LESSON PLANS

Teachers teach.
Why is a question with infinite answers.

At Whitman, some 216 faculty skillfully execute a balancing act between teaching and scholarship, focusing on instruction and research with the same rigor they require of their students.

In this issue of the magazine we focus on the teaching component of their work with profiles of three dedicated, innovative teachers and a feature on the Center for Teaching and Learning. We offer but a sample of the pedagogical styles of faculty and the essence of the learning experience that distinguishes Whitman from other schools.

What defines a Whitman professor? Intellectual agility, devotion to students and commitment to scholarship top the list. The proof of our faculty’s cutting-edge research, professional involvement and innovative creative activities is in the fruits of their labors — books, journals, translations, scholarly papers, lab findings, field projects, performances, exhibitions — and in the learning that takes place here.

Beyond the why of teaching resides the how. How best to create learning conditions that stir students from easy habits to the hard search? To that end, we also asked each featured professor — Shampa Biswas, Dana Burgess and Laura Schueller — to share with our readers a learning moment in their own words.

Stories by Keith Raether
Faculty portraits by Lore Fauver Rude

Students enjoy a little nice weather with their tests.

Center for Teaching and Learning

Signature scientis est pauo docere:
Unfurled from the Latin, it means “The touchstone of knowledge is the ability to teach.”

A visitor to the Center for Teaching and Learning in Penrose Library at Whitman College won’t find these words embossed in gold above the doorway.

They are understood by the faculty who pass through. The CTL’s raison d’être is to help teachers at Whitman teach — resourcefully, imaginatively, mindfully — in the interest of knowledge and its free exchange.

“To be good at teaching, you need to continually reflect on your practice as a teacher,” author and educator Stephen Brookfield observed in a speech marking the center’s opening in September 2000.

“To be an institution of exceptional learning, you have to pay careful attention to effective teaching,” said Keith Farrington, the center’s current director.

Whitman has long enjoyed an ethos of outstanding undergraduate education, notes Farrington, who doubles as the Laura and Carl Peterson Endowed Chair of Social Sciences. The CTL represents “a clearer articulation,” in his words, of the college’s commitment to make a “deeper learning experience,” he said.

“It’s a mistake, I think, to force anyone out of his or her most effective teaching mode,” Farrington said. “I don’t want to see the center stigmatize one teaching form or another as a negative. The extent to which we consider new teaching methods, whether or not we actually opt to experiment with them ourselves, has to make us more introspective, and therefor make us better in our teaching.”


Farrington, who in his 30 years at Whitman has seen many faculty come, teach, stay and go, appreciates where the center fits in: “It’s an affinity among its faculty, Farrington said. Some faculty contend that the days of the lecture are dead and push for “more process-driven, active-learning pedagogy.” Others hold fast to the traditional lecture format.

“If you look at teaching as a collective enterprise that is clearly the lifeblood of the institution, then learning from one another makes all the sense in the world.”

Within the teaching rubric at Whitman, there is wide latitude to accommodate differing styles, Farrington said. Some faculty contend that the days of the lecture are dead and push for “more process-driven, active-learning pedagogy.” Others hold fast to the traditional lecture format.

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There was a moment, an epiphany, in Shampa Biswas’ life as a graduate student when she no longer held the world in that state of suspended animation. Biswas, by Shampa Biswas

The book, Said observes that the pan-European Union of the East by scholars of the West has essentially painted half of the world into a corner. He urges that “narrative” replace “vision” in any interpretation of geography and its people. “Vision” classifies and labels. “Narrative” records and critically assesses the variety and dynamic nature of human experience.

Said’s book was truly transformative, one of those “aha!” moments, said Biswas, associate professor of politics at Whitman. “It was eye-opening to see how literature, which I dearly love, has been complicit in perpetuating inequality in the world.”

More important in the context of her teaching was Said’s insight that all knowledge is political. “It opens up the pedagogic possibility of also thinking of knowledge as politically liberating,” she said.

