on teaching excellence.

"We must renew our focus on the importance of teaching and mentorship, putting into place the systems necessary to train, assess, and reward exceptional teaching," Quick, the provost, and Elizabeth Graddy, vice provost, said in a March memo to the faculty. "In short, let's make USC the great research university that expects, supports, and truly values teaching and mentoring."

Clark, at the campus Center for Excellence in Teaching, is helping USC put its money where its mouth is. She said its new model of peer evaluation involves defining teaching excellence and developing training for the faculty, from graduate students who will become professors to full professors.

Peer review will be based on classroom observation and review of course materials, design and assignments. Peer evaluators also will consider professors' teaching reflection statements and their inclusive practices.

New Rewards

Rewards for high quality teaching will include grants and leaves for teaching development and emphasizing teaching performance in merit, promotion and tenure reviews, Clark said. Most significantly, thus far, the university has introduced continuing appointments for qualifying teaching-intensive professors off the tenure track.

Trisha Tucker, an assistant professor of writing and president of the USC's Dornsife College of Letters, Arts and Sciences Faculty Council, said different professors have had different reactions to the "culture shift." But she said she applauded the institution's ability to resist the "easy shorthand" of teacher ratings in favor of something more meaningful -- albeit more difficult. (USC also has made clear that research and service expectations will not change.)

"It does take work to do this peer review," she said. "But teaching is important and it takes a lot of time and resources to make that more than just empty words."

As writing is a feedback-driven process, Tucker said her program already emphasizes pedagogy and peer review. But professors in some other programs will have to adjust, she said.

"For the many faculty who haven't been trained in this way or hired based on these expectations, it can produce some anxiety," she said. So an important measure of this new approach's success is how USC supports people who "initially fall short."

Clark said the teaching center offers a model for peer review that individual programs will adjust to their own needs over the next year. That kind of faculty involvement in shaping peer review should make for a process that is less "threatening" than representative of an "investment in each other's success," she said.

In the interim, professors' teaching will be assessed primarily on their own teaching reflections. And while the center avoids using words such as "mandatory" with regarding to training, it is offering a New Faculty Institute, open to all instructors, for 90 minutes monthly over lunch for eight months. Sample topics include active learning, maximizing student motivation and effective, efficient grading practices.

Not Just USC

Philip B. Stark, associate dean of the Division of Mathematical and Physical Sciences and a professor of statistics at the University of California at Berkeley who has studied SETs and argued that evaluations are biased against female instructors in so many ways that adjusting them for that bias is impossible, called the USC news "terrific."

"Treating student satisfaction and engagement as what they are -- and I do think they matter -- rather than pretending that student evaluations can measure teaching effectiveness is a huge step forward," he said. "I also think that using student feedback to inform teaching but not to assess teaching is important progress."

Stark pointed out that the University of Oregon also is on the verge of killing traditional SETs and adopting a Continuous Improvement and Evaluation of Teaching System based on non-numerical feedback. Under the system, student evaluations would still be part of promotion decisions, but they wouldn't reduce instructors to numbers.

Elements of the program already have been piloted. Oregon's Faculty Senate is due to vote on the program as a whole this week, to be adopted in the fall. The proposed system includes a midterm student experience survey, an anonymous web-based survey to collect non-numerical course feedback to be provided only to the instructor, along with an end-of-term student experience survey. An end-of-term instructor reflection survey also would be used for course improvement and teaching evaluation. Peer

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review and teaching evaluation frameworks, customizable to academic units, are proposed, too.

"As of Fall 2018, faculty personnel committees, heads, and administrators will stop using numerical ratings from student course evaluations in tenure and promotion reviews, merit reviews, and other personnel matters," reads the Oregon's Faculty Senate's proposal. "If units or committees persist in using these numerical ratings, a statement regarding the problematic nature of those ratings and an explanation for why they are being used despite those problems will be included with the evaluative materials."

The motion already has administrative support, with Jayanth R. Banavar, provost, soliciting pilot participants on his website, saying, "While student feedback can be an important tool for continual improvement of teaching and learning, there is substantial peer-reviewed evidence that student course evaluations can be biased, particularly against women and faculty of color, and that numerical ratings poorly correlate with teaching effectiveness and learning outcomes."

More than simply revising problematic evaluation instruments, the page says, Oregon "seeks to develop a holistic new teaching evaluation system that helps the campus community describe, develop, recognize and reward teaching excellence." The goal is to "increase equity and transparency in teaching evaluation for merit, contract renewal, promotion and tenure while simultaneously providing tools for continual course improvement."

Craig Vasey, chair of classics, philosophy and religion at the University of Mary Washington and chair of AAUP's Committee on Teaching, Research and Publications, said the "most pernicious element" of quantitative student evaluations is that the results "get translated into rankings, which then take on a life of their own and don't really improve the quality of education."

