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A University Professor Teaches in the K-12 Classroom

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During my recent sabbatical, I had the unique opportunity to teach full-day sessions for 14 weeks in two different K-12 settings. Here's how that happened. I decided to propose this unique sabbatical project because my students regularly asked me about the clinical experience phase of the university's library science program. The prospect of taking PRAXIS exams (two are required for library science certification) in a testing center and completing background checks and required Pennsylvania Department of Education paperwork were all student stressors. And although those of us teaching in the program can explain and mentor student teaching experiences in a library setting, our students knew very well that most of us had done our student teaching many years prior. Since then, the overall process has evolved to include complications such as required certification tests, background checks, fingerprints, and such. More to the point, I wanted to actually live the experience as a student might.

I didn't arrive at my faculty position in this department via the more traditional route. I came to university teaching by way of the military, time in corporate America, and teaching at a community college. At this point, I do have a couple of master's degrees, higher education teaching experience, and am a practicing and certified Pennsylvania Professional Public Librarian, but before my sabbatical I was not K-12 certified. Once my sabbatical project was approved I set out to "walk the walk," doing the same steps required of our teacher candidates. First, there was some additional course work I needed to fill in certain gaps in my higher education-focused master's degree in library science. Accordingly, to prepare for the sabbatical, I completed four courses outside the library science domain. Next, I obtained the clearances I did not yet possess or were not current enough to satisfy school district requirements, completed the requisite medical exams, and processed the paperwork at the sponsoring school district in order to be voted in and invited as a "student" teacher by the schoolboard.

I first taught in an intermediate school library. To say the least, and especially because of not having children, teaching fourth, fifth, and sixth graders was a unique experience for me, and far more interesting and challenging than I expected. Full days of teaching energetic youngsters proved to be quite exhausting, and there were all sorts of new obligations and responsibilities; hallway monitoring, escorting sick kids to the nurse, for example. Throughout this experience, I found myself living out my collegiate Universal Design for Learning (UDL) lectures. It's one thing to talk about multiple means of representation and stepping out of one's comfort zone when lecturing undergraduate students. It is quite another experience to actually do so in an unfamiliar classroom setting. Reading fairytale stories to fourth graders, using my best, but still not very good, character voices, was a learning experience way beyond anything I was used to. Nevertheless, my less than stellar storytelling skills notwithstanding, working with the kids was a fantastic experience.

My next seven weeks I spent at a high school. This experience was more like teaching my undergraduates at Kutztown, but it had clear differences. It was interesting to work with students about to embark on the next phases of their lives, whether it was the military, college, or the workforce. For those headed to college and the military and uncertain about what to expect, I could fill in a lot of the details. Working with these students was rewarding because it helped me better understand seventeen- and eighteen-year-olds, soon to be college students.

I finished up the sabbatical by taking the Library Media Specialist and Fundamental Subjects PRAXIS exams, earned 12 additional graduate credits as a result of the student experience, and was awarded K-12 Library Media Specialist certification by the Pennsylvania Department of Education. More importantly, I gained a needed perspective on the whole experience. Now, when students ask me, "What it is like to take the PRAXIS," I can

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Doing More with Formative Assessments

Authors Kulasegaram and Rangachari propose moving beyond our understanding of formative assessments as "interim measures" that lead to the real, final assessments—the ones that generate the all-important grades. They suggest we stop calling them formative assessments and start thinking about them as assessments for learning. "We contend that assessment for meaningful learning should prepare students not just to get good grades and meet the requirements of a specific course, but give them the training, the skills, and the enthusiasm for the long haul." (p. 5)

They support this new vision of formative assessment by pointing out how inadequately most summative assessments measure competence. Their context is medical education, but the points they make relate to the preparation of all kinds of professionals. Testing factual recall is easy and its methods are objective, but there are pedagogical costs. "Important learning outcomes, such as the ability of students to extrapolate their knowledge or apply it to novel problems…are lost. Moreover, poor learning behaviors are reinforced in students, including the tendency to gorge on knowledge immediately before assessment and followed by a quick purge as the students move on to the next assessment." (p. 6)