Biswa uses “Orientalism” in her “Alternative Voices” class. With each fresh reading of the “book, new windows” open in her teaching. Said’s call for critical analysis is part and parcel of the learning experience at Whitman — precisely the petition Biswas delivers to her students.

“Not every moment in the classroom is transformative, of course, but as a teacher, you always hope to bring knowledge that will generate that spark of enlightenment,” she said. “I really savor those moments.”

Biswa recognizes both the influence and responsibility that come with her job. Honesty as an educator demands that the educator be ever a learner.

“I never felt a calling to teach, but I knew why it appealed to me soon after I started,” she said. “Teaching keeps me intellectually curious and challenges me.”

Biswa found in her classes. From the moment she started at Whitman, it was her first full-time teaching job, and she arrived with no small amount of apprehension. Professors of color at the college were few. She worried about how her students would receive her. Not only that, she was new, and her expertise and authority would be respected. Acceptance underestimates what Biswas found in her classes. From the start, her students were hungry to be challenged, and trusting enough to challenge her.

“My first year at Whitman was intense and crazy and I loved it,” Biswas recalled. “That year I organized protests against the University’s anti-Organization protests in Seattle; I was teaching a course in international political economy. It was a moment of high risk, she maintains. Two years later, the terrorist attacks of Sept. 11 opened the floodgates of political discourse. Biswas was on sabatical at the time and left for Sri Lanka with her family soon after the attacks occurred. When she returned to Whitman, the challenge before her was plain. How, in her classes — “International Politics” in particular — could she coax her students to assess critically her own experiences abroad.

There’s a way of addressing political texts that I have read and thought about many times over. “I want my students to lose the notion of ‘Mutual Assured Destruction.’ MAD held that the two superpowers would not attempt to defend their national territory against an attack by their archenemy.

The treaty prohibited the two superpowers from building a nationwide missile defense system and limited “qualitative improvements” (development, testing and deployment) of their ABM technology. In short, the two countries, each possessing tens of thousands of nuclear warheads and sophisticated, long-range delivery systems, agreed that they would not attack each other’s national territory from a nuclear first strike.

proving and deploying a missile defense system? Second, what can the administration to withdraw from the ABM Treaty and begin developing a national defense policy that would make you secure from such enormous destruction? Precisely because, in the world of MAD, the ability to defend yourself, i.e., the ability to make yourself invulnerable to a (second-strike) nuclear attack, increases the risk of a first nuclear strike, making an otherwise “stable” nuclear deterrence seriously unstable. Hence, the 1972 ABM treaty, whereby the two superpowers agreed that they would rely on the rationality of mutual assured destruction rather than their own ability to defend their territory from a nuclear first strike.

Given this context, I raise three very different questions with my students. First, what are the consequences for global and national security, in a post-Cold War world, of the 2001 decision by the Bush administration to withdraw from the ABM Treaty and begin developing and deploying a missile defense system? Second, what can we learn from this case about nuclear arms-control treaties and their effectiveness? Finally, a larger and deeper question that involves a closer and critical interrogation of the concepts of political “rationality” and “security.” Who and what are made secure by the rationality of nuclear deterrence and, more generally, strategic thinking? Biswas juxtaposed female genital mutilation in Africa in the States.

Teaching keeps me intellectually curious and challenges me. Honesty as an educator demands that the educator be ever a learner.

“Aha!” moments,” said Biswas, “are a great deal from them. They challenge me to think in new ways about texts that I have read and thought about many times over.”

One dynamic way Biswas creates openness in her classes is to approach each course with an interdisciplinary lens. Her syllabi routinely feature readings across disciplines, and her students tackle seemingly disparate issues and themes in arresting ways. In one class, Bisma juxtaposed female genital mutilation in Africa in the States.

My students are exceptional in many respects, and I learn a great deal from them. They challenge me to think in new ways about texts that I have read and thought about many times over.”

