InSight

A Journal of Scholarly Teaching

VOLUME 11

A Journal of the
Center for Excellence in Teaching and Learning

"Teaching with an informed and critical eye on one's students' learning […] takes into account theory, inquiry, and evidence of learning, and, like other intellectual pursuits, is enriched by participation in a wider community of people similarly engaged."

~Pat Hutchings, Mary Taylor Huber, and Anthony Ciccone, *The Scholarship of Teaching and Learning Reconsidered: Institutional Integration and Impact*

SUBSCRIPTION INFORMATION

InSight: A Journal of Scholarly Teaching is published annually as a free, refereed resource highlighting scholarly contributions to advance the practice and profession of teaching. Limited print journals are available upon request; online versions are available at http://insightjournal.net/.

ISSN: 1933-4850
E-ISSN: 1933-4869

"More and more, members of the international higher education community see the need and value of SOTL and, thus, need a range of scholarly resources about SOTL from within our disciplines and across disciplinary arenas."

~Kathleen McKinney, *The Scholarship of Teaching and Learning In and Across the Disciplines*

CONTENTS
VOLUME 11 • 2016

InSight
A Journal of Scholarly Teaching

INTRODUCTION

EDITORIAL

SCHOLARLY ARTICLES

INFORMATION FOR CONTRIBUTORS

"By inviting students to become partners in the research process and by giving them more responsibility at every phase, we are developing them as independent learners and are engaging them in an important educational process – the work of discovery."

~Cathy Bishop-Clark and Beth Dietz-Uhler, *Engaging in the Scholarship of Teaching and Learning: A Guide to the Process, and How to Develop a Project from Start to Finish*

INTRODUCTION

About Park University…

Park University (originally Park College) was co-founded by Colonel George S. Park and Dr. John A. McAfee in 1875. An independent, private institution, accredited by the Higher Learning Commission of the North Central Association, Park University currently enjoys a distinguished position in higher education as a growing institution with 40 campus centers in 21 states including an extensive online degree program. In 2005, Park University created The Center for Excellence in Teaching and Learning to promote the practice and profession of teaching, including scholarly inquiry into teaching across the disciplines. *InSight: A Journal of Scholarly Teaching*, an outreach of the Center's programming, is a refereed academic journal published annually. The editorial staff invites submissions of research and scholarship that support faculty in improving teaching and learning. Open to submissions from all disciplines and institution types, *InSight* articles showcases diverse methods for scholarly inquiry and reflection on classroom teaching.

From the Editor…

Recently, I was attempting to explain to non-academics why I continue in a profession that is often underfunded and underappreciated. I ended up simply describing the feeling I get when walking across a university campus, something I first felt as an undergraduate. I *belong* in this place of learning. The challenges, frustrations, discoveries, and joys of higher education produce a unique environment where people can come together to test their limits and expand their understanding. I thoroughly enjoy being a part of such an environment, and what could be better than sharing my love of literature with others? Yet, my enthusiasm for learning does not necessarily mean that I am using the best methods or practices when I teach or that my students are actively aware of their learning processes. Rather, it is through trial and error, peer exchanges, and involvement in the SOTL community that I move beyond a feeling and gain a scholarly perspective of what it is that I can offer students and, in turn, how students can engage with their own learning.

In the opening editorial, Professor Dan Bernstein of the University of Kansas expands on this important topic by considering the recent history of the scholarship of teaching and learning and arguing that now is the time to embrace teaching as a serious intellectual endeavor. He maintains that scholarly activity involving evidence and peer review can help us enlarge on what constitutes excellence in teaching. Not only will we become better educators, but this approach will also help us to prove that we are deliberate and thoughtful in our actions.

Adding to the conversation are eight other insightful essays about teaching and learning, spanning multiple disciplines and using a variety of methodologies. The three essays succeeding Bernstein's editorial examine how students can benefit from reflecting on their learning experiences, whether it is in the context of learning how to teach, transferring skills to other disciplines, or simply determining what stood out in a particular class period. The fourth article considers how well undergraduate degree programs prepare students for a graduate degree in social work and what the implications are for curricula design. The next article describes a group project with real world application, while the following two essays investigate the phenomena of resistant students and how to best work with them. The final essay provides a status report of where SOTL stands in the field of public administration. I am thrilled to present you with such compelling scholarship, and I look forward to continuing the conversation in the next volume.

Many thanks to Jamie Els for her hard work and dedication to the journal, Patricia Marsh for her APA editing prowess, and B. Jean Mandernach for her continued support. The journal also would not exist without the efforts of our talented peer reviewers – thank you.

--Stacey Kikendall, PhD

More Acknowledgements…

InSight's editorial staff would like to thank the executive staff of Park University; their leadership and support in providing faculty resources makes this publication possible. A special thank you is given to Dr. Greg Gunderson, President, Dr. Douglas J. Fiore, Provost and Vice President for Academic Affairs, Dr. Rebekkah Stuteville, Associate Vice President for Academic Affairs, and Dr. Emily D. Sallee, Associate Vice President for Faculty Affairs.

"Thus, the most important obligation now confronting the nation's colleges and universities is to break out of the tired old teaching versus research debate and define, in more creative ways, what it means to be a scholar."

~Ernest L. Boyer, *Scholarship Reconsidered: Priorities of the Professoriate*

EDITORIAL

Now is a Good Time to Recognize Teaching as Serious Intellectual Work

Dan Bernstein, PhD
Professor, Department of Psychology
University of Kansas

In my work promoting changes in teaching that generate deeper understanding, I often meet colleagues who assert that good teaching is not valued in their institution. Their concern is that simple averages of a few student rating items drive all decisions about teaching, and the innovative work I recommend is not recognized as excellent instructional design and delivery. In response to that common perception, a community of faculty members has developed ways to represent excellent course design and evidence of enhanced understanding. Further, this community is working to identify and sustain an audience of peers who can offer substantive commentary on the scholarly quality of a faculty member's systematic inquiry into instruction and the learning it generates and supports. These ideas and practices have been developing for over 20 years, and they are available now as a complement to the typical student voice in the evaluation of teaching. Using them requires recognition that there is much more to effective higher education than knowledge of one's field and skill in communication and motivation. Given the current high level of expressed dissatisfaction with student ratings as the only indicator of teaching performance, we have an opportunity to move this conversation forward.

After 15 years on the faculty of the University of Nebraska – Lincoln (UN-L) I was discouraged that the tenure, promotion, and merit systems did not place much weight on the quality of teaching. There was certainly less than the nominal 40% allocation mentioned for teaching in public documents about faculty assignments. For several years in the late 1980s I worked with a group of faculty colleagues to raise this issue with department chairs and the deans they reported to. The major voice in the conversation about quality of teaching was that of students, mostly in the form of mandatory end-of-semester ratings of various aspects of their experience in a class. One dean told us that he would not make important decisions solely based on students' ratings, but he invited us to devise some additional indications of what we thought was excellence in teaching.

Around this time, many departments added a second voice to the tenure decision by asking an experienced faculty member to visit a class led by the tenure candidate. The observer followed up by writing a letter for the candidate's file describing what was observed and offering some kind of commentary or recommendation about the quality of the instruction. Many chairs, however, dismissed the significance of these peer reviews of classroom performance, mostly because they were almost universally positive about the teacher. Department committees and deans wanted some differentiation among tenure candidates on teaching, and the class-visitation letters rarely gave voice to any substantive information for the deliberations of the chair and the faculty committee.

National attention was brought to the conversation when the President of the Carnegie Foundation for the Advancement of Teaching offered a new vision of teaching in a book called *Scholarship Reconsidered: Priorities of the Professoriate* (Boyer, 1990). Boyer identified four equivalent forms of intellectual activity, and he suggested that each one merited being identified as scholarly activity. In this view, teaching was an activity in principle equal to the discovery or articulation of new knowledge, and therefore it should be accepted as evidence of scholarship in higher education personnel policies and practices. While sympathetic to this claim, I was skeptical about the analysis, fearing that this renaming of teaching would lead discovery scholars to call their work something else. In addition, my reading of the

book did not provide a clear picture of how the students and the classroom observers would offer an informed opinion about the scholarship of teaching.

My colleagues and I moved ahead by generating a set of headings that prompted faculty colleagues to describe their own activities that they felt were innovative or particularly effective, along with attendance at workshops and conferences in which quality forms of teaching were presented, discussed, and even practiced. The answers to these prompts were included in the personnel file, providing the first opportunity for the faculty member's own voice to be part of the mix. Many departments adopted this prompt for voluntary descriptions, often adding an invitation for the faculty member to offer something loosely described as a teaching philosophy. At this point there were now three complementary voices in the conversation about teaching, although none of the voices seemed to offer a very strong or direct analysis of instructional quality.

In 1994 the American Association for Higher Education (AAHE) led 12 universities in implementation of peer collaboration and review of teaching that began to frame what a scholarship of teaching might look like (Hutchings, 1996). UN-L was one of those universities, and pairs of faculty members from our faculty teams began to exchange documents related to a course, along with a narrative about the design, implementation, and success of the course. Faculty members were asked to describe the following: (a) what their course was intended to achieve in students' understanding, (b) how their students' time and learning activities were directed toward that intellectual achievement, and (c) what they as instructors had learned about effective teaching by examining the students' performance on assignments intended to capture their understanding. These documents included a narrative account of what was done and a written reflection on how the whole process played out. At each of the three stages of this interaction, the faculty participants provided in writing their own course descriptions, and they also exchanged written feedback with their paired colleagues.

For the first time, those of us in the AAHE project experienced a format for providing a faculty voice that described an inquiry into students' learning. Instead of speaking about general course goals and describing one's own attitudes toward students, faculty members provided concrete and substantive examples of what they were doing to help students demonstrate a rich understanding of the material in the course. The project continued for three years, and over time each faculty member could write about a process of iterative innovation in learning activities that could be documented to show whether students' learning was increasing as a result. The comments written by a faculty peer might include observations during class time, but they were more focused on the process of enhancing the success of students in mastering the course goals. The peer voice in the conversation also took a big leap away from a general description of the climate in the class room and toward recognition of a serious inquiry into the best methods of helping students generate understanding of a field.

At this point we all felt we were finally making some progress in finding a suitable format for evaluation of teaching. The exchanged materials seemed like something that a dean would find credible, while the documents reported on collaborative activities that faculty members felt would help them become better teachers. Perhaps most important, many of us understood that excellent instructional design and continuous innovation in practices were a valuable form of intellectual inquiry. Our next goal was to find a clear way to represent that inquiry in a form that could be readily included in formal review of the quality of teaching.

A second book from the Carnegie Foundation titled *Scholarship Assessed: Evaluation of the Professoriate* (Glassick, Huber, & Maeroff, 1997) greatly advanced our work toward developing a clear representation of intellectual inquiry. The book argued that all forms of scholarship have certain common characteristics, and so teaching *could be* a form of scholarship if it is conducted in a scholarly way. Those characteristics resulted from extensive interviews of academic scholars and leaders conducted by Mary Huber; as a cultural anthropologist, she sought our expectations

of work we deem to be scholarly. The book suggests that scholarly work has six characteristics: (a) there are clear goals, (b) the scholar is aware of what others are doing, (c) the work is conducted using methods appropriate to the scholar's field, (d) the report includes significant results of the inquiry, (e) the work is made broadly available for comment, and (f) there is reflective critique of the work's meaning and implications. Simply teaching a course in a professionally competent way is a good idea, but that by itself does not result in scholarship. Identifying the full range of six characteristics put some concrete dimensions into Boyer's original call for a scholarship of teaching and learning.

For the next dozen years or so, many faculty members in the U.S. and throughout the English-speaking academic world developed ways to make inquiry into student learning a frequent feature of offering a course. While drawing heavily upon existing research and theory in higher education, some faculty members created communities within their own field of study that shared goals, assignments, assessments of student understanding, and a wide range of student-centered learning activities. When the reports included thoughtful reflection on the reasons for success and the remaining challenges, it was possible for peer readers to offer constructive and critical commentary aimed at furthering development of effective teaching. A range of local, national, and international organizations emerged to provide infrastructure for broad exchange of inquiry results and reflection. Communities of discipline-based scholarly inquiry thrived, and they facilitated the distribution of high-end knowledge about how to help students achieve deep understanding. Many scholarly societies established journals for reporting teaching activities and results (e.g., *Teaching of Psychology, Journal of Management Education, Journal of College Science Teaching, College English*), and organizations have appeared that support an explicitly scholarly approach to teaching (e.g., The International Society for the Scholarship of Teaching and Learning). The reports in these outlets, including as they did all of Huber's six dimensions of scholarship, emerged as a substantive body of work in the scholarship of teaching and learning.

Despite all of this activity, many (or even most) higher education institutions still rely primarily on student ratings of their experience, typically combined with some input from a classroom observer. The student voice is very important to the process of developing effective instruction, but only when it is used properly (Benton & Ryalls, 2016). Students are good observers of classroom practice and can report some features of student-centered instructional design, but they should not be considered experts who can properly evaluate what they describe and put it in the context of research on education. In general students have no access to an independent account of how deeply their colleagues in general are learning and what percentage of students is achieving at high levels of understanding. Relatively few institutions ask faculty members to fully express their voice through documentation of goals, assignments, learning activities, and reflection on the development of quality learning in their courses over time. Accordingly, the peer voice is still typically limited to comments on a face-to-face session with students, as faculty members do not routinely provide their peers with rich accounts of the iterative development of effective instructional design. As a result, the peer voice contains little commentary or evaluation of the overall scholarly inquiry into how students can achieve greater understanding.