Assessments for learning should accomplish a "judicious mix" (p. 9) of the following: 1) help learners see where they are in meeting course objectives; 2) identify what they haven't learned or still need to learn; 3) enable them to transfer their knowledge and skills to novel situations; 4) promote a deeper understanding of the material; and 5) provide them an opportunity to personalize their learning. These assessments can take place at several different levels in an educational experience. They can happen in the classroom, at the level of the course (meaning they build individual class sessions and course topics into a coherent integrated whole), and at the programmatic level.

Interesting points are made about the need for rigor in assessment for learning. Formative assessments are often referred to as "low-stakes" and that's fine, but that shouldn't be conflated with "low quality." If an assessment is to promote learning it must reinforce what's being learned, provide feedback on both the content and the learning, and direct the learner to resources that can be helpful with improvement.

Feedback that promotes learning is "actionable." It offers the learner things they can do that respond to what they have done. Receiving feedback, particularly if it's critical, can cause learners to self-protect. This means those delivering the feedback must be concerned about the content, how the feedback is delivered, and what's identified as in need of improvement.

Although this discussion of assessment for learning is abstract, it does include a number of concrete examples, among them some not often considered, like oral exams. If students are permitted to select the topics, oral exams offer a powerful way for individualizing learning. Student knowledge can be probed in ways not possible on paper exams. And the oral exam makes cheating and plagiarism moot. The primary objective of learning assessments is not grade generation. The feedback enables the student to monitor where they are on the way to meeting the course objectives. So, if the oral exam is something more like an oral review session, it might not be as anxiety-provoking.

Moreover, the authors are aware that factors like class size, faculty-student

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Improving Comprehension and Retention When the Content is Complex

This article starts with the results of a question 170 students in cell biology courses answered during the first week of the semester: "What percent of the information you have learned in your university courses do you still remember 6 months after those courses are finished?" Just over 50 percent of the students said 50 percent of the content. Another 30 percent said they only remembered 25 percent.

That amount of content lost has motivated a series of on-going efforts by this group of biologists to improve student comprehension and retention of the complex mechanisms they regularly study in undergraduate biology and biochemistry courses. And although much of the content in the article is discipline-specific, their goal of better comprehension and retention of content complexities is shared by faculty in every field. How they approached their objective is unique and applicable elsewhere.

The first author writes about an important personal discovery. Late in the afternoon he would realize that tomorrow morning he'd be teaching. "Already? Not very much time to prepare. What then did I think about? What's the topic? Do I need to review my notes? Are my slides ready? Is there a quiz? What else do I need to do? I came to the realization that everything was about me—the teacher. But what about them—my students." (p. 17) He calls it an "instructive moment" and one that "changed my perspective." "I concluded that perhaps what they were doing might be more important than what I was doing." (p. 17)

Throughout the article, there's evidence of that change in perspective with interesting feedback from students collected along the way. Consider this description they put together outlining how a hypothetical but typical student studied in their courses—and perhaps in other courses: "Jack" doesn't come to class having done the reading because he thinks it's easier to wait until the teacher goes over the material. He'll also find out what she thinks is important, ergo what he will need to know for the test. Neither Jack nor many of his classmates ask questions during class. They don't want to reveal their ignorance. Jack studies alone. He considers study groups a waste of time. When studying, he silently goes over his notes, reviews the text, paying special attention to words printed in bold type. There's an overwhelming amount of content but Jack has discovered that the multiple-choice questions on the test are pretty much like those in the study guide that comes with the text. Does the teacher offer advice on how to study? "Not really," according to Jack.

Said bluntly, experiences in many college classrooms not only don't teach much of anything about how to learn, they actually reinforce poor study strategies with class sessions and assessments that focus mostly on content details.