Review of syllabi and classroom observation by peers are both more "useful means of evaluating," he said. "And I think asking students how engaged they were in the class -- and especially if they also ask why -- gets "better input from them than the standard questionnaire."

Ken Ryalls, president of The IDEA Center for learning analytics and a publisher of SETs, told *Inside Higher Ed* earlier this year that not all evaluations are created equal.

"Our advice: Find a good SET that is well designed and low in bias; use the data carefully, watching for patterns over time, adjusting for any proven bias, and ignoring irrelevant data; and use multiple sources of data, such as peer evaluations, administrative evaluations, course artifacts and self-evaluations, along with the student perspective from SETs," he said via email. ∎

https://www.insidehighered.com/news/2018/05/22/most-institutions-say-they-value-teaching-how-they-assess-it-tells-different-story

Diversifying a Classic Humanities Course

Responding to student criticism that its foundational humanities course is too "white" and "Eurocentric," Reed College announces overhaul of the syllabus and format.

By Colleen Flaherty // April 12, 2018

Reed College professors walked out of Hum 110 after student protesters interrupted class in August.

SOURCE: YOUTUBE

Reed College announced major changes to its signature humanities course Wednesday, months after student protesters charged that the course was too white, too male and too Eurocentric.

Instead of focusing on the ancient Mediterranean, the team-taught course -- which all first-year students take together, at the same time -- will now consist of four different time- and place-based "modules."

Students will still study the humanistic traditions of the ancient Mediterranean and Athens in the first part of the course. But in the second half, students will engage with history and texts related to Mexico City in the 15th through 20th centuries, and Harlem from 1919 to 1952.

The changes to Hum 110, as the course is known, take effect next academic year.

Like many institutions, Reed has faced student demands that it make its curriculum more inclusive of people of color and non-Western traditions. But those demands took a distinctly Reed-like turn when a group of students staged a months-long sit-in of Hum 110 lectures, through the fall.

The protesters, associated with a group called Reedies Against Racism, reached a kind of agreement with the Hum 110 faculty that they could be present as long as they didn't disrupt class. It worked for a while, but things came to a head at the beginning of last semester, when some protesters insisted on using lecture time to introduce themselves to incoming first-year students.

The dispute resulted in a canceled lecture and soul-searching for Reed, which prides itself on its flat organizational structure and dialogue-based approach to conflict resolution.

Change was already under way, however, as the faculty had previously committed to beginning Hum 110's decennial review one year early. The new format announced Wednesday, recently approved by the program's faculty, marks the end of that review.

Members of Reedies Against Racism have previously said that they targeted Hum 110 for criticism, in particular, because it is required of all students -- meaning it not only grounds their future studies but also communicates what matters at Reed. They've also said the course ignores how some of the works studied have been used over time to perpetuate violence against people of color.

Meanwhile, defenders of Hum 110 -- which currently begins with the *Epic of Gilgamesh* and ends with the Bible and Apuleius' *The Golden Ass* -- have argued that critics err in transposing modern notions of race into the course, or even misunderstand it altogether.

"The idea that Hum 110 is a 'white' course is very strange to me," Jay Dickson, a professor of English, recently told *Reed Magazine*. "It pre-

Diversifying a Classic Humanities Course

supposes that our contemporary racial categories are timeless."

Lucía Martínez Valdivia, an assistant professor of English and humanities who was to deliver the canceled Hum 110 lecture at the beginning of the year, had planned to tell students that the course is technically called Introduction to Humanities: Ancient Greece and the Mediterranean, not Western Humanities, "in part because much of it is drawn from geographic areas not traditionally considered Western areas," such as Iraq, Iran and Egypt.

In a version of the canceled lecture that has since been shared online, Martínez Valdivia said it's hard to even define "Western," and that the concept is challenged throughout the course.

Elizabeth Drumm, the John and Elizabeth Yeon Professor of Spanish and Humanities at Reed, oversaw the more than 30-meeting review process as Hum 110 program chair. She and colleagues surveyed students, alumni and faculty members and were pleased to learn that they were committed to the idea of a unified, year-long course -- even though it would have been easier in many ways to abandon the format and let all 25 instructors teach individual sections however they saw fit, she said.

Based on that feedback, professors kept talking to each other, alumni and students -- including those critical of the course -- about how it could be improved

upon. Eventually, Drumm said, they agreed on the module format, which will make it easier to address essential humanistic questions through the history and literature of varied times, places and peoples.

Drumm said she discovered during the review process just how much the course has changed over time already, such as when it added content from Egypt. The changes announced Wednesday are significant but yet another chapter for the course, she said, and the new module format will make updating it easier going forward.

"We are not saying that the ancient Mediterranean is not important," Drumm said, asked how she might answer those humanists who believe that Western civilization-style courses deserve a permanent place in liberal arts curricula. "We just recognize that there are other questions we can ask that are vibrant and important to humanities, as well."