Relatively few institutions ask faculty members to fully express their voice through documentation of goals, assignments, learning activities, and reflection on the development of quality learning in their courses over time.

Why do I suggest that this is a good time to promote evaluation of teaching that explicitly considers the intellectual work in teaching? There is widespread dissatisfaction with the way teaching is currently evaluated, and many campuses are starting task forces to re-examine their processes and bring forward revisions or full reforms. The critiques come from many perspectives, ranging from statistical nuances (e.g., Stark & Freishtat, 2014) to outright rejection of the

student voice (e.g., Wieman, 2015). The student ratings systems are taking the brunt of the criticism, as their non-expert feedback lacks credibility with evaluators, regardless of the quality of the measures. Benton and Ryalls (2016) review the vast array of complaints, evaluating each with evidence and noting that ratings should never be used alone as a source of evaluation. Given the disruption created by uncertainty about the quality of current practice, this is a great opportunity for those faculty members who are actively engaged in many forms of the scholarship of teaching and learning to request that their work be explicitly invited into the routine evaluation procedures on their campuses. There is a vacuum at the center of this important conversation and now there are many, many fine examples of scholarly teaching that can be offered to fill that vacuum. In the past 20 years we have seen exponential growth in venues for sharing SoTL work in ways that meet the six characteristics of scholarship. There are conferences on teaching in most disciplines, there are journals that share this work broadly, and there are websites that host portfolios of iterative inquiry into student understanding. We just need to ask (or even insist) that the eyes and minds of evaluators be focused on this intellectual work as an essential complement to the existing student voice.

This critical moment in evaluating teaching also provides a great opportunity for us to advance the peer voice beyond its role as an observer of in-class performance. For those who want a formal peer review of the intellectual quality of the work, there are formats for internal and external review that can be readily adapted for use in local personnel processes (Bernstein, 2008; Bernstein et al., 2010; Bernstein, Burnett, Goodburn, & Savory, 2006). Organized materials in online portfolios (e.g., KU Center for Teaching Excellence Portfolio Gallery) also provide a powerful format for representation that complements the usual publication outlets, and those materials are easily exported to local colleagues for review. In cases of major personnel activities, the materials and questions for external reviewers to address are already well developed (e.g., Bernstein et al., 2010; Bernstein et al., 2006).

In many institutions the role of external review has been served by conventional publication outlets such as *InSight* or *Teaching and Learning Inquiry*, an interdisciplinary journal produced by the International Society for the Scholarship of Teaching and Learning. These outlets include expert peer evaluation of the intellectual quality of the work, so they come with established credibility as a research enterprise. Speaking through those outlets requires substantial analysis and reporting skill, plus learning the conventions of an additional publication community. Some faculty members have sufficient time and other resources to develop a second research life in that depth, but not everyone has those resources or even wants to communicate in that way. Treating teaching as a research and publication enterprise adds additional activities that will compete with the time for teaching itself. Whether faculty members have a large number of teaching assignments and/or substantial expectations of "regular" research productivity, I have found that adding an expectation of publication is rarely welcomed.

In a previous essay (Bernstein, 2010) I suggested that individual faculty members can find different paths within the SoTL world and not everyone needs to treat this work as research. Many of us have developed venues for sharing and reviewing systematic inquiry into teaching and learning without arguing that it needs to have all the trappings of a research program. Instead we suggest that our institutions honor real *excellence in teaching* because it is important in its own right and very difficult to do well, not because we enter into a research community. Excellent teaching is more than simply delivering a competent course that students experience as useful. We need to promote meaningful peer review of the intellectual inquiry done by faculty members as an inherent characteristic of excellent teaching.

It is important to acknowledge that more time will be spent providing meaningful representation of intellectual work and generating substantive peer review of that form of teaching than is now devoted to evaluating teaching. Simply

collecting student ratings reports requires zero faculty time, so even a relatively small amount of time will seem like a change in the wrong direction. Even though the additional time is less than what is required to publish educational research, it is still some more time. When that issue is raised it is important to remind colleagues that they already invest a huge amount of time in designing, preparing, delivering, and evaluating the learning in every class they teach. The amount of time required to capture that work and reflect on its success is a very small number of hours in comparison with the entire effort; the marginal cost of this work beyond the initial investment of time and intellectual energy is very reasonable. It should also be remembered that no one suggests that every course should be looked at in this detail every semester. The models we have proposed in several contexts (e.g., Bernstein et al., 2010) call for a faculty member to document and reflect on only one or two courses over a period of five years, perhaps tracking progress in learning in the same course over two or three offerings. That should be the new face of the faculty member's voice in evaluation of teaching.

It is also worth mentioning that many faculty members happily give time to reviewing the intellectual work found in submitted articles and proposed books or chapters prior to their publication; people often list those invited reviews in personnel reports as evidence of their own expertise. It would be a harsh statement of the relative value of teaching and research to claim that reviewing research is worthwhile but reviewing teaching is not worth the time. It is time for us to assert that reviews of all forms of serious intellectual work are of great value to our institutions, and we need to honor that work as important professional service that can be recognized and rewarded. The time needed to review peers' teaching for promotion or tenure should not be accepted as a barrier to this improvement in practice, as the products of these reviews will constitute a new and more substantive peer voice in the evaluation of teaching. No one would evaluate a biologist by watching her work in the lab, but we review her teaching by watching her in class for an hour. It will be a much richer peer voice when a reviewer looks over a portfolio with course materials, student work, and the instructor's narrative of inquiry over time. Our experience in working on peer review also indicates that reviewers find this work much more interesting and satisfying than sitting in a class.

This journey began when some faculty members asked academic leaders why teaching was not valued in the personnel system. Beyond the values of institutional missions, an important reason was the absence of credible evidence of excellence. Without clear demonstration that teaching was informed, effective, and connected with scholarly work on education, it would be difficult to make important decisions. The path toward current representations of inquiry into learning took a big leap forward when the functional characteristics of scholarship were applied to teaching. That set of insights provided a road map for how to present materials relevant to excellence in supporting learning and provided criteria for recognizing quality inquiry into students' understanding. Since our whole profession seems deeply interested in finding a better way to evaluate our teaching, this is a great opportunity to bring forward the emerging work in many forms of the scholarship of teaching and learning. At the very least this work needs to be welcome in the processes of our institutions, and perhaps we can argue that true excellence cannot be demonstrated by merely delivering competent instruction. It would be a huge step forward if we can raise the bar for excellence to mean sustained inquiry into effective teaching that generates student understanding. Now is a very good time to take steps toward such a goal by reframing the faculty and peer voices in the intellectual work in teaching.

Since our whole profession seems deeply interested in finding a better way to evaluate our teaching, this is a great opportunity to bring forward the emerging work in many forms of the scholarship of teaching and learning.

References

Benton, S. L., & Ryalls, K. R. (2016). *IDEA Paper No. 58: Challenging misconceptions about student ratings of instruction*. Manhattan, KS: The IDEA Center. Retrieved from http://ideaedu.org/wp-content/uploads/2016/04/PaperIDEA_58.pdf

Bernstein, D. (2010). Finding your place in the scholarship of teaching and learning. *International Journal for the Scholarship of Teaching and Learning*, *4(2*), 4. doi: 10.20429/ijsotl.2010.040204

Bernstein, D., Addison, W., Altman, C., Hollister, D., Komarraju, M., Prieto, L., … Shore, C. (2010). Toward a scientist-educator model of teaching psychology. In D. F. Halpern (Ed.), *Undergraduate education in psychology: A blueprint for the future of the discipline* (pp. 29-45). Washington, DC: American Psychological Association.

Bernstein, D., Burnett, A. N., Goodburn, A., & Savory, P. (2006). *Making teaching and learning visible: Course portfolios and the peer review of teaching*. Bolton, MA: Anker.

Bernstein, D. J. (2008). Peer review and evaluation of the intellectual work of teaching. *Change: The Magazine of Higher Learning*, *40*(2), 48-51. doi: 10.3200/CHNG.40.2.48-51

Boyer, E. L. (1990). *Scholarship reconsidered: Priorities of the professoriate*. Princeton, NJ: The Carnegie Foundation for the Advancement of Teaching.

Glassick, C. E., Huber, M. T., & Maeroff, G. I. (1997). *Scholarship assessed: Evaluation of the professoriate.* San Francisco, CA: Jossey-Bass.

Hutchings, P. (1996). *Making teaching community property: A menu for peer collaboration and peer review*. Washington, DC: American Association for Higher Education.

Stark, P. B., & Freishtat, R. (2014). An evaluation of course evaluations. *ScienceOpen*. doi: 10.14293/S2199-1006.1.SOR-EDU.AOFRQA.v1

Wieman, C. (2015). A better way to evaluate undergraduate teaching. *Change: The Magazine of Higher Learning*, *47*(1), 6-15. doi: 10.1080/00091383.2015.996077

Dan Bernstein is Professor Emeritus of Psychology at the University of Kansas and former Director of its Center for Teaching Excellence (2002-2014). His writing has focused on electronic course portfolios centered on student learning, and he helps colleagues showcase their teaching practices that yield high quality student work. Recent grants from the Teagle and Spencer Foundations have developed team-designed assignments and scaffolding, explored the use of assessment data in curriculum change, and promoted interactive learning in humanities instruction. Previous grants supported substantive peer review of the intellectual work in teaching, resulting in a 2006 book entitled Making Teaching and Learning Visible. His ongoing courses are a laboratory for evaluating web-based learning activities. He was a Charter Member of the University of Nebraska Academy of Distinguished Teachers and a Carnegie Scholar in 1998. He received the Fred S. Keller Behavioral Education Award from Div. 25 of the American Psychological Association, and he is a past President of the International Society for the Scholarship of Teaching and Learning and of the Society for the Experimental Analysis of Behavior.

Scholarly Teaching Through Action Research: A Narrative of One Professor's Process

Jana Hunzicker, EdD
Associate Professor, Department of Teacher Education
Bradley University

This article shares a first-hand account of an action research project conducted in a college-level early adolescent development course to better understand written and verbal reflection as learning tools, improve the author's teaching effectiveness, and foster reflective habits in pre-service teachers. The article includes a brief overview of related literature and a description of several reflective activities and assignments used in the course before presenting and discussing the project's results based on Ferrance's (2000) 6-step action research process.

ETE 227: Development of the Early Adolescent is an elective course offered at Bradley University, a private, comprehensive university located in the Midwest region of the United States. Because ETE 227 is required for the Illinois Middle School Endorsement, most Bradley teacher education majors take the course, often during their junior or senior year. Each fall and spring semester, ETE 227 is offered one evening a week from 4:30 to 7:00 p.m. A maximum of 30 students can enroll, and the class usually fills to capacity. During fall 2007, I was brand new to college teaching. As I struggled through teaching ETE 227 that first semester, I spent a great deal of time preparing and delivering PowerPoint lectures because I believed it was expected of me. However, I quickly discovered that 2.5 hours is a long time to actively engage students with teacher talk. I also learned that many college students do not complete their reading assignments prior to coming to class. So, in preparation for my second semester, I began adjusting my teaching approach.

The ETE 227 learning journal constituted a major overhaul between the fall and spring semesters of my first teaching year at Bradley. Instead of weekly chapter quizzes, which I had tried in an attempt to motivate students to read the textbook, I asked students to write two 300-word reflections each week, one after reading the textbook chapter and the other following class. Three times that semester, pre-service teachers submitted their learning journals electronically via e-mail attachment. I read each one (seven or eight entries per submission) and responded via e-mail. In my responses, I offered feedback about each student's current level of reflection and commented on at least one aspect of the course content. Reading students' learning journals enabled me to see which aspects of the course content intrigued them and which aspects they did not appreciate or fully understand. Because most students shared openly, I also got to know them. But most important, they were reading and responding to the textbook more thoughtfully than students had during the previous semester. I was encouraged by the successful outcome I had achieved. Since implementing the ETE 227 learning journal in spring 2008, I have used it every semester.

Although I did not realize it at the time, my decision to replace the weekly chapter quizzes with a learning journal initiated a scholarly teaching process that has continued for years. The purpose of this article is to share a first-hand account of that process, which began informally with a trial-and-error approach and was later formalized through the design and implementation of an action research project. Following a brief overview of related literature and a description of several reflective activities and assignments used in the course, I will present and discuss the project's results based on Ferrance's (2000) 6-step action research process.

Overview of Related Literature

Kolb's (1984) Experiential Learning Theory asserts that learning occurs during or following a concrete experience, when an individual engages in reflective

observation about the experience. This leads to abstract conceptualization or *making sense* of the experience; and finally, active experimentation that modifies or improves what was initially learned. In the college classroom, experience-based learning activities can "promote growth-producing experience for learners" (Kolb & Kolb, 2005, p. 205) by respecting their current levels of knowledge and offering a hospitable or safe learning environment. Importantly, experiential learning must include opportunities for learners to converse, act, and reflect on their learning, develop expertise, and engage emotionally (Kolb & Kolb, 2005). In this way, experiential learning transcends simple acquisition of information and skills because it is individualized and personal. Mezirow (2000) calls such learning processes transformational because each learner's experiences and subsequent reflection can result in thinking and behaving in new and different ways.