In a nutshell, Jack's approach to studying pretty much avoids anything that's intellectually demanding; he doesn't test his own conceptual understanding, doesn't collaborate with classmates, memorizes but doesn't articulate what he thinks he knows, and focuses almost entirely on what to learn, not how it could or should be learned. In other words, his approach violates most of the evidence-based study practices identified by research.

To promote better comprehension and retention, the researchers started using tests that contained conceptual problems. For example, students were given data sets and told to "state in one sentence" the conclusion justified by the data. Questions like these were used formatively in class so that students could practice generating answers. In one class session, after doing one of these problems and with the class average just below 40 percent, students were asked (anonymously) to explain their performance. One-third reported, "My strategy was to search the problem for specific clues as to what you wanted rather than using the prompt to allow me to demonstrate my understanding." A quarter responded, "I really don't know why I left important elements out that I thought I understood." (p. 9)

When asked what they planned to do to improve their answers, the researchers write, "Our hope was that they would recognize the need for a more comprehensive understanding of the fundamental principles. . . ." (p. 12) Nineteen percent of the students reported that they would "put down everything I know." In other words, "cover all the bases." That approach fails to address the real problem—the "inability to discriminate critical from trivial attributes." Most of the rest of the responses had to do with trying harder, paying closer attention, and "working harder to figure out what the teacher wants." "Together these results indicate that many students are unable to make an accurate diagnosis of their analytical deficiencies or prescribe a useful remedy." (p. 13)

Said bluntly, experiences in many college classrooms not only don't teach much of anything about how to learn, they actually reinforce poor study strategies with class sessions and assessments that focus mostly on content details. Students in this course did provide

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Self-Efficacy: Its Relationship to Learning

The definition of self-efficacy is straightforward: "a person's perception that he or she has the skill and capability to undertake a particular task." (p. 1918) It's important to teachers because of its "consistent" and "demonstrable" links to student learning outcomes. If students believe they can learn the content (that they're smart enough) or execute the skills, that significantly increases the chance they will accomplish the learning task.

And the amount of research that supports the role of self-efficacy in learning is convincing. Findings in the meta-analysis highlighted here are based on 64 different studies. The meta-analysis builds on another review of research published in 2011. Another review of research (published in 2012) looked at 50 different measures believed to influence learning as measured by grades. It looked at 241 studies and found self-efficacy was the strongest correlate with GPA among all 50 of the different measures. The nature of these beliefs students have about what they can and can't learn merits our further exploration.

Here's the first message that emerged from this 64-study review: self-efficacy is strongly associated with student achievement, as well as self-regulation, motivation, and strategy use. (p. 1923) Researchers report that the relationship between self-efficacy and achievement was significant in 92percent of the studies they analyzed. These studies were conducted in seven different countries (including the US and Canada) and across a wide range of disciplines. Also of note, self-efficacy was not just associated with achievement. The research found strong correlations between it and 20 variables they deemed relevant, things like: self-regulation, metacognition, locus of control, intrinsic motivation, and learning strategy use. In other words, students with high levels of self-efficacy do the behaviors that promote learning. They're motivated and willing to devote time and effort to the task. They're self-regulating and disciplined. They plan study sessions and then execute those plans. They use good learning strategies—distributed practice, interleaving, and self-testing, for example. Their beliefs become a self-fulfilling prophecy. They do what they need to realize their self-expectations.

Here's the first message that emerged from this 64-study review: self-efficacy is strongly associated with student achievement, as well as self-regulation, motivation, and strategy use.

Given the power of self-efficacy, the second key message is encouraging: **teachers can intervene to raise student self-efficacy.** Ten studies in this sample demonstrated that "self-efficacy was higher when particular teaching strategies were employed." (p. 1924) Seven studies showed that self-efficacy improved over a period of time probably as a result of completing a course or a particular learning activity. That's the good news. The not so helpful news is that the courses and related activities that garnered the improvement in the studies tend to be very specific, discipline- and course-related. They're not easily replicated and if they aren't replicated according to the study design, then the results aren't guaranteed.