— Shampa Biswas

Shampa Biswas

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Lesson I by Yashaunia Biswas

In my introductory “International Politics” class, I ask my students: “If, during the Cold War, the Soviet Union had fielded 10 nuclear-tipped missiles aimed at the United States, would the United States have been able to intercept and destroy? All of them? More than five? Two or three?” Then I share the answer: “Zero!” This shocking fact had nothing to do with available technology, resources or military preparedness. It had everything to do with what may be one of the most puzzling yet effective bilateral arms-control treaties between the United States and the Soviet Union: the Anti-Ballistic Missile Treaty, negotiated in 1972.

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Belongs in his office; “Cool baubles and more than raw content. Rough stone said. “There’s a crucial element of self-materials to think for themselves and ... wisdom — relentless” study, clear thinking and wisdom —

“A good educator gives students the materials to think for themselves and encourage them, embolden them.” — Dana Burgess

Is there a potential contradiction between students doing the intellectual work — the heavy-lifting — and a teacher dominating the classroom? Burgess is aware of the issue of “proposing too much of your own interpretation” on the subject of a class, just as he recognizes that his audience is 18 or 20 years old and needs signposts.

“I try to find the germ of what’s truly of merit in a student’s comment,” he said. “I coax it out, repeat it, translate it to the class so that the other students can hear it — it’s often very hard for them to hear their peers saying something of merit — and then I invite someone else to do something with it.”

By his own admission, Burgess is anything but a modernist about education. Study abroad, internships and community-service applications of learning are all well and good, but his allegiance is to the ivory tower.

“To my mind, the ivory tower is not a barrier,” he said. “There are others who have gone before us, wiser than we. Being old here, we know...”

“Absolutely,” said Burgess of the aphorism.

Circulate in his classes, whether the student is doing... Burgess modulated into contemporary western vernacular. “I’m all...” Burgess wants more than knowledge that invites close inspection. The process of discovery is a little like looking at a diamond under a microscope, each turn of the focus knob revealing a new facet of the gem.

“One wonderful thing about teaching at Whitman is that you get to play with a much greater variety of baubles,” he said. “I don’t have to limit my repertoire to Pinard or Greek tragedy. I teach Dante. I teach Shakespeare. I get to teach new ideas and authors.”

Last fall Burgess teamed with Associate Professor of Religion Jonathan Walters to teach “Comparative Indo-European Epic,” using the “Iliad” and the “Ramayana” as primary sources. “The class gave me the opportunity to delve into a whole culture that I knew nothing about, and to figure out how a Greek epic relates to an Indian epic,” Burgess said.

His romance with the classics was accidental — and inescapable ever after. As an undergraduate at Bard College, he knew he wanted to immerse himself in literature. What he didn’t expect was getting so happily stuck at the beginning.

“There was more than enough in the early literature to occupy my attention,” said Burgess, who went on to earn a doctorate in Greek from Bryn Mawr. The classics have hardly been literature quicksand for Burgess. His most recent object of inquiry is Nietzsche; early in his Whitman career he studied Dante. The “likely source of his inspiration to learn Latin was Ezra Pound.

And while Burgess is an abiding scholar of Greek tragedy, he’s also an avid “amateur” director of the same material. This past spring he staged his own translation of ‘Electra’ at Harper Joy Theatre.

The performer in Burgess comes as no surprise to those who know the through-lines of his life. His mother was a theater director. His father was a professor, a Shakespeare scholar and a playwright at the University of California at Berkeley. At Bard, the younger Burgess studied dance as well as classics. At Whitman, he serves as the director of dance.

“I need — and I think my students profit from — a significant amount of physical energy in the classroom,” Burgess said. “A teacher needs to be a spark for engagement. We all have different styles, and as an educator I wouldn’t want it any other way.”

In a class session of “Antiquity and Modernity,” Burgess: So, Joan, waddaya think is the most important character trait of Odysseus?