Experiential learning is not limited to the P-20 classroom (i.e., primary, secondary, and post-secondary educational settings). Accumulated life experiences, paired with opportunities for reflection and dialogue, foster learning throughout adulthood (Rohlwing & Spelman, 2014). This may be particularly true for professionals. Research shows that effective teachers reflect on their teaching practice systematically, analytically, and critically (Danielson, 2007; Ostorga, 2006; Walkington, Christensen, & Kock, 2001). Schon (1983) identifies two types of reflection. "Reflection-in-action" (p. 68) involves thinking on one's feet as an experience is happening. Reflection-on-action involves thinking, talking, or writing about an experience after it occurs. Action research, the process of systematically and intentionally studying one's own teaching (Jacobs & Yendol-Hoppey, 2014), is an in-depth means of reflection-on-action that often requires critical reflection.

Danielson (2007) writes, "It is through critical reflection that teachers are able to assess the effectiveness of their work and take steps to improve it" (p. 92). Critical reflection takes reflection-in-action and reflection-on-action to the next level by considering moral and ethical dilemmas (Mezirow, 1991) and/or examining underlying beliefs, values, and assumptions (Brookfield, 2000). For teachers, critical reflection focuses especially on the why of teaching (Walkington et al., 2001). It is a means through which teachers can articulate their personal teaching philosophy and better understand how their beliefs influence their decisions (Ostorga, 2006). For example, in reflecting-on-action about why so much class time is devoted to small group discussion during a particular lesson, a teacher may articulate an underlying assumption that students need to talk things through in order to fully understand them. Although many theorists view critical reflection as a higher-order form of reflection, Zeichner (1994) argues that all forms of reflection are valid because reflection is a developmental process.

Reflection is useful for teachers at all levels of experience, but it is particularly valuable for new teachers (Melville, Fazio, Bartley, & Jones, 2008; Rike & Sharp, 2008). However, because reflection is developmental, new teachers may not know how to engage in reflection effectively (Ostorga, 2006; Yost, Senter, Forlenza-Bailey, 2000). Zeichner (1994) asserts, "If prospective teachers are to become reflective about their practice in whatever sense one defines it, then they need to engage in activities during their pre-service preparation that fosters this reflectiveness" (p. 21). One approach to teaching reflection is allowing time for learners to make sense of new information by connecting it to their prior knowledge, making generalizations, and applying it in new or different situations (Jones & Jones, 2013; Lupinski, Jenkins, Beard, & Jones, 2012). Yost and colleagues (2000) explain:

> Opportunities to construct a personal knowledge of learning theories and discuss issues relating to diversity and social, political, and economic forces that impinge upon schools will provide preservice teachers with a firm knowledge base from which they can critically reflect on the practice of teaching. (p. 47)

Such a constructivist approach requires the professor to assume the role of facilitator, rather than expert; it also demands that learners be given ample time to explore, think, discuss, plan, revise, and share (Carter, 2008-2009; Vygotsky, 1978).

ETE 227 Reflective Activities and Assignments

The process of learning how to reflect can be supported with structures such as writing prompts, guided questions, self-assessment tools, and other means such as teaching portfolios and samples of student work (Educational Testing Service, 2014; Hole & Hall McEntee, 1999). But even with support, pre-service teachers' ability to reflect can vary widely (Jansen & Spitzer, 2009). Therefore, in addition to the ETE 227 learning journal, I began to develop a variety of reflection-based assignments and activities to keep students engaged during class time and foster reflective habits. In addition to learning the course content, critical reflection was a desired outcome. In most cases, students had the opportunity to reflect during the activity or assignment itself as well as following, through the ETE 227 learning journal. In this way, I was able to informally assess the effectiveness of each activity or assignment and make appropriate revisions. Following are brief descriptions of each reflection-based activity or assignment in its present form.

Autobiographical display. Designed by a professor who taught ETE 227 before I joined Bradley's Department of Teacher Education faculty, the autobiographical display assignment consists of a paper, a poster, and a class presentation focused on each student's life experiences between the ages of 11 and 15. The paper includes reflections on key aspects such as family, friends, school experiences, and career aspirations during young adolescence; and the poster includes a photograph, self-description, quotations from family and friends, and information about favorite things during this developmental period. The posters are presented during class time. Pre-service teachers generally like this assignment. In addition to providing a foundation for the course and helping the class get to know one another, I am able to refer back to the examples and experiences that students shared as we move through ETE 227 chapter by chapter.

Guest speakers. Guest speakers visit my ETE 227 classroom three times each semester, providing additional information about relevant topics such as homelessness, urban youth culture, and teen dating violence that are only briefly mentioned in the course textbook. Pre-service teachers appreciate the guest speakers because they provide first-hand information on unfamiliar topics. The guest speakers also allow me to stay current on these topics and maintain professional connections in the community.

Roundtable discussions. The roundtable discussion assignment requires pairs of students to read and discuss an assigned article about young adolescent development or effective middle schooling before individually leading two, 12-minute roundtable discussions during class time. Students spend the first half of their time explaining their research article and the second half engaging their small group in discussion. Following the experience, students receive peer feedback and complete a written reflection. Many pre-service teachers recognize that the assignment builds professional skills that they will need in their future classrooms, faculty meetings, and professional conferences.

Media stations. A class activity used in conjunction with a textbook chapter about early adolescents' use of technology and social media requires small groups of students to spend 15 minutes at four different media stations: television, music, technology, and print media. At each station, students view media through a specific lens, such as a parental or historical perspective, and complete a specific task, such as reaching consensus on five television programs most appropriate for

one's 13-year-old daughter. Students enjoy spending class time engaging with media, and the subsequent analysis and class discussion allows me to integrate various theories of media consumption and other key concepts—a disguised lecture—in ways that relate directly to students' experiences.

Sex education debate. The sex education debate, another class activity used in conjunction with the textbook, explores four different approaches to sex education. After being randomly assigned to one of the four approaches, small groups are given 15 minutes to prepare. The debate consists of three rounds. The first round offers arguments in favor of each sex education approach, the second round presents arguments against the opposing approaches, and the third round allows for counterarguments and closing remarks. Following the sex education debate, I engage the class in discussion. Although most pre-service teachers report that their beliefs about sex education do not change as a result of this activity, many reflect in writing later about the value of closely and objectively examining the strengths and weaknesses of approaches they favor as well as those they dislike.

Bem Sex Role Inventory. The Bem Sex Role Inventory (BSRI), a self-assessment of masculinity, femininity, and androgyny, was published by Sandra Bem in 1974. After reading a textbook chapter on gender socialization, I ask students to complete the inventory as a means of stimulating class discussion. Pre-service teachers are always very eager to complete the inventory, and many share their results openly as we discuss major concepts about gender socialization. However, many question the validity of the inventory when they learn that it was published forty years ago.

Routine assignments and activities. Other ETE 227 assignments and activities, including chapter PowerPoint presentations, small group chapter discussions, and videos on classroom management, constitute more routine classroom practices. I have found that the key to keeping college students engaged for 2.5 hours is brisk pacing and variety (Hunzicker & Lukowiak, 2012). Although I use some traditional teaching methods, such as lecture, during almost every class meeting, I keep things moving, change up the sequence of activities often, and throw in a brand new activity—such as the sex education debate or media stations—when students least expect it.

Scholarly Teaching through Action Research

Action research "focuses on the concerns of teachers, rather than outside researchers, and provides a vehicle that teachers can use to untangle the complexities of their daily work" (Jacobs & Yendol-Hoppey, 2014, p. 304). An in-depth means of engaging in reflective practice, action research is based on three assumptions: (a) educators work best on problems they identify for themselves, (b) educators become more effective when they examine, assess, and modify their own teaching practice, and (c) educators help one another through collaboration and sharing (Borg, 1992; Watts, 1985). Teachers conduct action research to develop personally and professionally, improve and enhance student learning, and advance the teaching profession (Johnson, 1995). Developed for use in P-12 classrooms, action research is gaining acceptance as an approach to reflective practice in higher education, especially in the field of teacher education (Bossio, Loch, Schier, & Mazzolini, 2014; Chigeza & Halbert, 2014).

Action research projects can be visionary and long-term, such as implementing a behavioral intervention and then tracking student office referrals for several weeks; or straightforward and simple, such as documenting one's movement around the classroom for an entire day. The idea is to gather meaningful data that can be reflected upon and used to inform teaching practice.

The action research process typically involves six steps: 1) identifying the problem and articulating research questions, 2) gathering data, 3) interpreting the data, 4) acting on the evidence, 5) evaluating the outcome(s) of changes made, and 6) identifying new questions (Ferrance, 2000). Organized according to these six steps, my ETE 227 action research project is reported in the sections that follow.

Action Research Process

Step one: Research problem and questions. The problem addressed through this action research project was the need to better understand written and verbal reflection as learning tools, improve my teaching effectiveness, and foster reflective habits in pre-service teachers. Written reflection was defined as a solitary, reflection-on-action process in which pre-service teachers explored concepts or events in writing. Verbal reflection was defined as a collaborative or interactive, reflection-in-action process during which pre-service teachers explored concepts or events through discussion. The project was guided by four research questions: (a) Which assignments and activities are most likely to engage pre-service teachers in thinking about the course content?; (b) How do pre-service teachers use written and verbal reflection as learning tools?; (c) How do pre-service teachers perceive the value of written and verbal reflection?; and (d) How likely are pre-service teachers to use written and verbal reflection in the future?

Steps two and three: Data collection and analysis. After receiving approval from my university to conduct the project, data were collected over six semesters' time. In all, 172 undergraduate teacher education majors who completed ETE 227 between spring 2009 and fall 2011 were invited to participate. Of those invited, 82% were female and 18% were male students. In addition, 89% were White, non-Hispanic, 93% were traditional college age (i.e., aged 24 or younger), and 98% were college-level juniors or seniors. Of the 172 pre-service teachers, 84 chose to participate in the project, rendering a 49% response rate. Data were collected via an online survey administered using Survey Monkey (www.surveymonkey.com) immediately following the posting of final grades each semester. Descriptive statistics were calculated based on participating pre-service teachers' survey responses, and bar graphs were created using Microsoft Excel. Following are the project's results, paired with my interpretations in light of related research on student engagement and written and verbal reflection.

Results and Discussion

Most Engaging Assignments and Activities

In completing the online survey, participating pre-service teachers were first asked to identify the class activities and assignments that were most effective in getting them to think about the ETE 227 course content (see Figure 1). Media stations were deemed the most engaging class activity, with 82% of respondents rating them as highly effective. Guest speakers came in second, at 76%. Tied for third place at 69% were roundtable discussions and the autobiographical display, with the sex education debate coming in a close fourth at 68%. Bringing up the rear were small group chapter discussions (64%), learning journals (56%), and chapter PowerPoint presentations (45%). Not shown in Figure 1, class activities and assignments deemed least engaging were the Bem Sex Role Inventory (BSRI) (33%) and course exams (27%).

Figure 1 How Effective Was Each of the Following in Getting You to Think About the ETE 227 Course Content?

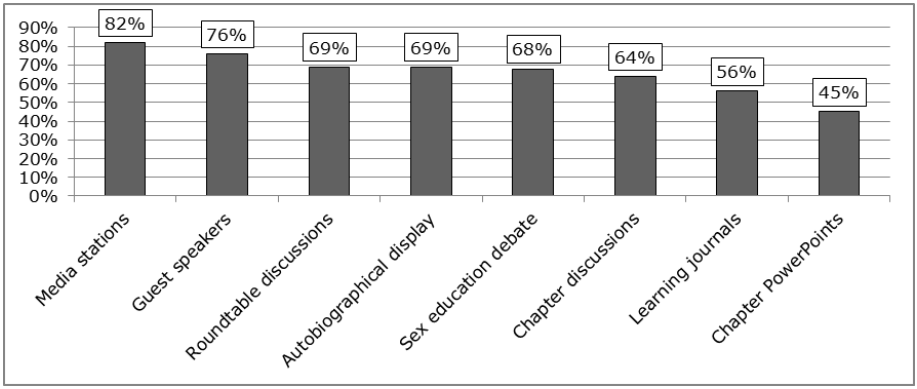


Figure 1. Participants' (*N* = 84) perceived effectiveness of ETE 227 class activities and assignments.

Millennials, born "roughly between 1980 and 2000" (para. 1), are multi-taskers, well-connected through social media, and technology-savvy (Abbot, 2013). Therefore, it comes as no surprise that media stations were considered by the ETE 227 pre-service teachers to be the most engaging class activity. Although media stations constituted one, stand-alone activity, it was novel, challenging, and highly interactive, which created an enjoyable and memorable learning experience (Dowson & McInerney, 2001). Although not high-tech, guest speakers, which rated second, brought in members of the community to discuss authentic educational issues and engaged students emotionally, factors also identified in similar studies as highly engaging (Hunzicker & Lukowiak, 2012; Kolb & Kolb, 2005).