It is always a challenge to extrapolate general conclusions from individual studies. The researchers observe, "As scholars, we need to become skillful at extracting pedagogical principles from publications or presentations reporting on work conducted in a range of disciplinary settings. . .for adaptation and testing in our own particular teaching situations." (p. 1931). What's at issue here is how research that advances knowledge gets translated into evidence-based principles that can be applied to practice.

However, there is help for teachers in self-efficacy theory which explores how learners decide if they can or can't do or learn something? Those beliefs derive from four main sources and each in an area over which teachers have some control. First, performance accomplishments, or the actual experiences of success or failure, are part of what develops self-efficacy beliefs. If a learner tries something and completes it successfully, that's evidence that they can. Frequently that motivates a second attempt and success then further builds the belief. However, not all failure experiences decrease self-efficacy—it's repeated failure experiences that do. For teachers then, it's understanding the importance of those first experiences and selecting ones where the chance of success is good. It's also understanding that failure can be a learning experience or it can erode self-efficacy beliefs.

Unfortunately, many students arrive in our courses with firmly established beliefs, and for many of them, it's about what they can't do. "I can't write." "I'm very bad a math." They desperately need experiences that challenge those beliefs and teachers who recognize that changing them is a process. The student who has never before gotten a decent grade on a math test often attributes a decent grade to luck, prayer, or clean living.

Beyond experiences that challenge beliefs, self-efficacy is also developed by **vicarious experiences**—that is, by seeing the success or failure of another person, especially if the person is someone like the observer. So, if women in engineering programs see other women doing the problems, performing in lab, and succeeding in courses, that's persuasive and motivating. And the opposite

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Reflections about Connections

Emily Gravett writes insightfully about the disconnect between instructor and student course goals. She's writing about religion courses and how academic goals, such as "analyzing the historical, cultural, linguistic, literary, political and social contexts of religious beliefs and practices" are not the goals that motivate students to take religion courses. Their goals are more personal and often involve big questions such as, "Who am I?" "Why am I here?" "What is truth and how can I know it?" Instructors (not just those who teach religion) are trained to deal with content objectively, rationally, and to approach subject matter with reason and logic. Students need to learn these ways of rational thinking, but what motivates them in all kinds of courses is how that content is relevant to them—how it connects with what's happening in their lives. Gravett points out that we are doing the discipline and our students a disservice "if we do not attend to (or, worse, if we actively avoid) what we know motivates students to learn." (p. 21)

It's a very discipline-specific article but its implications are relevant in every field. For example, Gravett proposes a variety of instructional practices that encourage students to make connections between the content and their lives. Here's a weekly online reflection assignment her students write. They use the notes they've taken in class during the week.

1. What's the most surprising or important thing you learned in class this week?
2. What was the most inspiring or unsettling idea you heard from a peer during class this week and why?
3. Describe a connection between something you learned in class this week and your life outside class.

Not only does a reflection assignment like this encourage thinking about the personal relevance of course content, it promotes good note-taking and underscores that students should be listening and learning from others in the class. Perhaps best of all, it "motivates" the teacher to talk less and use discussion more. —*MEW*

Reference: Gravett, E. O. (2018). Lost in the great divide: Motivation in the religious studies classroom. *Teaching Theology and Religion, 21* (1), 21-32.

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describe the testing center (potentially stressful, little cubicles, timed exams on computers), and I can offer real suggestions about how to study for and face those stressful exams.

Because of the sabbatical teaching experience, smaller details of the current certification experience are now in my grasp. If a student asks about the PDE 430, or clearances, or the special education course sequence, I can accurately comment on those elements. I can also reassure my students that they will succeed in the journey. Perhaps the most important lesson learned from the whole experience was how it enabled me to see how things look from a student's perspective. After teaching for some time, it's easy to lose that perspective and tremendously beneficial to that once again be able to "walk the walk."

Self-Efficacy

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happens as well. If students see other students failing or don't see any other students like themselves succeeding, then those vicarious experiences accomplish the wrong result.