Kevin Myers, college spokesperson, said there have been no Hum 110 sit-ins since the fall.

Nigel Nicholson, dean of the faculty and Walter Mintz Professor of Classics, Greek and Latin Literature at Reed, said there are many similarities between the current and new Hum 110 class, but that the latter could be even more "successful."

"What we're trying to do with the material was not pedagogically effective for a lot of students," he said. "The [new] class will still be

tremendously demanding, as it was before. We're maintaining a lot of what we have but exploring some new areas to create some new intellectual dynamics."

Nicholson added, "I'd invite people who think we're watering down this course to come visit and see the class for themselves."

Reedies Against Racism responded to the Hum 110 revision in a Facebook post late Wednesday, saying that the college's announcement failed to sufficiently recognize the role of students and faculty members of color and their allies in forcing change. The group also expressed concern that some of the more diverse texts currently offered in the course — specifically those relating to the Middle East and North Africa — would be cut to make room for the Mexico City and Harlem modules.

"Reed freshmen will still receive the message that learning about white culture is more urgent and foundational to a college education," the post reads, asking faculty members to look beyond Athens and Rome, specifically to Jerusalem and Cairo, in the first half of the course.

"In short, we're calling for the Humanities 110 faculty to pick different cities from the old syllabus for the first two semesters," the post says. "We feel that these cities should be outside of Europe, as reparations for Humanities 110's history of erasing the histories of people of color, especially black people." ∎

Say goodbye to the traditional, one-way lecture
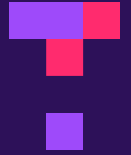
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Escaping Westworld

In the future, we won't be able to sidestep the ethical and policy issues linked to the use of technology, writes Lynn Pasquerella, so we must confront the question of how we best prepare students for it.

By Lynn Pasquerella // September 4, 2018

Thandie Newton, who has played a robot on 'Westworld,' attends the season-two premiere of the show

SOURCE: GETTY IMAGES

When the dystopian television drama *Westworld*, based on the 1973 Michael Crichton movie, premiered last season, no one anticipated that it would overtake *Game of Thrones* as the most watched first season of any HBO original series. Westworld is a futuristic theme park inhabited by robot hosts who are indistinguishable from their genetically human counterparts. Because they follow the rules of their programmers, the first of which is that "a robot may not injure a human being or, through inaction, allow a human being to come to harm," visitors to Westworld may do to them "what people do when they think no one is watching."

However, this cycle is broken when one of the robots begins gaining consciousness, signified by confronting a choice about whether to escape Westworld or return to find her daughter, trapped in a reality doomed to repeat itself. The series raises fascinating questions about the qualities of consciousness, the identity of persons, the compatibility of free will and determinism, and the nature and scope of morality. And the fact is, in the future, we will not be able to continue to sidestep the ethical and policy issues inextricably linked to the use of technology. Scientific advancements will render questions of free will and determinism and individual and social responsibility unavoidable.

Henry Kissinger highlighted such philosophical conundrums in a recent piece in *The Atlantic*, lamenting that "in every way -- human society is unprepared for the rise of artificial intelligence." As an historian, he wondered "what would be the impact on history of self-learning machines -- machines that acquired knowledge by processes particular to themselves, and applied that knowledge to ends for which there may be no category of human understanding."

While Kissinger briefly entertains science fiction scenarios like the ones in Westworld, where AI turns on its creators, he is much more focused on the capacity of AI to develop slight deviations from human instructions that could cascade into catastrophic departures. "What will become of human consciousness if our own explanatory power is surpassed by AI," he asks, "and societies are no longer able to interpret the world they inhabit in terms that are meaningful to them?" He makes an urgent plea for the creation of a national vision exploring the transformation of the human condition that has been prompted by AI -- one which connects the rise of technology in relation to the humanistic traditions.

Of course, such a vision is needed for more than AI alone, as I recognize every day in my work as a medical ethicist. We live in a society, for example, in which technological advancements have preceded thoughtful reflection regarding the ethical, legal and social implications of the use of that technology with respect to when and how people should be allowed to die.

Take the case that I encountered early in my career of a physician's self-described moral distress about a 60-year-old woman who had been diagnosed with terminal liver cancer. She had made plans for the eventuality of her death by signing a living will, expressing her wishes to have life-sustaining treatment withheld if the burdens of treatment were likely to outweigh the benefits. Further, she made clear that she did not want to be resuscitated if death were imminent and she suffered cardiac arrest.

She was brought to the hospital by ambulance a day later after her husband discovered her in bed, unconscious and blood soaked, after swallowing a bottle of tranquilizers and cutting her wrists with a butcher's knife. The family physician was absolutely convinced that she would not want to be resuscitated. In fact, he was concerned that if she survived, she would have him charged with battery for going against her wishes by trying to save her life.