Joan: He’s a hero.

Burgess: That’s what mean? What a hero like?

Joan: He’s good and brave and smart.

Burgess: OK. Let’s think about “smart.” What does he do that’s smart?

Joan: When he found out the Cyclops when he said his name was “Nobody.”

Burgess: Great! That’s a great example of being smart. What kind of smarts does he have then?

What kind of smarts does he take to defeat the Cyclops? ... Henry?

Henry: I think he’s a bad guy. He just lied to the Cyclops to steal his stuff.

Burgess: OK. He’s a bad guy, but he’s a smart bad guy, isn’t he?

Henry: I guess. If you call lying smart.

Burgess: So what kind of intelligence is required for a good lie?

Joan: Ya gotta fake it. Ya gotta trick someone.

Burgess: So he’s tricksy smart, huh? Joan, Henry says Odysseus is tricksy smart. Do you buy that?

Henry: The Cyclops was pretty easy to trick... but, yeah, Odysseus tricks people all the time. He fooled Nausikaa into helping him.

Burgess: So what’s the difference between the way he tricks the Cyclops and the way he fools Nausikaa?

Samantha: He didn’t fool Nausikaa. He sweet-talked her. He told her what she wanted to hear, how she was going to get married and all.

Henry: Yeah, like I said, he’s a bad guy.

Burgess: Like she’s you think? He’s not very... really.

Samantha: That’s not a very good come-on line. No girl wants to be told she looks like a tree. I think he really means it. I mean — springing into the light,” she said. “In coming into existence. She didn’t matter before, but now she matters. He’s telling her she matters.

Burgess: Cool! Does that mean he’s telling her what she wants to hear? What do you think, Paul? Is he tricking Nausikaa or is he telling her what he really thinks?

Paul: He’s doing both. He’s flattering her, but he’s flattering her with the truth. She’s there doing her... What do you think, Joan? What do you think?

Joan: He acts like a gentlewoman to Nausikaa, and he acts like a hero with the Cyclops.

Burgess: So that different from what he did when he tricked the Cyclops? You started this off, Joan, what do you think?

Joan: He acts like a gentleman to Nausikaa, and he acts like a hero with the Cyclops.

Burgess: You said that a hero was good and brave and smart. Is he all those things with the Cyclops?

Joan: Yes ... but he’s not really very ‘good.’ He’s lying and he wants to hurt the Cyclops; but he’s smart and brave. He’s good to Nausikaa.

Burgess: It sounds like he’s pretty adaptable. Are there any other times when he seems adaptable?

In leading a discussion, I try to clarify and specify the students’ ideas as they are forming, to put their responses to the text into relationship to one another and lead the students unobtrusively toward productive lines of analysis. What follows is a fictional example of how that might take place in a class session of “Antiquity and Modernity.”
Laura Schueller

Laura Schueller has taught mathematics at Whitman for 11 years, fewer than Euclid logged but enough to know that teaching can’t be quantified, even in the realm of numbers. Were it possible, Schueller would have some explaining to do. She’d have to clarify how, by the second week of a new course, she knows the hometowns of her students. She’d have to account for all the evening office hours that she routinely keeps. Worst of all, she’d have to rethink her deepest conviction about math: that its beauty lies not in correct answers or in the elegance of possible solutions but in the beauty of possible solutions.

“I think there’s this idea about math that, if you can just learn the algorithms and memorize how to do things, everything will add up,” said Schueller, an associate professor of mathematics. “To me, being good at math is seeing the beauty in it. That beauty, that elegance, is something you should look for in whatever you study.” — Laura Schueller

At Penn State, she met a fellow math romantic, Albert Schueller, who would soon become her husband. The two went on to Kentucky together, where they earned their masters of arts and doctorates. They accepted jobs at Whitman together because it was Laura Schueller’s first teaching position after graduate school. The Schuellers are one of several wife-husband faculty teams at Whitman who job-share in order to balance the responsibilities of teaching, family and scholarship. The abiding benefit of the Schueller system for the Schueller children is plain: Their home-schooling in math comes from professors of math. Witnessing so closely her children’s early discoveries with numbers reminds Schueller of her own awakening. It was urgent and unyielded. So urgent that when she was a fifth-grade student in Virginia Beach, Va., she indicated on a multiple-choice survey question that she was going to earn a Ph.D. in mathematics. She didn’t know what a Ph.D. was, only that it was at the top of a list of choices.