The roundtable discussions, autobiographical display, sex education debate, and small group chapter discussions, which all ranked near the middle, required pre-service teachers to explore their personal experiences, values, and prior knowledge in new and different ways. Although more routine than the media stations and guest speakers, these somewhat-engaging activities and assignments offer a comfortable balance of challenge and support by scaffolding complex tasks so that each student can work within his or her zone of proximal development (Vygotsky, 1978). In addition to a great deal of self-focus, research shows that such assignments and activities can create cognitive dissonance, which stimulates learning by motivating students to resolve discrepancies between their current thinking and new information (Rohlwing & Spelman, 2014). The ETE 227 learning journal, a commonly used tool for developing reflective practice (Dunlap, 2010; Lupinski, et al., 2012), also required self-exploration around the course content although most pre-service teachers preferred verbal reflection to the solitary nature of the learning journal. Finally, the Bem Sex Role Inventory (BSRI) and course exams were ranked least engaging by the ETE 227 pre-service teachers since many considered the BSRI invalid due to its age and very few college students enjoy taking exams.

Written and Verbal Reflection as Learning Tools

Reflection and thinking. The second survey question directed pre-service teachers to consider written and verbal reflection in relation to their thinking (see Figure 2). Sixty-five percent of respondents reported that written reflection prompted them to think about themselves as people, while only 48% said the same of verbal reflection. In addition, 56% reported that written reflection prompted them to think about themselves as learners, compared to 52% for verbal reflection.

Moreover, 79% of respondents reported that written reflection prompted them to think about themselves as future teachers, while only 67% reported that verbal reflection did so.

Figure 2 Reflection Prompted Me to Think About

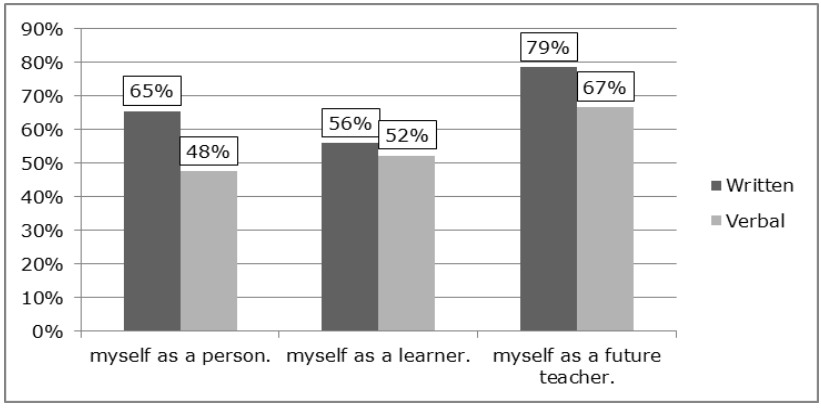


Figure 2. Participants' responses to forms of self-reflection: "Reflection prompted me to think about…"

In all three instances, written reflection was more effective than verbal reflection in prompting pre-service teachers to think about themselves. Other studies reinforce this finding. Dunlap (2010), for example, found that college students' perceptions of their work, learning, and achievements changed over time as a result of reflective journaling activities. However, it should be noted that verbal reflection was reported by two-thirds of respondents as a strong prompt in getting them to think about themselves as teachers. This may be due to the fact that discussion-based activities provide an opportunity for pre-service teachers to bounce ideas off one another as they discuss scenarios germane to their future classrooms (Kolb & Kolb, 2005; Rohlwing & Spelman, 2014). Research reiterates that engaging students collaboratively is more supportive of problem solving and higher order thinking than more traditional learning activities (Gavalcova, 2008), and Millennials as a group tend to prefer interactive, collaborative activities to solitary ones (Abbot, 2013; Carter, 2008-2009).

Figure 3 Reflection Helped Me to

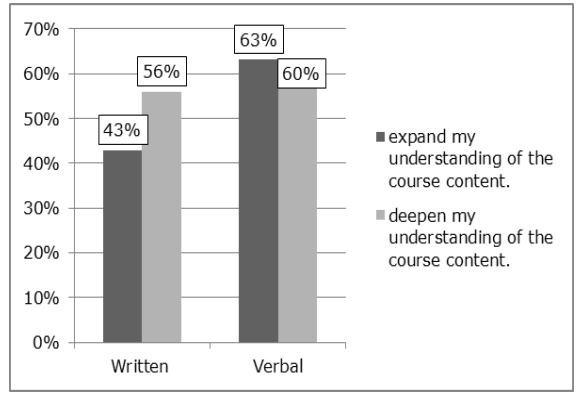


Figure 3. Comparing written and verbal reflection with comprehending course content: "Reflection helped me to…"

Reflection and learning. The third survey question directed pre-service teachers to consider written and verbal reflection in relation to their learning (see Figure 3). Forty-three percent of respondents reported that written reflection helped them to expand their understanding of the ETE 227 course content, while 56% reported that it helped them to deepen their understanding. Conversely, 63% of respondents reported

that verbal reflection expanded their understanding of the course content while 60% reported that it deepened their understanding of the course content.

These findings suggest that, when considered in isolation, written reflection is more likely to deepen understanding and verbal reflection is more likely to expand understanding. However, in comparing the two types of reflection, the majority of pre-service teachers reported that verbal reflection both deepened and expanded their understanding more so than written reflection. Kolb and Kolb (2005) explain, "Making space for good conversation as part of the educational process provides the opportunity for reflection on and meaning making about experiences that improve the effectiveness of experiential learning" (p. 208). This finding suggests that a balance of written and verbal reflection is optimal, an opinion that is reinforced by research (Lin & Lucey, 2010; Lupinski, et al., 2012) and reiterated by pre-service teachers through survey item 6, discussed later.

Before and after reflection. The fourth survey question directed pre-service teachers to consider their thinking before and after reflecting during ETE 227 (see Figure 4). Thirty-one percent of respondents reported that they thought about the course content before reflecting in writing, and 17% reported that they thought about it before reflecting verbally. In addition, 20% of respondents stated that they thought about things they wrote in the days that followed, while 36% said that they thought about things they discussed in class during the days that followed. Moreover, 18% of respondents reported sharing insights from their written reflections with others outside of class, while 36% of respondents reported sharing insights from class discussions with others outside of class.

Figure 4 Before and After Reflection

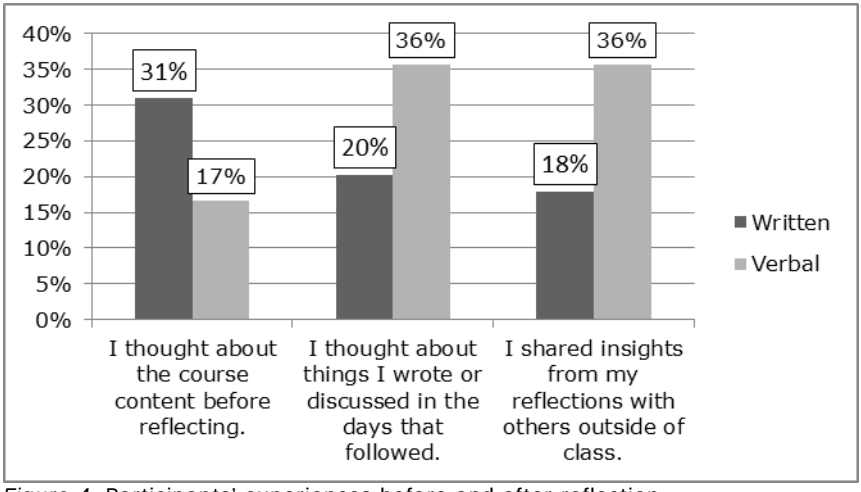


Figure 4. Participants' experiences before and after reflection.

These findings suggest that pre-service teachers are more likely to think before they write than they are to think before they discuss. However, the pre-service teachers in this project reported that once they reflect in writing, they are more likely to forget about it. Reflecting verbally during class discussions, on the other hand, is about twice as likely to stay on pre-service teachers' minds and be shared with others during subsequent conversations. One reason for this may be Millennials' strong connections to their peers through social media (Abbot, 2013).

Perceived Value and Future Use of Reflection

Perceived value of reflection. The fifth survey question was designed to measure pre-service teachers' perceived value of written and verbal reflection (see Figure 5). Twenty percent of respondents reported that they enjoyed reflecting in writing during ETE 227, compared to 58% who reported that they enjoyed reflecting verbally during the course. Additionally, 27% agreed that without reflecting in writing they would not have learned as much, while 57% agreed that if they had not reflected verbally during class time they would not have learned as much. Moreover, 49% of respondents reported that as a result of engaging in written reflection during ETE 227, they better understand its value as a learning tool; 56% reported that as a result of engaging in verbal reflection during ETE 227 they better understand its value as a learning tool.

Figure 5 Perceived Value of Written and Verbal Reflection

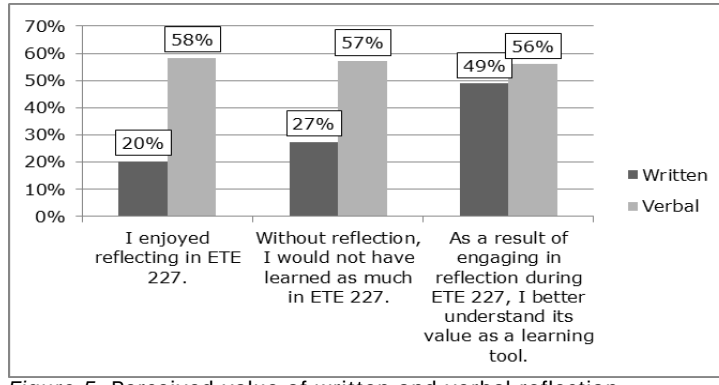


Figure 5. Perceived value of written and verbal reflection.

These findings show that the pre-service teachers who participated in this project enjoyed reflecting verbally almost three times more than they enjoyed reflecting in writing. Similarly, they credited verbal reflection as a learning support more than twice as often as they credited written reflection, reinforcing that learning is a social activity (Dowson & McInerney, 2001; Kolb & Kolb, 2005; Vygosky, 1978) and that Millennials generally prefer interactive, collaborative activities (Abbot, 2013; Carter 2008-2009).

Figure 6 What is the Optimum Balance of Written and Verbal Reflection for Pre-Service Teachers?

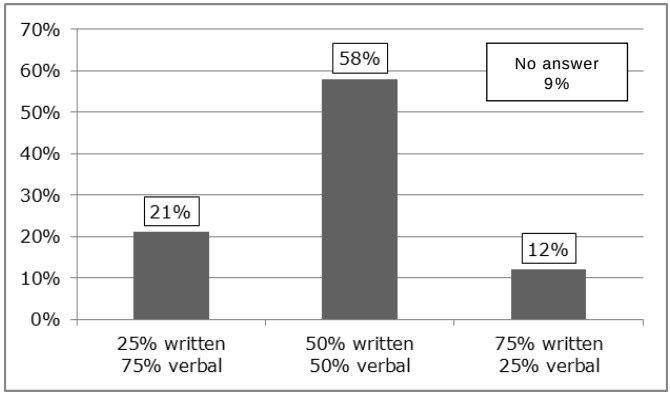


Figure 6. Optimum balance of written and verbal reflection.

Optimum balance. The sixth survey question asked pre-service teachers to identify the optimum balance of written and verbal reflection for pre-service teachers (see Figure 6). Twelve percent of respondents felt that a balance of 75% written reflection and 25% verbal reflection was optimal; 21% felt that a balance of 25% written reflection and 75% verbal reflection was optimal; and 58%

felt that a balance of 50% written reflection and 50% verbal reflection was optimal. Nine percent of respondents did not provide an answer.

Although more pre-service teachers perceived verbal reflection a more useful learning tool than written reflection, the majority identified a 50/50 balance of written and verbal reflection as optimum, suggesting that they understood the value of both types of reflection. Research supports a balanced approach to building pre-service teachers' reflective practice skills. One team of professors found that a balance of individual-based and group-based reflective activities helped pre-service teachers better understand themselves and their students around issues of cultural awareness (Lin & Lucey, 2010). In another study, a College of Education seeking to integrate more reflective practice activities into its teacher education programs identified interviews, reflective journaling, lesson plans, instructional tools, videotaped lessons, professional portfolios, skill mastery projects, simulations/role playing, and action research as means through which pre-service teachers can practice verbal and written reflection (Lupinski et al., 2012).

Future use of reflection. The seventh and final survey question directed pre-service teachers to predict how they will use written and verbal reflection as learning tools once they enter the teaching profession (see Figure 7). Fifty-six percent of respondents predicted that they would use written reflection to engage students in their future classrooms, and the same percentage predicted that they would use written reflection as a means of self-directed professional development. Conversely, 82% of respondents predicted that they would use verbal reflection to engage students in their future classrooms, and 75% anticipated that they would use verbal reflection as a means of self-directed professional development.