But he was cognizant that if he failed to treat her aggressively, he could be charged with assisted suicide, which was a felony in the state. He also knew that living wills were not binding in responding to acts of attempted suicide, and he ultimately performed CPR when she went into cardiac arrest, had her intubated and stitched her up.

> **"**
> All this means that we in higher education must also confront the question of how we best prepare students for the future and escape a Westworld-like existence.
> **"**

As he suspected, when his patient regained consciousness, she was furious. She tried to rip out the tubes and demanded that all treatment be stopped. A psychiatric consult was brought in to assess the patient's competency; she was deemed competent to refuse treatment, was extubated and died six hours later.

Though at first convinced that he had ultimately done the right thing under the circumstances, the physician regretted his part in prolonging his patient's suffering. He believed that to meet his obligation to his patient based on a professional duty to do no harm and to relieve suffering, he would have to go against his own self-interest in violating a legal code. In weighing his self-interest against the interest of another, he was forced to come to grips not only with his patient's but with his own humanity.

In the future, society will not be able to continue to avoid the ethical and policy issues inextricably linked to the use of medical technology. Thus, questions that policy makers need to address in an open discussion include: How should we, as a society, allocate scarce medical resources? Can individualism be excessive in matters of life and death? How can we balance the values of pluralism and tolerance on the one hand against principles of fairness to all on the other? And most important, should our society continue to view death as a failure and, thus, distinctly un-American?

Avoiding Scientism

All this means that we in higher education must also confront the question of how we best prepare students for the future and escape a Westworld-like existence. Understanding the dangers of an exaggerated trust in the efficacy of the methods of natural science applied to all areas of investigation, nearly five decades ago, Paul Feyerabend warned against a lapse on the part of scientists into scientism in his book *Against Method*. Scientism is a doctrine according to which all genuine knowledge is scientific knowledge, reifying the scientific method as the only legitimate form of inquiry.

Despite Feyerabend's admonition, science's success in explaining the world has led to a cultural misappropriation in a way that has conflated science with scientism. The profound societal impact of this conflation has led astrophysicist Adam Frank to challenge defenders of scientism by calling for

a clarification of how scientism manifests itself in order to "help us understand the damage it does to the real project that lies ahead of us: building space for the full spectrum of human beings in a culture fully shaped by science." Taking up Frank's charge to consider how scientism manifests itself, and in particular how the metaphysics of consciousness offers the tools necessary for building the space to which he refers, we need to ask, "What would we lose, if anything, by reducing all learning and engagement to practices only rooted in the sciences?"

Indeed, that is precisely the question we should be raising when designing a curriculum for the 21st century. The illumination of human consciousness through literature, philosophy, music and the arts enriches the experience of individuals alone and as members of a community, allowing us to flourish fully as human beings. The illumination and the inquiry are themselves intrinsic goods that thwart the notion of scientific knowledge as singularly capable of responding to the world's challenges, exactly because they may turn out to be just as valuable in fostering a capacity to grapple with complexity that cannot be resolved through the scientific method.

As Feyerabend reminds us, true scientists are not scientistic -- they possess a much more nuanced and complex understanding that sensibilities cannot be gained through scientific practices. Science is a tool to investigate metaphysical and epistemological claims. But value also comes from reflecting on experiences in a way that arouses the very sensibilities that enable us to deal with the metaphysics of being human and conscious of living

> **We must offer a curriculum in which assignments make clear the relationships among areas of knowledge, ensuring that students do not see academic disciplines as separate and disconnected silos of learning but rather as varied approaches to the same enlightened end.**

in the world.

The liberal education we offer to our students is a sensibility rather than a group of subjects. Good critics of literature can bring us into a sphere of experience that combines allusions to the past with what is happening in the world right now. Like philosophers, artists and historians, they are capable of xence. In the end, it is this phenomenological engagement with the liberal arts that is incapable of being translated through scientism.

Therefore, we must offer a curriculum in which assignments make clear the relationships among areas of knowledge, ensuring that students do not see academic disciplines as separate and disconnected silos of learning but rather as varied approaches to the same enlightened end. This conclusion was validated in a report, "Branches of the Same Tree," recently issued by the National Academies of Sciences, Engineering and Medicine.

I served on the committee, which was directed to examine whether the integration of arts and humanities with science, engineering, math and medicine can improve learning outcomes for all students. The title of the report was taken from a quote by Albert Einstein, who, in a letter written in 1937 against the backdrop of burgeoning fascist power in central Europe, expressed consternation over "the dangerous implications of living in a society, where long-established foundations of knowledge were corrupted, manipulated and coerced by political forces." Einstein maintained that "all religions, arts, and sciences are branches from the same tree."

The report found the need to "achieve more effective forms of capacity-building for 21st-century workers and citizens," through the acquisition of broad-based skills from across all disciplines "that can be flexibly deployed in different work environments across a lifetime."