Years later, when it became clear to Schueller’s parents that their daughter was serious about a career in math, her father tried to rescue her. “He wanted me to be an engineer because he was worried I wouldn’t be able to do anything else.”

At Whitman, the Schuellers bring very different teaching styles to the classroom and office. He is efficient, mild-mannered and attentive to the smallest detail. She is spontaneous, effusive and spacious in her approach. Both styles succeed, and both reflect a zeal for teaching.

“You probably couldn’t pick two styles more diametrically opposed,” said Laura Schueller. “Students come to Albert’s office, they talk about a homework problem, the problem is solved, and they leave. It’s a professional manner that his students expect. I’m a live wire; just listen to me at a basketball game. I like people. I thrive on personal connection, and I suspect I bring that need to the classroom. All the better for my teaching, I think, if I can share something of myself with them.”

The rapport Schueller enjoys in her classes spills over to her office hours, when students, past and current, come to her “about things that don’t necessarily have to do with math.” Not long ago a Whitman graduate student who had been a Ph.D. student at Whitman was stumped by a problem he was trying to teach. He even brought along his students’ papers, which Schueller kindly reviewed. Quantifiable or not, teaching for Schueller comes with a clear quotient. It is called happiness. She and her husband love math, pure and not-so-simple, and are passionate about sharing it with keen young minds, at Whitman and at home.

“Our poor children,” Laura Schueller said. “Albert and I brainstorm a lot at the dinner table.”

After more than a decade at Whitman, Schueller has compiled a data set, as it were, large enough to measure what succeeds and fails in her classes. “I can look at a test in abstract algebra or calculus and say to myself, ‘This is a reasonable test, we’ve done a reasonable job preparing for this test. If the students aren’t entirely there, then it’s because they may simply be a ‘B’ student in the subject. If they are, it’s because they’re an ‘A’ student.’”

In either case, Schueller hopes she is wise. She still bristles at educators and others who insist that math apply to real life. “When will they learn that the beauty of it isn’t in its applications?” she said.

The agitation is only momentary, though, for there are chapters upon chapters of exquisite equations to consider. And “Fermat’s Last Theorem” to unveil. Finally, on Schueller’s desk at Olin, there is a mantra in the form of a fortune to remember. It reads: “Be present, not tense.”

— Laura Schueller

Pythagorean triples

As early as 500 B.C., people understood the Pythagorean theorem, which states that the sum of the squares of the lengths of the legs of a right triangle is equal to the square of the length of the hypotenuse.

In elementary number theory, it is uncommon to study Pythagorean triples, that is, triples of positive integers (a, b, c) with the property that $a^2 + b^2 = c^2$. But even more interesting things happen. If we consider higher powers, we encounter the now famous “Fermat’s Last Theorem” which states that $a^n + b^n = c^n$ has no positive integer solutions when $n > 2$. This amazingly simple-to-state, 350-year-old conjecture, proved by Andrew Wiles in 1994, was and is the catalyst for much modern number theory.

This type of mathematics is attractive because it allows us to punch numbers into a calculator, look for patterns and then, with small steps, each a little more abstract than the one before, work toward the splendid world of unsolved — even unconsidered — mathematical questions. I encourage you to sit down and play with mathematics awhile, enjoy the patterns and elegance and stretch your abstract thinking. Who knows? Maybe you’ll even prove a theorem.

Lesson III

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