Teachers also need to be aware that self-efficacy beliefs are influenced by **social persuasion**. It makes a huge difference if a faltering student has a teacher who believes in them and continues to believe, even in the face of failure. The statement of belief is made acknowledging that the student has far to go, much to learn, is not close to the goal, but the student still has the potential to reach the goal. Teachers can powerfully influence the development of self-efficacy and just as powerfully compromise those beliefs.

And finally, beliefs about ability are influenced by the **physiological reactions** that come to be associated with the learning task. How does the learner feel about what he or she is trying to learn? If the experience provokes anxiety, fear, and stress, those emotions get woven into beliefs about self-efficacy. This is why teachers should pay special attention to those aspects of instruction that many students do find anxiety-provoking—being called to answer a question, various aspects of testing situations, and critical feedback on performance, for example.

It's difficult to underestimate the power of beliefs about ability to influence learning. A belief in the ability to do something enables a learner to confront a task with confidence, to organize what needs to be done, to know or figure out how it should be done and then to set about doing it. If students don't believe in their abilities, success is a much less likely outcome. Teachers can intervene—they can be part of the set up for success or they can be part of the reason students don't succeed. —*MEW*

Reference: Bartimote-Augglick, K., Bridgeman, A., Walker, R., Sharma, M. and Smith, L. (2016). The study, evaluation and improvement of university student self-efficacy. *Studies in Higher Education, 14* (11), 1918-1942.

Are Professors Forcing Liberal Views on Students?

That's a concern commonly expressed by those in the conservative camp, and not without some justification. College professors in general are more liberal than conservative. And what professors believe and think does influence students in subtle and sometimes not so subtle ways.

However, a recent study documented that something quite different was happening in a set of introductory and upper division political science courses (where political views are an inherent part of the content). The faculty researchers started out by asking students to rate their political ideology along a liberal and conservative continuum. The students also rated how conservative or liberal they thought their professor was and, as might be expected, they rated the professors as being more liberal than they were. Then the research asked students three different questions about the instructor: 1) would they recommend the instructor and course to other students; 2) how would they rate the quality of instruction provided in the course; and 3) how did they feel about the instructor (from very much dislike to very much like).

What they found was that students who rated themselves as liberal tended to perceive their instructors as liberal and students who rated themselves as conservative tended to rate their instructors as conservative. In this study, the instructors concealed their actual political ideologies. These results "suggest that, rather than forming perceptions of their professors' political views based on their professors' actual views . . . students tend to project their own ideology onto their professor based on the extent to which they like the professor." (p. 569) Moreover, "The interaction between the professor favorability measures (Recommend, Quality of Instruction, and Like Professor) are all positive and statistically significant." (p. 568) In other words, how much the students liked the instructor strengthened their assessment of the instructor's political ideology.

This evidence directly confronts the assumption that liberal professors are influencing students in ways that make them more liberal. "Contrary to the fears of some conservative politicians, recent research has shown that a professor's ideology has little impact upon the ideology of their students . . ." (p. 566) It is true that students in general do tend to become more liberal across their college careers but research is cited in the article that this move in the liberal direction happens in courses regardless of the professor's actual ideology.

If a student likes a professor, he or she "may be loathe to believe" (p. 566) that the professor does not share the same political views. So, even if they don't know where the professor stands politically, students assume they and the professor are on the same side of the political fence. Although the evidence in the study does not support the view that professors are proselytizing students to the liberal perspective, it is still troubling that, even in the absence of evidence, students make assumptions about political perspectives. Many faculty have chosen not to reveal their beliefs and positions on issues because they do not want their views to influence students. This research would seem to indicate that it doesn't matter if you conceal your views. Students draw conclusions anyway, especially if you happen to be a professor students like.

The evidence doesn't justify becoming a professor students don't like. But the study does affirm that how student feelings about professor have consequences, some we probably don't anticipate. —*MEW*

Reference: Braidwood, T., and Ausderan, J., (2017). Professor favorability and student perceptions of professor ideology. PS, Political Science and Politics, 50 (2), 565-569.