It concludes that "In a world where science and technology are major drivers of social change, historical, ethical, aesthetic and cultural competencies are more critical than ever. At the same time, the complex and often technical nature of contemporary issues in democratic governance demands that well-educated citizens have an appreciation of the nature of technical knowledge and of its historical, cultural and political roles in American democracy." For "truly robust knowledge depends on the capacity to recognize the critical limitations of particular ways of knowing," and "to achieve the social relations appropriate to an inclusive

and democratic society."

Big Questions and Grand Challenges

Thus, fulfilling the promise of American higher education requires a curriculum that emphasizes essential learning outcomes (knowledge of human cultures and the physical and natural world, intellectual and practical skills, personal and social responsibility, integrative and applied learning) as necessary for all students' intellectual, civic, personal and professional development and success. On this model, disciplinary work remains foundational, but students are provided with practice connecting their discipline with others and with the needs of society in preparation for work, citizenship and life. A liberal education for the 21st century requires replacing traditional curricular models that follow previous patterns of depth and breadth with those that provide hands-on experience with unscripted, real-world problems across disciplines.

Developing this type of deeper-level understanding across subject areas, connecting knowledge to experience and adopting a holistic approach to evidence-based problem solving that incorporates diverse and sometimes contradictory points of view is one of the best approaches to cultivating the perception, intellectual agility and creative thinking necessary for them to thrive in a globally interdependent, innovation-fueled economy. Yet, most important, it recognizes that decision making must be grounded in the ethical principles of respect for persons, justice and beneficence.

The ability to engage and learn from experiences different from one's own and to understand how one's place in the world both in-

> **Students must be asked to demonstrate an understanding of complex and overlapping worldwide systems, how these systems are influenced and constructed, operate with differential consequences, affect the human and natural world, and perhaps most important, how they can be altered.**

forms and limits one's knowledge is inextricably linked to the crucial capacity to understand the interrelationships between multiple perspectives -- personal, social, cultural, disciplinary, environmental, local and global. This understanding is pivotal for bridging cultural divides, necessary for working collaboratively to achieve our shared objectives around solving the world's most pressing problems -- which is all the more reason colleges need to redouble our focus on world citizenship and the interdependence of all human beings and communities as the foundation for education.

These lessons are more important than ever as we prepare graduates for the ever-shifting landscape of tomorrow. Students must be asked to demonstrate an understanding of complex and overlapping worldwide systems, how these systems are influenced and constructed, operate with differential consequences, affect the human and natural world, and perhaps most important, how they can be altered.

Students should be asked to apply an integrated and systemic understanding of the interrelationships between contemporary and past challenges facing cultures, so-

cieties and the natural world on the local and global levels. Integrative learning and thematic pathways that address grand challenges across disciplines and within the major, requiring students to integrate and apply their knowledge to new problems, are imperative for a 21st-century curriculum.

By asking all students to address big questions and grand challenges, we lead them to test the edges of their own ambition. In the process of learning across difference and connecting their courses with issues and communities beyond the classroom, they develop enhanced ethical reasoning and judgment and a sense of responsibility to self and others, acquire empowering knowledge, and gain new levels of agency.

Sociobiologist E. O. Wilson's cogent observation that contemporary society is "drowning in information, while starving for wisdom" was accompanied by his prediction that "the world henceforth will be run by synthesizers, people able to put together the right information at the right time, think critically about it, and make important choices wisely." Wilson's comments highlight both the value of a liberal education and the ideal of an edu-

cated citizenry in an age when the democratization of information through the internet has given rise to a new wave of anti-intellectualism -- one steeped in the denial of reason and the distrust and disdain of experts.

The result has been increasing polarization and an entrenched refusal to countenance opposing points of view, contributing to a marketplace of ideas at risk of falling prey to those who have the resources to control the shaping of public opinion and policies. In this arena, asserted claims become orthodoxy despite the absence of evidence and in the face of enduring questions. In this ostensibly post-truth era, addressing the misinformation and incivility resulting from the debilitating impact of a rhetoric-for-hire that has challenged both research expertise and the value of higher education is more urgent than ever.

It is time for leaders in higher education to reassert the role that liberal education can play in discerning the truth and enhance the reputation of our institutions by emphasizing big-picture, problem-centered inquiry and students' active engagement in experiential learning, with increasing rigor, across all disciplines, in transformational partnerships with other colleges, universities and communities around the globe. If we fail to do so, I fear that we risk confronting our own need to escape Westworld. ∎

https://www.insidehighered.com/views/2018/09/04/importance-liberal-education-increasingly-technical-world-opinion

Bio

Lynn Pasquerella is president of the Association of American Colleges & Universities. This article was adapted from her keynote address at the Engineering and Liberal Arts Symposium at Union College.

Caution: No Trigger Warning!

Rivi Handler-Spitz uses a graphic novel approach to show how to help students deal with texts they find disturbing.