Figure 7 As a Teacher, I Will Use Reflection as a Learning Tool

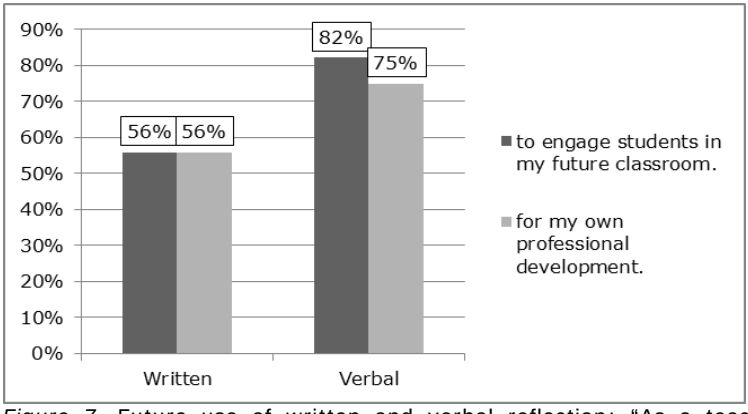


Figure 7. Future use of written and verbal reflection: "As a teacher, I will use reflection as a learning tool…"

Pre-service teachers' predictions about their future use of reflection are consistent with their general preference toward interactive, collaborative activities. A higher percentage of respondents predicted that they will use verbal reflection in their future classrooms, but most believed they will also use written reflection. Unfortunately, few studies on building pre-service teachers' reflective practice skills have followed through to the first years of teaching. This reveals a gap in the literature, which signals an opportunity for further research.

Follow Through

Steps Four and Five: Acting on the Evidence and Evaluating the Outcomes

When using action research, or any method of scholarly teaching, it is not enough to simply answer the research questions. An important last step is applying the information in ways that benefit students (Borg, 1992; Brookfield, 2000; Jacobs & Yendol-Hoppey, 2014). Because the data for this project were collected over six semesters' time, I was able to engage in continuous and ongoing data analysis by observing pre-service teachers' responses to each ETE 227 activity and assignment as it occurred in addition to reviewing participants' collective survey responses each semester, and overall once data collection was complete. Through these observations, I frequently made adjustments to the course's reflection-based activities and assignments, including clearer parameters, directions, and assessment criteria; more direct instruction as a precursor to class activities; and allowing more (or less) class time for some activities. I also learned to prepare better questions and prompts to guide learners progressively toward higher levels of thinking during class discussions (Kellough & Kellough, 2008) and ensure that written reflections showed evidence of critical reflection. Additionally, I improved the quality and frequency of the feedback I provided in response to students' learning journal submissions. Using a dialogue journal approach, defined by Tompkins (2008) as a back-and-forth written conversation between teacher and student, I learned to provide tangible, actionable, and timely feedback (Wiggins, 2012) for each student three times each semester.

When using action research, or any method of scholarly teaching, it is not enough to simply answer the research questions.

Limitations. Even though the project supported data-driven improvements to the course over several semesters' time, it is important to acknowledge its limitations. For example, terms such as "written reflection" and "verbal reflection" may have been misinterpreted by the survey respondents since I did not clearly define these terms in the survey. Student perceptions self-reported following the semester may not have accurately represented their experiences during the course (Fowler, 2013), and researcher bias may have caused me to hear what I wanted to hear when interpreting students' learning journals and survey responses (Grbich, 2006). However, in the final analysis I believe that the positive outcomes of the project outweigh the limitations.

Step Six: Identifying New Questions

Through this project, I learned that media stations, guest speakers, roundtable discussions, and the autobiographical display are the most engaging ETE 227 assignments and activities. I learned that both written and verbal reflection prompted participating pre-service teachers to think about themselves from various perspectives, and that verbal reflection deepened and expanded their understanding more so than written reflection. I learned that the pre-service teachers who participated in this project were more likely to think before they wrote than they were to think before they discussed, but verbal reflections were more likely to stay on their minds and be shared with others later. And finally, I learned that those who participated in this project considered a 50/50 balance of written and verbal reflection optimum, and that most planned to use both types of reflection in their future classrooms.

… verbal reflections were more likely to stay on their minds and be shared with others later.

Now that ETE 227 is running smoothly, I wonder where my former students are teaching, and whether they are using verbal and written reflection as learning tools in their own classrooms. I also wonder if the reflection activities in

which they engaged during ETE 227 caused them to learn more about young adolescent development than a traditional teaching approach would have rendered. Specifically, I would like to know more about the reasoning and sentiment behind my students' survey responses. Possible directions for continued action research include a content analysis of pre-service teachers' learning journals and interviews with individual students.

Conclusion

This article shares a first-hand account of an action research project designed to better understand written and verbal reflection as learning tools, improve teaching effectiveness, and foster reflective habits in pre-service teachers. It is my hope that this narrative offers inspiration and instruction for others wishing to engage in scholarly teaching through action research.

References

Abbot, L. (2013, December 4). 8 Millennials' traits you should know about before you hire them. [Web log message]. Retrieved from http://talent.linkedin.com/blog/index.php/2013/12/8-millennials-traits-you-should-know-about-before-you-hire-them

Bem S. L. (1974). The measure of psychological androgyny. *Journal of Consulting and Clinical Psychology*, *42*(2), 155-162.

Borg, W. R. (1992). *Applying educational research: A practical guide for teachers* (3rd ed.). New York, NY: Longman.

Bossio, D., Loch, B., Schier, M., & Mazzolini, A. (2014). A roadmap for forming successful interdisciplinary education research collaborations: A reflective approach. *Higher Education Research and Development*, *33*(2), 198-211. doi: 10.1080/07294360.2013.832167

Brookfield, S. (2000). Transformative learning as ideology critique. In J. Mezirow & Associates (Eds.), *Learning as transformation: Critical perspectives on a theory in progress* (pp. 125-148). San Francisco, CA: Jossey-Bass.

Carter, T. L. (2008-2009). Millennial expectations, constructivist theory, and changes in a teacher preparation course. *SRATE Journal*, *18*(1), 25-31. Retrieved from http://apbrwww5.apsu.edu/SRATE/

Chigeza, P., & Halbert, K. (2014). Navigating e-learning and blended learning for pre-service teachers: Redesigning for engagement, access and efficiency. *Australian Journal of Teacher Education*, *39*(11), 133-146. doi: 10.14221/ajte.2014v39n11.8

Danielson, C. (2007). *Enhancing professional practice: A framework for teaching* (2nd ed.). Alexandria, VA: Association for Supervision and Curriculum Development.

Dowson, M., & McInerney, D. M. (2001). Psychological parameters of students' social and work avoidance goals: A qualitative investigation. *Journal of Educational Psychology*, *93*, 35-42. doi: 10.1037/0022-0663.93.1.35

Dunlap, J. C. (2010). Using guided reflective journaling activities to capture students' changing perceptions. *Tech Trends*, *50*(6), 20-26. doi: 10.1007/s11528-006-7614-x

Educational Testing Service. (2014, August). *The Praxis Performance Assessment for Teachers (PPAT) reflective practice handbook* (version 1.1). Washington, DC.: Author.

Ferrance, E. (2000). Action research. *Themes in education*. Retrieved from https://www.brown.edu/academics/education-alliance/sites/brown.edu.academics.education-alliance/files/publications/act_research.pdfFowler, F. J. (2013). *Survey research methods* (5th ed.). Thousand Oaks, CA: Sage.

Gavalcova, T. (2008). On strategies contributing to active learning. *Teaching Mathematics and its Applications*, *27*(3), 116-122. doi: 10.1093/teamat/hrn013

Grbich, C. (2006, September 21). *General approaches to designing and analyzing data*. Retrieved from http://www.sagepub.com/upm-data/12704_02_Grbich_Ch_02.pdf

Hole, S., & Hall McEntee, G. (1999). Reflection is at the heart of practice. *Educational Leadership*, *56*(8), 34-37. Retrieved from http://www.ascd.org/publications/educational-leadership.aspx

Hunzicker, J., & Lukowiak, T. (2012). Effective teaching and student engagement in the college classroom: Using the Instructional Practices Inventory (IPI) as a tool for peer observation and self-reflection. *Journal on Excellence in College Teaching*, *23*(1), 99-132. Retrieved from http://www.celt.muohio.edu/ject/

Jacobs, J., & Yendol-Hoppey, D. (2014). Using action research to target and generate professional learning. In L. E. Martin, S. Kragler, D. J. Quatroche, & K. L. Bauserman (Eds.), *Handbook of professional development in education: Successful models and practices* (pp. 304-318). New York, NY: The Guilford Press.

Jansen, A., & Spitzer, S. M. (2009). Prospective middle school mathematics teachers' reflective thinking skills: Descriptions of their students' thinking and interpretations of their teaching. *Journal of Math Teacher Education*, *12*, 133-151. doi: 10.1007/s10857-009-9099-y

Johnson, B. M. (1995, Fall). Why conduct action research? *Teaching and Change*, *3*(1), 90-104. Retrieved from ERIC database. (EJ520875)

Jones, J. L., & Jones, K. A. (2013). Teaching reflective practice: Implementation in the teacher-education setting. *Teacher Educator*, *48*(1), 73-85. doi: 10.1080/08878730.2012.740153

Kellough, R. D., & Kellough, N. G. (2008). Thinking and questioning: Skills for meaningful learning. In R. D. Kellough & N. G. Kellough (Eds.), *Teaching young adolescents: Methods and resources for middle grades teaching* (5th ed., pp. 81-108). Upper Saddle River, NJ: Pearson Education, Inc.

Kolb, D. (1984). *Experiential learning.* Englewood Cliffs, NJ: Prentice-Hall.

Kolb, A., & Kolb, D. A. (2005). Learning styles and learning spaces: Enhancing experiential learning in higher education. *Academy of Management Learning and Education*, *4*(2), 193-212. doi: 10.5465/ AMLE.2005.17268566

Lin, M., & Lucey, T. A. (2010). Individual and group reflection strategies: What we learned from preservice teachers. *Multicultural Education*, *18*(1), 51-54. Retrieved from ERIC database. (EJ916847)

Lupinski, K., Jenkins, P., Beard, A., & Jones, L. (2012). Reflective practice in teacher education programs at HBCU. The Journal of *Educational Foundations*, *26*(3-4), 81-92. Retrieved from *www.stockton.edu/edfoundations*

Melville, W., Fazio, X., Bartley, A., & Jones, D. (2008). Experience and reflection: Preservice science teachers' capacity for teaching inquiry. *Journal of Science Teacher Education*, *19*, 477-494. doi: 10.1007/s10972-008-9104-9

Mezirow, J. (1991). *Transformative dimensions of adult learning.* San Francisco, CA: Jossey-Bass.

Mezirow, J. (2000). Learning to think like an adult: Core concepts of transformation theory. In J. Mezirow & Associates (Eds.). *Learning as transformation: Critical perspectives on a theory in progress* (pp. 3-33). San Francisco, CA: Jossey-Bass.

Ostorga, A. N. (2006). Developing teachers who are reflective practitioners: A complex process. *Issues in Teacher Education*, *15*(2), 5-20. Retrieved from http://www1.chapman.edu/ITE/

Rike, C., & Sharp, L. (2008). Assessing preservice teachers' dispositions: A critical dimension of professional preparation, *Childhood Education*, *84*(3), 150-153. doi: 10.1080/00094056.2008.10522994

Rohlwing, R. L., & Spelman, M. (2014). Characteristics of adult learning: Implications for the design and implementation of professional development programs. In L. E. Martin, S. Kragler, D. J. Quatroche, & K. L. Bauserman (Eds.), *Handbook of professional development in education: Successful models and practices* (pp. 231-245). New York, NY: The Guilford Press.

Schon, D. A. (1983). *The reflective practitioner.* New York, NY: Basic Books.

Tompkins, G. (2008). *Teaching writing: Balancing process and product* (5th ed.). Upper Saddle River, NJ: Pearson, Merrill/Prentice-Hall.

Vygotsky, L. S. (1978). *Mind in society: The development of higher psychological processes*. Boston, MA: Harvard University Press.

Walkington, J., Christensen, H., & Kock, H. (2001). Developing critical reflection as a part of teaching training and teaching practice. *European Journal of Engineering Education*, *26*(4), 343-350. doi: 10.1080/03433790110068242

Watts, H. (1985). When teachers are researchers, teaching improves. *Journal of Staff Development*, *6*(2), 118-127. Retrieved from http://learningforward.org/publications/jsd

Wiggins, G. (2012). 7 keys to effective feedback. *Educational Leadership*, *70*(1), 11-16. Retrieved from http://www.ascd.org/publications/educational-leadership.aspx

Yost, D. S., Senter, S. M., & Forlenza-Bailey, A. (2000). An examination of the construct of critical reflection: Implications for teacher education programming in the 21st century. *Journal of Teacher Education*, *51*(1), 39-49. doi: 10.1177/002248710005100105

Zeichner, K. M. (1994). Research on teacher thinking and different views of reflective practice in teaching and teacher education. In I. Carlgren, G., Handal, & S. Vaage (Eds.), *Teachers' minds and actions: Research on teachers' thinking and practice* (pp. 9-28). Bristol, PA: The Falmer Press.

Dr. Jana Hunzicker is an associate professor in the Department of Teacher Education at Bradley University in Peoria, Illinois where she teaches courses in young adolescent development, middle school instruction, language arts methods, and teacher leadership. Dr. Hunzicker also serves as executive director for Bradley's Center for Teaching Excellence and Learning (CTEL) and coordinates the Bradley Professional Development Schools (PDS) Partnership for her college. Her research interests include effective teaching practices, teacher learning, professional development, professional development schools, and teacher leadership. Dr. Hunzicker can be reached at jhunzicker@bradley.edu.