Assessments

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ratios in a program, the layout of classrooms, and the available time all have implications in terms of what can be accomplished. Assessment for learning at its best is a time-consuming endeavor. However, the benefits of assessment for learning are worth accomplishing even in bits. If oral exams are not feasible, a collection or even a few individualized exam questions, possibly selected from a question set proposed by the student, can provide the student a novel learning experience. "Meaningful learning can be significantly enhanced if students were given an opportunity to personalize their learning." (p. 6)

It's an interesting article that does propose a different and definitely more substantive way of thinking about formative assessment. Not only does it require a change of attitude and understanding on the part of the teacher, it would require considerable re-ordering in how students think about assessment. Considering it makes sense when we remember that assessment drives learning—how learning is assessed determines what students will learn and how they will learn it. —*MEW*

Reference: Kulasegaram, K. and Rangachari, P. (2018). Beyond "formative": Assessment to enrich student learning. *Advances in Physiology Education, 42* (1), 5-14.

Differentiated Instruction: One Size Does Not Fit All

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I teach students soon to be elementary and special education teachers, and they are often surprised to discover that their students are not "one size fits all". The phrase has been around for decades and originally implied that a particular piece of clothing would fit everybody. Now, in my experience, the one size fits all scarf works for pretty much everyone, not so much for the one size fits all pair of pants or leggings.

For my new educators, "one size fits all" implies that all the students who walk into their classroom are basically the same and this is simply not true, in a grade school classroom or a college classroom. Students come with varying academic backgrounds and with different skill levels. They represent a range of economic levels, as well as diverse family backgrounds, cultures, and ethnic heritages. Finally, students have a range of academic abilities. Some are gifted; others may have a specific disability.

Dr. Carol Ann Tomlinson writes in, *How to Differentiate Instruction in Mixed Ability Classrooms,* that differentiation of instruction simply means "the teacher assumes that different learners have differing needs" and teachers should have plans responsive to their learning needs. To do that, teachers must not only have an in-depth knowledge of the content, they must have the same level of knowledge about their students. They must know student backgrounds, academic levels, and learning preferences. This does not mean 30 individual lessons for each concept being taught in the classroom. It's more a conscientious or focused effort to address the scope of learning abilities and needs, not assuming that a course with nothing but lectures will adequately meet the learning needs of everyone and if it doesn't, well, that's the students' problem.

Teachers can use the information gained from informal assessments to make adaptations to instruction in "real-time" so that student learning is further enhanced before those final assessments.

Effective teachers at every level should continually assess students both formally and informally in the classroom. That's how to determine the differentiation needed to ensure the mastery of content and skills by all students. This too, is a difficult concept for new teachers (and perhaps for some not so new). The new teachers I work with often believe assessments are the means we use to give the student a grade at the end of the grading period. However, assessments are most effective when they are used to inform instruction. Assessments should address the following: What did the student learn? What additional areas of instruction are needed? What are the next steps for instruction? Teachers can use the information gained from informal assessments to make adaptations to instruction in "real-time" so that student learning is further enhanced before those final assessments. The goal for all teaching is optimizing teachable moments within the classroom.

Assessment and differentiation of instruction go "hand in hand" as educators work to ensure all students are learning at high levels. What teachers learn from informal assessments helps them develop a toolbox of instructional strategies that they can then use to successfully navigate the learning of each student. To concretely illustrate how that might work, consider how a portfolio can be used to assess student learning. The teacher can describe a variety of ways the material can be learned—through a collection of readings, by watching videos, listening to podcasts, or through some relevant activity. The student uses one or several of these approaches to master the material and demonstrates that mastery in the portfolio. There ends up being multiple ways the student can demonstrate that they understand and can apply course content. Their portfolio might be the traditional paper and folder method or a digital format.