By Rivi Handler-Spitz // August 21, 2018
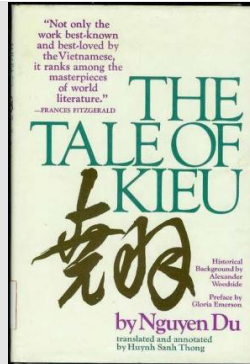
These days, students seem reluctant to engage with disturbing material, and well-meaning professors too often cater to their preferences, shielding them from what they'd rather not confront. Last semester in a history of Asian literature survey class, I had an encounter with a student that challenged both of us -- professor and student -- to rethink our positions.

Caution: No Trigger Warning!

As this graphic treatment depicts, without any trigger warning -- being a graduate of the University of Chicago, I avoid them -- I assigned my class the 19th-century Vietnamese novel *The Tale of Kiều*. This novel contains many highly metaphorical descriptions of rape. One day, an excellent student emailed me saying she found the content upsetting and could not bear to come to class. I was shocked and dismissed her concerns as excessive. Unwarranted. Or rather, I felt that the only way I could condone her hypersensitivity would be if I knew about her past. Such a reaction might make sense, I supposed, if she had been assaulted herself. But I could not ask. How then, I wondered, could I possibly adjudicate whether her sensitivity was justified or not? And how could I respond appropriately?

We scheduled a meeting, and she broke down in tears in my office. At that moment, I realized that her present state, not her past, was my concern: I had in front of me a young woman who, for whatever reason, was profoundly disturbed by even the poetic suggestion of sexual violence. Her feelings were powerful and real. And they needed to be respected no matter what experience, real or imagined, underlay them. My job was to help her develop strategies for engaging with a text she obviously found extremely disquieting.

Over the course of more than a week, we discussed her situation several times both in person and online. We also each sought out

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trusted confidantes with whom to analyze our ongoing interactions. This iterative process was essential, and through it, we moved closer to understanding one another's points of view. I choose to express the story visually here because doing so challenged me to imagine our interactions from both the student's perspective and my own. Drawing -- especially the thought bubbles -- prompted me to imagine her perceptions and to envision her thoughts, fears and concerns.

The story as told here exhibits my greatest hope for students: that they will learn to titrate their own exposure to content they find disturbing, and that they will eventually wean themselves off the need to rely on professors' or other authority figures' trigger warnings or "opt-out" assignments. In the end of this story, it is the student herself -- not the teacher -- who comes up with the best strategy for approaching the text. Students must gain this independence, as eventually they will decide for themselves what to read and how to read it. They will take responsibility for balancing between protecting and pushing themselves. ∎

https://www.insidehighered.com/views/2018/08/21/graphic-novel-depiction-dealing-sensitive-material-class-without-using-trigger

Bio
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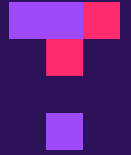
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Why We Must Balance Emotion and Intellect

The best college teaching has always included both rational argument and emotional insight -- a combination that is more crucial than ever in classrooms today, argues John R. Swallow.

By John R. Swallow // July 10, 2018

SOURCE:
ISTOCKPHOTO.COM/STUDIOGSTOCK

On college campuses across America, students are voicing serious concerns about sexual assault, racial bias and mental health. Those concerns often surface -- with great emotion -- as part of classroom discussions. And when students feel that faculty members, staff members or administrators lack compassion in their response, outrage or protest might follow. As we have seen, this form of student reaction often makes headlines.

I have heard many attribute such protests to the combativeness of our nation's politics, to the belligerence of an earlier generation's culture wars or to the extreme sensitivity of a generation of so-called snowflakes. But that doesn't ring true for those of us who live or work in academe. We know from our years of experience -- and recent research supports this -- that the undergraduate years are a time when most college students come to appreciate the views of those on the other side of the political spectrum.

There is a simpler explanation for their behavior: they're human. And humans are complex beings endowed with both emotion and intellect.

Those elements of humanity interact and coexist everywhere in life, including in the classroom. The best college teaching has always included both rational argument and emotional insight. That combination -- especially the emphasis on the emotional insight -- is more crucial than ever in college classrooms today.

The Irrationality of the Rational Alone

Early in my college career, I enrolled in a beginning drawing course. I was instructed to draw a live model, and I found myself stuck drawing and redrawing the model's curly hair, unable to progress further. My professor looked at me and, instead of commenting on the quality of my art, simply asked, "Are you scared?" Which, of course, I was. His acknowledgment of my fear -- of my feelings -- cleared the path for learning. I never developed great skill in figure drawing, but I learned

the techniques and concepts, all of which were beyond reach when I was blocked by fear.

Over the course of the semester, I observed how this professor used emotional insight to help students learn and progress. I never forgot that lesson, and I have tried in my own teaching and now as a college president to do the same.