Cross-Disciplinary Exploration and Application of Reflection as a High Impact Pedagogy

Sarah E. Summers, PhD*
Assistant Professor, Department of Humanities and Social Sciences
Rose-Hulman Institute of Technology

Heather C.S. Chenette, PhD*
Assistant Professor, Department of Chemical Engineering
Rose-Hulman Institute of Technology

Ella L. Ingram, PhD
Associate Professor, Department of Biology and Biomedical Engineering
Rose-Hulman Institute of Technology

Jay P. McCormack, PhD
Associate Professor, Department of Mechanical Engineering
Rose-Hulman Institute of Technology

Patrick J. Cunningham, PhD
Associate Professor, Department of Mechanical Engineering
Rose-Hulman Institute of Technology

*The first two authors contributed equally.

Reflection is a high-impact practice in education. This paper explores the premise, approach, and outcomes of a learning community centered on scholarly engagement with the literature of reflection. Using the reflection model operationalized by a national consortium, we developed, implemented, and assessed reflection activities designed to create opportunities for transfer of skills and conceptual change. Two case studies reveal commonalities in using reflection in a college setting. We explore the questions that emerged as a result of our experiences, and connect this work to the importance of engaging with colleagues in a community of learners.

The practice of reflection connotes an informal and individual practice—sometimes seen as unstructured or emotional. Yet, far from being amorphous, reflection is a "systematic, rigorous, disciplined way of thinking with its roots in scientific inquiry" (Rodgers, 2002, p. 845) that involves sharing and critical dialogue within a supportive environment. Ambrose (2013) suggested that true learning requires reflection on acts of doing or practicing what one is trying to learn, a suggestion consistent with the idea that reflection is a cyclical process promoting continuity of experiences (Rodgers, 2002). Given its rigor and application to experiential learning, reflection complements the goals and approaches of STEM education; however, we find that traditional STEM education regularly omits opportunities for explicit training and practice with this formal process of reflection.

Reflection is a high impact educational practice, with successful applications across disciplines, especially in professional practice settings (e.g., architecture, nursing, law, and management; see Fook, White, & Gardner, 2006; Schön, 1987). However, much of this work describes idiosyncratic models and thus presents a challenge to educators who desire a clear path to implement reflection-based learning practices. To help educators meet this challenge, the Consortium to Promote Reflection in Engineering Education (CPREE), a nationally distributed, twelve institution collaboration, operationalized the theoretical constructs presented by Dewey, Rodgers, and others to an actionable model. In the CPREE model, reflection is "an intentional form of thinking where a learner becomes aware of and revisits aspects of an experience with a lens for meaning-making, contributing to

certain future effects" (Turns, Sattler, Yasuhara, Borgford-Parnell, & Atman, 2014, para. 3). Distributed as the core model of the consortium, the operationalized model provides a framework for scholarly teaching (see Figure 1), and helps educators use reflection in the classroom.

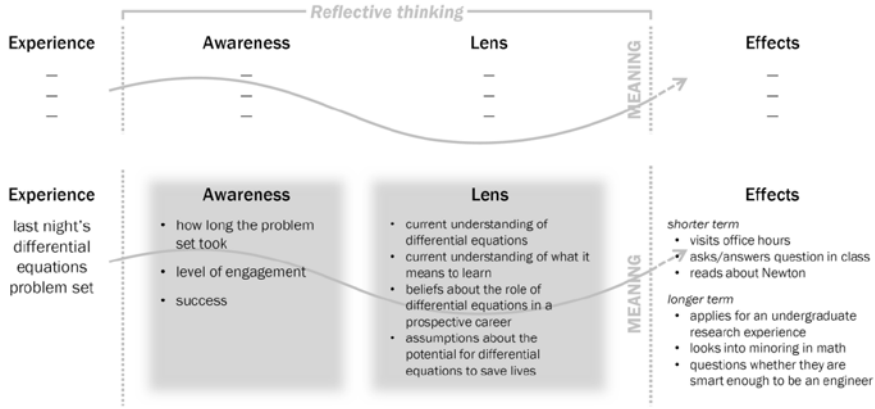


Figure 1. Operationalized model of reflection (description from Turns et al., 2014, image from CPREE used with permission).

As educators, we construct or impose experiences on our students (the left side of Figure 1). Through the prompts we use, we direct students' awareness to specific features of the experience and help them analyze the experience with a particular lens (i.e., content, development as learner, meaning making, or development of identity, as in Grossman, 2009). Our direct influence ends with this support, leaving us with only indirect influence on the future effects. To provide guidance with the operationalized model, we present (and used ourselves) the following questions to guide the support we provided learners in each phase of the reflection process. *Experience*: What is the experience being reflected upon? What are students focused on? What aspect(s) of the experience are students considering? *Awareness*: What is done to support students' awareness of the experience? *Lens*: In this reflection activity, are you supporting students' reflection on their: (a) accountable disciplinary knowledge, (b) identity, or (c) preparing for future learning? *Effects*: What meaning do students arrive at as a result of the reflection activity? How does the activity position students for action? What are likely actions that students can take after completing this activity? (B. Sattler, personal communication, January 29, 2015; L. Thomas, personal communication, February 17, 2016). These questions naturally create a cyclical process, as future effects become new experiences, which provide fodder for additional reflection. Further, these questions illustrate the organized nature of both preparing students for reflection and of the acts of reflection.

In the sections that follow, we detail our small, private STEM institution's application of the operationalized model through a summer learning community (LC). We provide a brief overview of the LC and of the reflection activities that this community built using the operationalized model, including our approach to assessment. Then, we provide two case studies of assignments designed and implemented by LC participants—one in the Humanities and one in Chemical Engineering. Finally, we examine our experiences integrating reflection-focused learning into a STEM curriculum and outline the questions prompted by that examination.

Reflection Learning Community

As scholarly educators, we understand the value of community and constructivist approaches when working with new ideas (Rodgers, 2002). Therefore, as part of our campus CPREE activities, Ingram, Cunningham, and McCormack created the LC during the summer of 2015 to develop reflection activities that were integrated with existing courses and student experiences. Twelve participants comprised the LC, representing engineering (Chenette), math, humanities (Summers), institutional research, and global programs. The group met six times during the summer, with a poster session at the start of the next academic year. The major activities of the LC supported growth and exploration (see Appendix A), and the group used the core principles of disciplinary diversity, topic-based focus, theoretical base in teaching and learning, high collaboration, and time investment, consistent with the guidance provided by the research collected in Richlin and Cox (2004). Participants critiqued peer activities, debated applications to various courses, discussed philosophical foundations, and reconsidered experiences with students. More information on the structure, operations, and funding of the LC is available upon request from the authors.

The LC had the explicit goal of including reflection activities across a variety of experiences for our STEM-focused students. We observed several key outcomes from the LC experience. Each educator created a scheme for students to experience the totality of the reflection structure (see Figure 1). Informed by the literature and constructive peer critiques, all educators implemented their reflection activities, which included selecting and applying assessments. These experiences provided hundreds of students, including the entire entering class, opportunities to practice rigorous reflection. All educators plan to revise and re-implement these activities in the next iteration of their course. For readers interested in examples, more than 100 reflection-based activities are available via the CPREE field guides archived at http://cpree.uw.edu/about-fieldguides/.

To refine their approaches to learning, learners engage in reflection on how they are processing information, i.e., metacognition.

The reflection activities designed by LC participants exhibited a range of practices. These activities focused on specific content, development as a learner engaging with content, making meaning of the content, or developing a sense of identity (Grossman, 2009). In reflecting on content, learners develop deeper learning by discovering relationships between and among concepts or the function or role of a topic within a larger framework. To refine their approaches to learning, learners engage in reflection on how they are processing information, i.e., metacognition. In making meaning of the content, learners focus their attention on why the content is important to the discipline or why it matters to them individually. Identity development occurs when learners reflect on their experiences through a particular lens (e.g., the discipline) and formulate both an affiliation and a sense of uniqueness. Each emphasis Grossman identifies is consistent with a deep approach to learning (Marton & Säljö, 1976).

Assessment of Reflection

The initial opinion of many educators (including participants in our LC) is that assessment of reflection is inherently problematic for a variety of reasons. Through our work in the LC, and with guidance from the literature (e.g., Moon, 2006), we rejected that opinion in favor of a scheme proposed by Kember and colleagues (1999, 2008) that focuses on written work. The revised scheme (Kember, McKay, Sinclair, & Wong, 2008) relies on four levels of analysis, most briefly summarized as non-reflection, understanding, reflection, and critical reflection. Detailed descriptions are included in Kember et al.'s (2008) work; here we provide our own short synopses.

In applying this assessment approach, we adopted four premises. First, we acknowledged that we can only assess what is produced in writing, knowing that this production almost certainly would not capture the entirety of a student's experience. Second, we accepted Creswell's (2007) rationale for not focusing on the quantitative distribution of student responses in each category: counting responses creates an orientation to "magnitude and frequency contrary to qualitative research" (p. 152). In this case, what the responses demonstrate about students' abilities to practice reflection matters more than the distribution of student responses across categories. Third, we noted that our language and assessment illustrated comparative value of the categories with respect to reflection only; we accepted that for many educational tasks and in many different settings, different levels of engagement with the content or experience occur. Finally, we recognized that ratings of Reflection and Critical Reflection did not guarantee reflection and ratings of Non-Reflection and Understanding did not preclude the presence of reflection, as noted by Moon (2006). Any measure of an internal process will be imperfect, but even in its lack of precision, such measures still are indicators of reflection. Using this defined assessment scheme was in keeping with our conceptions of reflection as a rigorous cognitive activity going beyond emotional responses and imprecise feelings.

Non-reflection (or habitual action in the Kember et al., 2008 formulation) is characterized by rote thinking, most often illustrated by a "just the facts" statement or answer. Calculation, routine experiences, procedural activity, significant paraphrasing, and other similar activities can exemplify this level of thinking. The category *understanding* presents a learner's search for meaning within the confines of the conceptual system. Analogous to the revised Bloom's taxonomy category "understand," learners displaying this category of thinking would be competent as judged by a concept inventory but likely struggle to translate a concept in one system to a new situation. *Reflection* is displayed by learners who incorporate concepts or experiences into a larger knowledge scheme. In general, some or all of three features are present in reflection-focused statements: application of concepts or theories, connection to personal experience, and insight regarding learning. Critical reflection is illustrated by "a change in perspective over a fundamental belief" (Kember et al., 2008, p. 375). To be indicative of this category of reflection, written submissions present an explicit awareness (often newly discovered, as it is so ingrained) of the "fundamental belief" (p. 375) and an exploration of why that belief is no longer satisfactory given the new learning or experience.

In the case studies provided, each instructor used the Kember et al. (2008) rubric to assess her students' responses, matching specific elements of the rubric to explicit student phrases. We found substantial differences among the written submissions we examined in terms of the amount of meaningful content presented. We observed the general pattern that as written work fit more into the reflection and critical reflection categories, the submission required more words on the student's part, because these two categories require providing unique personal context and insight. To show the range of student experiences with this pedagogy, we present an illustrative example within each of the rubric's categories. Our intent was not to prove the point through exhaustive examples, but to highlight the opportunities inherent in the reflection approach to impact student thinking. One goal of the educational enterprise is to cause more students to experience significant thinking about themselves, content, and experiences. The case studies below illustrate two mechanisms for achieving this goal. Our work explores a single point in time, and we are eager for other scholarly research to illuminate the long-term impacts of structured reflection practices, such as those described below, in STEM education.

Case Study: Reflective Writing in Technical Communication (Summers)

One of the biggest challenges I face when teaching Technical and Professional Communication (Tech Comm, a required, upper-level writing course), is how to help students transfer the skills and knowledge they gain from my course to the myriad writing tasks they will encounter in future educational and professional situations (Yancey, Roberson, & Taczak, 2014). Students incorrectly conceptualize transfer of writing knowledge as directly applying a skill from one task to another (e.g., once they have learned one way to design a PowerPoint slide, they can replicate that slide design for any presentation). In fact, transfer of writing knowledge requires understanding that existing skills and practices must be adapted and repurposed for new contexts. To move transfer beyond the limited scope of tasks, instructors must develop both students' dispositions toward learning and their ability to understand their learning in context (Wardle, 2007). Reflection, as operationalized by CPREE, addresses both students' dispositions toward learning and their ability to understand that learning in context. Thus, reflection directly promotes both the dispositions and the contextual awareness that successful transfer requires.

My course, like many technical writing courses, includes juniors and seniors from a wide range of disciplines and with varying professional goals. In a single, ten-week course, I cannot teach all students how to write every discipline-specific document they might encounter. Instead, I provide students with assignments that reinforce a rhetorical approach to writing—a focus on audience, context, and clarity in writing and document design. To apply these concepts beyond the course, students must identify how these ideas intersect with the norms in their fields and how to best repurpose them in new situations. Given this context, I participated in the learning community with this question: How can I use reflection expressed in writing to encourage students to draw connections between the writing tasks or rhetorical concepts in Tech Comm and writing in their disciplines as a means of promoting transfer?

...reflection directly promotes both the dispositions and the contextual awareness that successful transfer requires.