Successful teachers understand the connection between assessment and the planning of differentiated instructional next steps. It's those connections that ensure that all students regardless of their learning differences have a meaningful and engaging learning experience. In doing this, the classroom becomes a positive learning environment for all students. "One size fits all" may work now and then in the world of fashion, but it's a totally unrealistic expectation in the world of education!

Comprehension and Retention

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feedback indicating that they understand memorizing details, regurgitating them on the exam, and then forgetting them is of limited benefit. They would prefer a better approach. "However, when the assessment task is unexpectedly rigorous or different compared to what they are accustomed to, many students appear to be unable to intuitively adjust, to make a successful course correction." (p. 17) —*MEW*

Reference: Bradshaw, W. S., Groneman, K. J., Nelson, J., and Bell, J. D. (2018). Promoting mastery of complex biological mechanisms. *Biochemistry and Molecular Biology Education, 46* (1), 7-21.

Workshops

It's an instructional development workshop. Will you attend? It might be on campus, a multi-campus event, or a session at a conference. Workshops, like those offered on professional development days or at conferences are the oldest and most common initiative to improve teaching and learning. They've been the stock and trade of teaching centers since the faculty development movement launched in the late 70s. Do they improve teaching and thereby student learning?

Not if you don't attend—and a lot of faculty don't. For some, that's because it's not the way they prefer to learn about teaching and learning. For others, it's time away from academic commitments, mostly associated with research. Still others, well, they think they don't need to. Usually that reason doesn't apply to good teachers who are almost always eager to find out more or see if they can pick up something new. It applies to the groups who are okay with their teaching—it is what it is—and they're fine with that.

Research on the effectiveness of workshops in advancing the teaching-learning agenda is mixed. In general, longer sessions have more impact that shorter ones. Effectiveness also appears related to how embedded the workshop is in events that come before and follow after. The easiest and most common way workshops are evaluated is by soliciting faculty reactions to them—the student evaluation equivalent of "did you like it?" The call has been repeatedly made to more robustly evaluate the effectiveness of workshops. And some of that is occurring, but it involves classroom observations which are time-consuming and measures of student learning that can be tenuous to tie to teaching behaviors.

A less direct way to improve the outcomes of workshops is for faculty to attend with clearer expectations. Some faculty, much like students, arrive at workshops with a do-it unto me mentality—I'm here, go ahead and develop my teaching. The better approach involves a look at the topic followed by an identification of what the participant needs to know about that area. What would you like to learn? What questions would you like to have answered?

When participants are involved, learning can occur from all that are present, not just the presenter.

As any workshop presenter will tell you, you don't have to worry about faculty participants taking notes. They do and they are first-rate notetakers. However, in addition to getting down what's important and what they don't want to forget, participants should also be responding to what's being presented with their own ideas, reactions, insights, and questions. A record of the content is fine, but equally worth recording and remembering are those thoughts that occurred during the session.

Faculty are fun to teach in workshops because most of them love resources. Make available a bibliography and then reference some of those sources during the presentation and participants are marking entries with enthusiasm and interest. But are any of those sources consulted subsequently? Participants can make the learning that occurs in workshops more significant. Like students, that happens when the reaction to the session is active not passive. When participants are involved, learning can occur from all that are present, not just the presenter. The years of teaching experience represented by those attending a workshop add up quickly to an impressive repository of experience and wisdom. Sometimes what provokes the most learning in workshops isn't the glowing recount of how I did it and what happened in my class, but the question provoked by something that didn't work or something that's an ongoing dilemma, conundrum, or challenge.

And what about when the workshop is bad or just not very good? That situation merits constructive feedback to the presenter and to those who organized the session. What were the hopes for leaning and what happened instead? What topics should be covered in workshops? What workshop structure and formats contribute to the learning experience?

Workshops are like courses—in lots of ways, you get out of them what you put into them. For many teachers, workshops are one of the few opportunities to reflect on teaching and learning. They provide the chance to learn from someone with greater expertise and from colleagues who face the same students and share the same instructional spaces. A good workshop informs, inspires, and raises questions without easy answers. — *MEW*