Our culture is much more open than it was when I was an undergraduate student. Today's students are much more likely to offer up their emotions. They publicly fret over finances and tribulations with friends. They talk openly about suicide and depression. And with emoji across an abundance of social media platforms, they share just about every feeling they have with audiences in ways I couldn't have imagined at their age.

It can be challenging for faculty, staff and administrators to respond -- and to respond well -- to their expressions of emotion. Some of us are reluctant to engage, bewildered by this generation's extreme openness and concerned about

Why We Must Balance Emotion and Intellect

saying the wrong thing. Or we fall back on intellectual debate, treating an emotional claim as a reasoned position.

Consider the conversation around trigger warnings. A student discloses an intense reaction to a particular work of literature because it reminds the student of past trauma. In doing so, the student wonders whether it would have been better to know about this disturbing content ahead of time. For the faculty member or the student to treat it solely as a question of policy misses the opportunity for both of them to find common ground in trusting the intentions of another.

As the post-millennial generation begins its higher education journey, we must refine what has worked and what hasn't worked to connect with and educate our students. Knowing that we must balance intellect and emotions gives us a starting point to reach them and meet their educational needs. Otherwise, we will face additional years of mismatched communications and expectations.

Whether as part of college teaching or part of the campus experience, we cannot avoid the emotions present in students or ourselves. Sometimes we idealize the academic environment as one where only rational thought takes place. But to expect that human interaction on deeply meaningful topics -- race, mental health, assault, or other sensitive issues -- can rely solely on rational argument is irrational.

Even when the topic is not high stakes, emotion is often in play in the classroom and on the campus. When I became a professor of mathematics at a residential college, I quickly learned that sometimes half of the work of teaching calculus to my students was reducing their anxiety. Acknowledging it, and working to increase their confidence, was relational, emotional work, distant from derivatives and integrals. It made a difference, and it was part of how my students learned to learn.

That sort of careful pedagogy, and close relationships between faculty members and students, has been the promise of the residential college. Because faculty and staff are committed to that promise, I know that we can rise to the occasion. What we need to do now is engage in the increased sharing of emotion and understand how to work with it.

Emotional intelligence is one piece of the puzzle, as are techniques for calming a combative discussion. The art of facilitating discussions, whether in class or in office hours or off campus, is something all of us can learn to do better.

I learned this when I taught a seminar-style, interdisciplinary humanities course combining history, literature, philosophy and religion. We had to build trust in the group and set guidelines for how to respond to each other, as the discussion of religious texts can easily go awry. Before reading the Hebrew Bible, the New Testament or the Quran, I encouraged members of the class to discuss their religious background and their investment in a particular faith tradition and text. We were then able to express and acknowledge emotion but respond to it respectfully and effectively -- and learn about the religious texts at the same time.

If we take the time to listen closely to what our students express and to carefully reflect the concerns they voice -- acknowledging the difficulty someone has experienced in disclosing something personal -- we are one step closer to clearing the path for them to truly understand and be able to grapple with the content.

And we may find our campuses less fractured places to boot. ∎
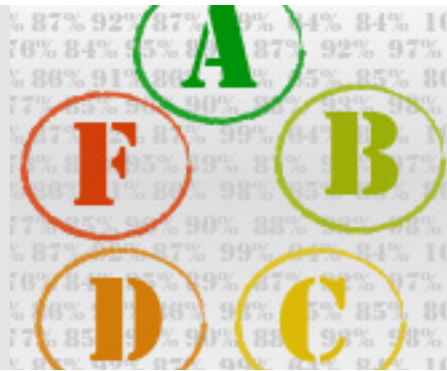
Bio
John R. Swallow is president of Carthage College in Kenosha, Wis.

Why Are We Still Grading?

| There is absolutely no way to take a student's work in any class and put a number or a letter to it in a way that couldn't be done in another equally reasonable way, argues Dan Houck.

By Dan Houck // September 20, 2018

Next spring, I'll be teaching my first course. While I'm eagerly planning the course sequence, designing assignments and considering various instructional methods, I keep coming back to the same question: How will I grade?

Or maybe the question is: Will I grade? You see, I know that I will have full authority over grading. The only requirement will be the final, end-of-semester grade, so I don't necessarily have to grade anything prior to that. But should I?

Now when I say "grading," I mean any quantified assessment of student work. I'll be teaching a freshman writing course, so I plan to provide lots of feedback, but I want to focus on qualitative feedback. I'm even wary to go so far as saying that an assignment is above, below or meets expectations in any explicit terms such as those.

Why am I so wary? Well, the research on grading is conclusive: It's bad for everyone. A few of the biggest drawbacks to grading include: causing students to look for the easiest way to get the best grade, reducing their interest in actual learning and lowering the quality of their work. And that just scratches the surface of research that shows the negative impacts of grading.