As a result of the LC, I designed a Reflective Professional Writing Portfolio assignment and implemented it in two sections of Tech Comm (Appendix B). The portfolio assignment had components pulled from the operationalized model. First, students selected at least three pieces of writing or design related to their disciplines (called artifacts in the assignment, representing the original *experience*) and wrote abstracts to accompany each artifact. In these abstracts, students provided the context for the artifact (illustrating *awareness*) and then explored the writing and rhetorical skills they demonstrated in the artifact (providing a *lens*) and how those writing and rhetorical skills might be more broadly applied in their disciplines or future professional settings (leading to *effects*). Next, students used the *experience* writing abstracts to describe what they learned about their communication skills from completing the portfolio (illustrating *awareness*) and create a communication philosophy (providing a *lens*). The ultimate aim of the philosophy was an analysis of how students can apply their philosophy to future contexts (predicting *effects*). Finally, students created websites to display their portfolios and to practice professional writing and design in an online context—itself an act of transfer.

Student Outcomes

Using Kember et al.'s (2008) scheme, I analyzed the quality of students' portfolios and determined to what extent they understood the connections between their experiences and specific writing tasks or communication approaches. This analysis demonstrates the range of student reflection and highlights the possibilities for transfer among students who reach reflection and critical reflection.

Non-reflection. Very few student portfolios fell into the category of non-reflection. Those portfolios that did often replicated parts of the assignment sheet or examples from class and seem focused on providing an objective "right" answer, rather than providing a unique and personal reflection on a past writing experience. For example, in an abstract of a lab report, one student wrote: "This lab demonstrated three qualities that are important as a chemical engineer working alongside chemical manufacturers: attention to detail, problem solving skills, and proper development skills. These skills are necessary to ensure the efficient production of high quality products." The student only discussed the report in terms of its objectives, rather than in terms of the student's experience attempting to achieve those objectives. Additionally, this student concluded each of her abstracts with the same final sentence about necessary skills, which demonstrates a lack of attention to different contexts she might encounter. In non-reflection, students saw writing experiences as objective outcomes and could only articulate superficial connections to future contexts, which suggested they will not be successful transferring writing knowledge.

Understanding. In this category and context, students considered the connections between the experience and the lens; however, the understanding of that connection relied heavily on repeating the theory underneath the lens. For example, in his communication philosophy, one student explained the relevance of the rhetorical triangle, a model that helps students understand the relationships between writer, audience, and message:

> When I described catering to the audience earlier, I referenced the two sides of the triangle that share the audience as a point. It is important to verbally communicate to the audience in a way they will understand and also design the message so that it has significance with the audience.

This student was clearly able to recall his past presentation experience and apply the lens of the rhetorical triangle. Yet, his writing lacked specific references to context or personal understanding of the lens. How did the student determine the audience's needs? How did the student design the message to appeal to that specific audience? Without answering these context-specific questions, the student was unable to make meaning from the experience and apply it to future action. Understanding is an important first step toward being able to transfer writing skills, but students in the understanding stage would be unlikely to clearly articulate differences in contexts and the appropriate strategies to account for those differences.

Reflection. This practice occurred when students applied the lens of rhetorical theory to their experiences and created personal meaning. Many students attained reflection in at least one of their abstracts because they explicitly practiced structuring abstracts this way in class. In collaborative writing activities, we composed examples that began with describing the context of an experience, applied a concept from class (like attention to audience or timeliness), and then explained why that application was important to their learning, their fields, or their careers. For example, the following example from a student's abstract about a group presentation makes more specific applications of course concepts than the "understanding" example:

> A highlight of this project was our use of the assertion-evidence method of presenting. This method allows the presenter to highlight key information and main ideas for the audience without putting too much on the slide. It also allows the presenter to expand upon his/her ideas—better engaging the audience, showing his/her expertise in the subject, and forcing the listeners to focus on the speaker rather than only the slides. Working as a

> doctor/engineer it will be important for me to be able to work in a team as well as present my findings in a way that is concise and engaging for both technically and non-technically versed audiences.

The student reflected on the strength of his project by explaining his own understanding of the benefits of a design approach and the ways those benefits connect to a rhetorical emphasis on audience. Then, the student considered how this approach might apply to his future career. While we cannot know exactly how the personal insight he gained here will aid him in the future, we know that regardless of his future discipline, he will be able to apply the cross-disciplinary skill of communicating for a specific audience.

Critical reflection. Relatively few students reached critical reflection in their portfolios, as Kember et al. (2008) predicted. Critical reflection requires a "change in perspective" (p. 379) based on reflection. For many students, this change may not occur until they must apply and revise their existing writing knowledge. However, a few students articulated changes they have noticed already in their approach to writing, including one student, who contrasted previous internship projects with current course projects in his communication philosophy:

> During this internship, I presented multiple projects while using my old slide-making habits. Over the past quarter, I have greatly developed my ability to design presentation slides using the "rhetorical triangle" by keeping the reader/viewer as the driving factor of the design. I have also used this same factor in developing instruction manuals at both [internship company] and in the classroom. Furthermore, my skill to describe instructional steps in a very effective manner grew tremendously this past summer creating step-by-step assembly line processes; however, my organization and design of these steps was lacking. A key skill I learned during this past quarter was my ability to organize the manuals more effectively. Features of this organization include incorporating pictures in a strategic aspect, as well as keeping the same blocked format to articulate each instructional step.

This student considered past internship writing experiences through the lens of the rhetorical triangle and key design concepts, and he demonstrated that he shifted his perspective on what he considers good work. Through reflection, the student realized that, while the content of his instruction manuals was "effective," the design needed improvement. He was also able to articulate strategies for improving design that can be applied to new contexts. This student's critical reflection hinged on extensive experience writing in a workplace; thus, other students might reach critical reflection on their own—having already practiced the process of reflection—once they encounter more writing contexts.

Case Study: Reflection to Make Sense of Predictions in Engineering (Chenette)

Conceptions about heat and mass transfer are informed by our experience with the world (e.g., when should one use salt to "melt the ice" on a winter day?), yet students struggle to conceptualize thermal and chemical properties of materials. Students find it easy to justify why a system behaves as it does based on experiential knowledge alone. However, if that experiential knowledge contains a misunderstanding, the dichotomy between one's intuition and the accepted scientific explanation may result in conflicting information. A shift in understanding must take place to align intuition with what makes sense from a scientific perspective. Unfortunately, for thermal energy concepts, this shift often fails to happen even after college-level instruction; thus, misconceptions persist (Prince, Vigeant, & Nottis, 2012b). In previous versions of my Fundamentals of Heat and Mass Transfer

course, I confirmed the absence of such a shift via a concept inventory, demonstrating only an average normalized gain of 8%, consistent with other research (Prince et al., 2012a).

Conceptual change requires both dissatisfaction with the original concept and recognition of an intelligible new concept (Posner, Strike, Hewson, & Gertzog, 1982) and is related to the act of reflection. Knowing that conceptual change was necessary in my context, I wanted to explore if and how written reflection activities facilitated creating the required dissatisfaction and recognition needed to adjust commonly-held misconceptions about heat and mass transfer. For example, most students can correctly identify and employ the proper relationships to model a system that involves the transfer of energy, but only around 20% correctly identified the effect the material properties had on temperature profile within the object. This situation was ideal for using reflection to explore content knowledge (Grossman, 2009).

I introduced in-class prediction activities related to heat transfer, as recommended by Vigeant, Prince, and Nottis (2011). Three activities were distributed across a 10-week course. The one I highlight here focused on conduction of heat to melt ice (see Appendix C). For each activity, I described a heat transfer scenario and asked the class questions about heat transfer processes, asked students to make a prediction, allowed students to participate in preparing and observing a simple demonstration (the *experience*), and led a short classroom discussion. Within the week following the in-class activity, I assigned students to complete a follow-up assignment in the form of an online quiz that prompted students to revisit the activity and answer nine questions in a couple of sentences each. To frame student *awareness*, I offered no guidance other than the number of sentences on how students should respond to questions, asking only that they put forth a good-faith effort to complete it. Students received full credit if they completed the follow-up assignment, regardless of effort, correctness, or length of responses. The assignment was worth one problem on a homework assignment. The prompting statements for the follow-up assignment were based on the Rate vs Amount Misconception Survey (AIChE Concept Warehouse, n.d.) These guiding statements (see Table 1) loosely map to the steps in the operationalized model of CPREE (see Figure 1). Appendix C provides the actual follow-up assignment questions, which included asking students to describe a new understanding of the experience (*lens*) and making conclusions about a new scenario (*effects*). I purposefully did not call this a "reflection" assignment to avoid negative connotations that students may have for such assignments.

Table 1

Prompting Questions Asked After Each In-class Prediction Activity

Aspect	Prompting Question
Experience	Recall the prediction activity in class. Re-state your prediction.
Awareness	Describe what you observed during the demonstration.
Lens	If the results of the demonstration did not match your initial prediction, create a new explanation of the results. In your explanation, you should pay particular attention to why your prediction was incorrect and how you revised your thinking to explain what happened.
Effects	Do factors that increase the rate of heat transfer always increase the amount of heat transfer too? Yes/No, Explain. What, if anything, did you learn from this activity?

Student Outcomes

I adopted the four-category rubric developed by Kember et al. (2008) to assess student responses with respect to the quality of reflection. Evidence of reflection often appeared in response to the final prompting question, "What, if anything, did you learn from this activity?"

Non-reflection. Responses categorized as non-reflection simply reproduced the theory discussed in class. For most students, this reproduction implied a functional understanding, but their written statements showed no attempt to reach a greater understanding of the topic or find deeper meaning from the experience. For example, the following two students mentioned what they learned, but their conceptual understanding was unclear: "[I learned] that the amount of heat transferred is related to mass"; "I learned that there is a difference between heat rate and the amount of heat transferred." The low specificity of the language used by these two students illustrated the bare minimum in conceptual understanding. In the first case, the student missed the important aspect of the concept that amount of heat transferred is *proportional* to mass. Neither student addressed the reason behind their observation.

Understanding. Student work that correctly articulated the point of the activity, but only provided responses within the context of the topic demonstrated understanding. For example, "This activity helped me see the physical differences in amount of heat transferred and the rate of heat transfer. It shows the reason why someone defined the heat flux on a per area basis. It was a helpful activity." This example illustrated more appropriate terminology and the additional conceptual understanding of the parameters influencing heat flux. The statement focused on only the specific context addressed in the demonstration and was consistent with a minimally acceptable response on a quiz or exam.

Reflection. Responses that exhibited reflection included some personal insight or applied what students learned to a real-life scenario. For example, one student wrote:

> I was able to learn the advantages of controlling exposed surface area. For instance, if someone wants their drink to get colder faster, they should use crushed ice. If someone wants their drink to stay cold longer, they should probably use cubed ice.

This response addressed a key aspect of the overall demonstration and considers *better* in different contexts. The student found meaning in the applicability of the concept to a different setting, while remaining firmly within the boundaries of the concept itself.

Critical reflection. Student work that exhibited critical reflection showed "evidence of a change in perspective over a fundamental belief" (Kember et al., 2008, p. 379) pertaining to the distinction between the rate of heat transferred and the amount of heat transferred. One student acknowledged the prediction was wrong and described a change in understanding: "I thought it had to do with volume [per piece] of the cubes but in reality it was the mass that mattered and because both masses were the same they both dropped the water to the same temperature." The student went on to identify a broader lesson learned from this activity:

> I learned that changing your prediction based off of results is not a bad thing. I also learned that what you take away from an event should be how and why they work not if you were right or wrong.

This student explored two levels of Grossman's (2009) reflection—considering the conceptual content in new ways, and considering her learning in new ways. The student hinted at applicability of the experience to new contexts, fitting the *effects* component of the operationalized model. This type of thinking is promoted by reflection-focused activities in a way that solving equations or reading textbooks do not. I noted that among students who believed their original predictions about the melting ice were completely correct, none exhibited critical reflection.

Instructor Impressions

Summers and Chenette worked together to consider their experiences using reflection in the classroom through the scholarly lens provided by the resources from the LC. In this section, we consider the meanings we can make from our experiences and the ways they can shape teaching practices.

As we discussed our assignments and our students' responses, we realized that we took two very different approaches to integrating reflection into our classrooms. Summers taught reflection explicitly, including lessons on reflective writing and using CPREE materials to help students understand how reflection might benefit them as writers and learners. Thus, reflection was a core part of the content of the portfolio assignment. In contrast, Chenette used reflection to teach content. She used minimally-guided reflection as a way to encourage students to review their interpretation of heat and mass transfer concepts to see if this process improved conceptual understanding. Thus, reflection can be adapted to fit instructors' needs across disciplines. Our experiences suggest that reflection can be useful both in teaching specific content and in teaching an approach to learning and thinking, consistent with the framing Grossman (2009) provides.

As instructors, we are responsible for creating the learning opportunities, but students must do the work themselves.

Despite our different approaches, we both had students submit work that encompassed all of Kember et al.'s (2008) categories, from non-reflection to critical reflection. This distribution in responses suggests that focused instruction can play an important role in improving the quality of student reflection, as it did for Summers' students, but that other factors also can influence the quality of students' reflections. As instructors, we are responsible for creating the learning opportunities, but students must do the work themselves. What students gain from a learning activity depends on the students' engagement with it, their understanding of the material, and the idiosyncratic nature of their previous experiences. For example, Summers noticed that students with prior internship experiences were better able to reflect on the relevance of their writing experiences in professional contexts. Chenette noticed that students with initial predictions that were not completely correct were more suited to expressing personal insights and changes in beliefs. Instructors can provide valuable guidance in finding the appropriate touchstone experiences or manufacturing such experiences for their students.