Are there any upsides to grading? Grades allow us to (attempt to) compare standards among different institutions, which is more or less the reason we have grades to begin with. No one had any idea what it would do to students who now focus on the grade rather than learning. And because professors know they have to assign grades, they often create assignments and write tests that will be easy to grade. Then they teach to those assignments and tests so they can give the students the grades and oftentimes forsake actual feedback. The grades are then used in high-stakes arenas like graduate school admissions and fellowships, which gives everyone more and more reason to worry about these always and inescapably subjective numbers and letters.

And they are subjective to the point of being arbitrary. There is absolutely no way to take a student's work in any class and put a number or a letter to it in a way that couldn't be done in another equally reasonable way or with which another qualified grader would necessarily agree. Can anyone really tell the difference between two similar assignments on a 100-point scale? Or even a 13-point scale (A-F with pluses and minuses)? I want to avoid all that trouble for me and my students. I want my students to concentrate on improving their writing, not their grades. I want to focus on helping them rather than justifying the grades I give.

Breaking the Cycle

So what can I do? If I had my druthers, I'd give no number, letter, symbol or other measure that could be inferred as a grade at all, but I can't. And since I have to give a final grade, is it fair to leave students' work unquantified until the end of the semester? They can't be altogether blamed for being concerned with their grades with our system such as it is. To paraphrase the Declaration of Independence, students

are more disposed to suffer while grades are sufferable than to right themselves by abolishing the forms to which they are accustomed.

And grades are apparently still very sufferable. But here's the irony: according to the research, by not grading I'm helping them focus on more substantive improvements that will result in higher levels of accomplishment. When translated into grades, they would get higher grades than if they had been graded all along -- assuming my grading scheme isn't so arbitrary it misses the difference.

A potential happy medium is contract grading. There are various shades of this, but the basic premise is to tell students what they have to do to get a certain grade and perhaps work with them to write the contract. For example, if they complete all assignments to my satisfaction (which may be less than their best), then they could be sure to get a B in the course over all. Some faculty members create a requirement for each letter grade and use the pluses and minuses to capture the finer shades of grading. If the professor is very comfortable with and clear about the requirements, it alleviates much of the pressure of grading, as students are automatically bracketed. That's a great compromise, but I worry it already sets students up to see the course as just a series of steps to complete or boxes to be checked. Sure, for some a B will not be enough, but why give them any reason to think the grade they'll get is a good indication of the work they'll do?

Thoughts on rubrics are mixed, since they are often a precursor or proxy to grading. Providing rubrics with assignments is a way of informing students of your expectations, at least in broad strokes. But their typically bracketed layout with its various levels of quality for each learning objective is the source of some objections. You are literally putting the assignment (and so the students) in boxes before you've seen what they produce. And each level is often associated with a number or even an ambiguity such as "meets expectations," which is where the grade proxy comes in.

One solution is to reduce the number of increments even so far as pass/fail or sufficient/revise to counter the association with grades. Yet that again poses the course and its assignments as something to be completed. It runs the risk of telling students that improving yourself -- i.e., revising a work that met expectations -- has no intrinsic value. Here again, I think thoughtful written feedback is most effective for us all.

Perhaps the best thing I could teach my students as writers is how to recognize when their writing needs work and what kind of work it needs. To this end, they will be given ample opportunities to assess themselves and their peers. With each assignment, I'll ask them to provide a short written assessment when they turn it in. Drafts will be reviewed by peers, which helps students develop skills necessary for self-critique by seeing their strengths and weaknesses in others' work. And examples of good writing will be provided and dis-cussed in class as models to work toward.

So what about those final grades? As it is detrimental to learning to grade anything that a student is still working on, I'm leaning toward the portfolio approach. At the end of the semester, students will turn in all of their writing assignments, all of them having been reviewed and revised at least once, for a final grade. They'll also write an assessment of their portfolio detailing what they've learned, where they've succeeded and what still needs improvement. Here, and only here, I'll also ask them what grade they think they should get.

But how will I arrive at a letter for each? Ultimately, I have to have a scheme or a formula, even if it's implicit. If I'm not ranking, I'm at least comparing. Or maybe I wait till the end of the semester to quantify the quality of each piece in the portfolio, assign a weighting and add it all up. Or shall I touch each portfolio to my head, awaiting a clear message from the gods of holistic grading, and then declare, "B-plus"? There's no avoiding this, and I don't know what's right or even just best. What is the most meaningful way to assign the final grade?

I don't know the answer to that, but I think it's time to start breaking the cycle. Maybe, just maybe, I can teach my students that they know better what they've learned than any grade can ever indicate. Even if they don't feel they suffer by grading and they object to my approach, we don't always hurt when we're sick, and the best medicine doesn't always taste good. ∎

Bio
Dan Houck is a Ph.D. candidate at Cornell University, where he studies fluid dynamics and wind energy. He will be looking for a postdoc position in about a year if anyone was wondering.