Given these observations, we developed questions to help us guide our future teaching practices.

1. How much time should we devote to reflection activities and instruction about reflection in the classroom? We both had to rearrange—and at times cut—content to incorporate reflection activities. We want to continue to study student outcomes to determine to what extent time spent discussing or practicing reflection helps students achieve other course outcomes. We recognize that spending time on reflection comes with a cost. A critical issue for instructors is to balance the cost and gains of using reflection as a deep learning pedagogy.

2. How can we determine to what extent reflection activities influence students' future learning? Whether we are focused on later performance in the course and course sequence (Chenette) or the transfer of course content into new contexts (Summers), we hope to find ways to assess the longer term efficacy of reflection. Such assessment requires longitudinal research.
3. What is the role of guided writing assignments in reflection? Writing seems like the clearest way to assign and assess reflection (e.g., essays as in Kember et al., 2008; journals as in Moon, 2006; and portfolios and other forms as in Wald, Borkan, Taylor, Anthony, & Reis, 2012), but we also want to investigate the other ways that students process reflection. For example, among students who did not complete written assignments, Chenette observed evidence of some students trying to apply their interpretations to new situations. This outcome seemed to result from the nature of inductive learning, which is inherently hands-on and intriguing.
4. To what extent must reflection be transparent, explicit, and motivated in the specific course setting to positively affect students? The two approaches highlighted in this paper stand in stark contrast. Yancey (2015) argues that even in writing courses, reflection is often "a marginal activity […] expected from students rather than designed into the curriculum" (p. 189). We wonder if for students to benefit from reflection, they need to know that it is happening. Summers framed the portfolio assignment as a reflective writing task from the beginning and shared theories of reflection (including the operationalized model) throughout the assignment. Chenette avoided all mention of reflection. We are left wondering the importance of explicitness for the different types of reflection specified by Grossman (2009).

Summary

The complex history of reflection in education and the initial confusion we felt regarding the implementation, assessment, and student experience of reflection resolved through our engagement with the scholarly community. When we take a meta-reflection view, we can see in our collective work the various aspects of Grossman's (2009) reflection categories. With respect to content, we explored what reflection is and how it works, via the literature and the operationalized model. As learners, we developed approaches for engaging with philosophical content well outside our disciplinary expertise. In making meaning, we incorporated our personal philosophies and teaching experiences with our developing understanding of reflection. The LC also impacted our identities as scholarly teachers, through our engagement with peers and with research in the realm of reflection. We came to the broader understanding of the importance of working with colleagues across disciplines and engaging in topics as novices, both having the effect of challenging strongly held positions and facilitating significant growth. As a result of the experiences described here, we can honestly present ourselves as willing and able to do the hard work necessary to ourselves achieve the outcomes we want for our students.

Acknowledgements

This research aspect of this project was completed with IRB approval to Summers, Chenette, and Ingram (protocols RHS0237 and RHS0254). This material is based on work supported by The Leona M. and Harry B. Helmsley Charitable Trust through funding of the Consortium to Promote Reflection in Engineering Education (CPREE), a collaboration of twelve educational institutions. We especially thank Dr. Lauren Thomas for her contributions to the theoretical framing of this work and for reviewing a draft. We thank Dr. Rachel McCord for early assistance with

assessment of reflection, and two anonymous reviewers and Kelly Myer Polacek for comments that improved this manuscript. The members of our LC were invaluable in creating the context for this work to occur.

References

AIChE Concept Warehouse. (n.d.). *Rate vs amount misconception survey*. AIChE Education Division Concept Warehouse website: https://jimi.cbee.oregonstate.edu/concept_warehouse/

Ambrose, S. A. (2013). Undergraduate engineering curriculum: The ultimate design challenge. *The Bridge: Linking Engineering and Society*, *43*, 16-23. Retrieved from https://www.nae.edu/Publications/Bridge/81221/ 81228.aspx

Creswell, J. W. (2007). *Qualitative inquiry & research design: Choosing among five approaches* (2nd ed.). Thousand Oaks, CA: SAGE.

Fook, J., White, S., & Gardner, F. (2006). Critical reflection: A review of contemporary literature and understandings. In S. White, J. Fook, & F. Gardner (Eds.), *Critical reflection in health and social care* (pp. 3-20). Maidenhead, Berkshire, UK: Open University Press.

Grossman, R. (2009). Structures for facilitating student reflection. *College Teaching*, *57*, 15-22. doi: 10.3200/CTCH.57.1.15-22

Kember, D., McKay, J., Sinclair, K., & Wong, F. K. Y. (2008). A four-category scheme for coding and assessing the level of reflection in written work. *Assessment & Evaluation in Higher Education*, *33*, 369–379. doi: 10.1080/02602930701293355

Kember, D., Jones, A., Loke, A., McKay, J., Sinclair, K., Tse, H., & Yeung, E. (1999). Determining the level of reflective thinking from students' written journals using a coding scheme based on the work of Mezirow. *International Journal of Lifelong Education*, *18*, 18-30. doi: 10.1080/026013799293928

Marton, F., & Säljö, R. (1976). On qualitative differences in learning. I–outcome and process. *British Journal of Educational Psychology*, *46*, 4-11. doi: 10.1111/j.2044-8279.1976.tb02980.x

Moon, J. A. (2006). *Learning journals: A handbook for reflective practice and professional development* (2nd ed.). New York, NY: Routledge.

Posner, G. J., Strike, K. A., Hewson, P. W., & Gertzog, W. A. (1982). Accommodation of a scientific conception: Toward a theory of conceptual change. *Science Education*, *66*, 211–227. doi: 10.1002/sce.3730660207

Prince, M. J., Vigeant, M. A., & Nottis, K. E. K. (2012a). *Best paper PIC IV: The use of inquiry-based activities to repair student misconceptions related to heat, energy, and temperature*. Paper presented at the annual meeting of American Society of Engineering Education, San Antonio, TX. Retrieved from https://peer.asee.org/21014

Prince, M., Vigeant, M., & Nottis, K. (2012b). Development of the Heat and Energy Concept Inventory: Preliminary results on the prevalence and persistence of engineering students' misconceptions. *Journal of Engineering Education*, *101*, 412–438. doi: 10.1002/j.2168-9830.2012.tb00056.x

Richlin, L., & Cox, M. D. (2004). Developing scholarly teaching and the scholarship of teaching and learning through faculty learning communities. *New Directions for Teaching and Learning*, *2004*(97), 127-135. doi: 10.1002/tl.139

Rodgers, C. (2002). Defining reflection: Another look at John Dewey and reflective thinking. *The Teachers College Record*, *104*, 842–866. Retrieved from http://www.tcrecord.org/About.asp

Schön, D. A. (1987). *Educating the reflective practitioner*. San Francisco, CA: Jossey-Bass.

Turns, J. A., Sattler, B., Yasuhara, K., Borgford-Parnell, J. L., & Atman, C. J. (2014). Integrating reflection into engineering education. Paper presented at the annual meeting of American Society of Engineering Education, Indianapolis, IN. Retrieved from https://peer.asee.org/20668

Vigeant, M. A. S., Prince, M. J., & Nottis, K. (2011). The use of inquiry-based activities to repair student misconceptions related to heat, energy, and temperature. Paper presented at the annual meeting of American Society of Engineering Education, Vancouver, British Columbia, Canada. Retrieved from https://peer.asee.org/18483

Wald, H. S., Borkan, J. M., Taylor, J. S., Anthony, D., & Reis, S. P. (2012). Fostering and evaluating reflective capacity in medical education: Developing the REFLECT rubric for assessing reflective writing. *Academic Medicine*, *87*, 41–50. doi: 10.1097/ACM.0b013e31823b55fa

Wardle, E. (2007). Understanding 'transfer' from FYC: Preliminary results of a longitudinal study. *WPA: Writing Program Administration*, *31*, 65–85. Retrieved from http://wpacouncil.org/journal/index.html

Yancey, K. B., Roberson, L., & Taczak, K. (2014). *Writing across contexts: Transfer, composition and sites of writing*. Logan, UT: Utah State University Press.

Yancey, K. B. (2015). The social life of reflection: Notes toward an ePortfolio-based model of reflection. In M. E. Ryan (Ed.), *Teaching reflective learning in higher education* (pp. 189–202). New York, NY: Springer.

Appendices

Appendix A

Learning Community Outline of Sessions

Session	Session Objectives	Pre-Meeting Homework
Introduction	Establish baseline rapport with their colleagues; Analyze the operational definition of reflection; Deliver a three minute summary of their anticipated project.	Read Felton *et al*. (2013).
Foundational Concepts	Explain key aspects of reflection experiences; Create a master document of relevant terms, issues, considerations; Identify initial conceptions of what reflection can and can't do; Consider the range of reflection "tools" available and scenarios for deployment of these "tools".	Draft at least three reflection activities for your class; Read Rodgers (2002), Desjarlais & Smith (2011), and Graessner (2009); Submit 25-word summaries of papers.
Activity Presentation	Share perceived challenges and strengths with current activity drafts; Incorporate feedback from the group to address activity objectives; Engage in solution-finding with peers regarding their activities.	Submit a poster of the content in the provided format; Identify research questions of interest.
Assessment Workshop	Identify at least three different strategies that could be used to assess the success of their activity; Identify at least one mechanism to assess the research question of interest (for those that desire to publish).	Read Kember *et al*. (2008), Moon (2006), Stewart & Richardson (2000); Specify desired information about student thinking as a result of the reflection activity.
Activity Presentation	Share perceived challenges and strengths with current activity drafts; Incorporate feedback from the group to address activity objectives; Engage in solution-finding with peers regarding their activities.	Submit a poster of the content in the provided format; Identify research questions of interest.
Sustaining Activities	Present three-minute pitch to group; Present the portfolio of reflection activities developed over the summer (including	Revise the three-minute pitch based on the refined activities.

Session	Session Objectives	Pre-Meeting Homework
Sustaining Activities	assessment plan); Brainstorm ideas to sustain and broaden the development, refinement, and use of student reflection activities.	
Poster Dissemination	Describe reflection and the target activity to a naïve audience; Argue for reflection as a high-impact practice to peers.	Prepare a poster for printing; Revise the three-minute pitch based on the refined activities.

Desjarlais, M., & Smith, P. (2011). A comparative analysis of reflection and self-assessment. *International Journal of Process Education*, *3*, 3-18.

Felten, P., Bauman, H.-D. L., Kheriaty, A., & Taylor, E. (2013). Cultivating growth: Conversation in community. In *Transformative Conversations* (pp. 31-62). San Francisco, CA: Wiley.

Graessner, A. C. (2009). Inaugural editorial for Journal of Educational Psychology. *Journal of Educational Psychology*, *101*, 259-261.

Moon, J. A. (2006). Assessing journals and other reflective writing. In *Learning Journals: A Handbook for Reflective Practice and Professional Development* (pp.107-121). New York, NY: Routledge.

Stewart, S., & Richardson, B. (2000). Reflection and its place in the curriculum on an undergraduate course: Should it be assessed? *Assessment & Evaluation in Higher Education*, *25*, 369-380.

Appendix B

Reflective Professional Writing Portfolio Assignment Sheet (Condensed Version)

Overview

Electronic portfolios are an increasingly common vehicle for developing a professional online identity. Employers are interested in e-portfolios for a variety of reasons: they provide multiple writing samples, display skills with technology, design, and new media, and require reflection and meta-knowledge. Professionals like e-portfolios because they help them keep track of their projects and accomplishments. As a final course assignment, you will design an e-portfolio using a platform of your choice. The portfolio will highlight your writing from your discipline complemented by writing you do in this course. You will create your e-portfolio for an audience of potential employers.

Objectives

- To select and reflect on your previous writing experiences in light of our course discussions
- To articulate what constitutes good communication in various contexts in your discipline
- To organize and interpret your writing artifacts for an audience of potential employers
- To apply your knowledge of design to an online environment
- To describe your identity as a writer, now and in the future

Artifacts and Abstracts

Your portfolio will include *at least three* examples of your writing or design work from your discipline. They may be individually- or group-authored, but if you choose a group-authored work, you need to be prepared to describe your role in the project. Good artifacts will demonstrate the range of your skills as a writer, designer, and/or communicator and will allow you to discuss your strengths and/or your improvement as a communicator.

Each artifact will be accompanied by an abstract that contextualizes and reflects on your artifact for an audience of potential employers. The most successful abstracts will

- **explain** the artifact (audience, purpose, context, scope, date, client, etc.)
- **identify** specific examples of good writing, design, or communication within the artifact and how you achieved those
- **analyze** why those examples demonstrate good communication in your discipline (in other words, why is it important that you can do the thing you've identified well) and what those examples say about you as a communicator

Communication Philosophy

In addition to your individual abstracts, your portfolio will also include a document that reflects on the portfolio as a whole and helps a reader understand the portfolio in the larger context of your past development and your future goals.

In approximately 500 words, you will write a communication philosophy that synthesizes the pieces of your portfolio to explain your identity as a scientist/engineer/mathematician who is also a writer/speaker/designer. Portfolios should demonstrate all the features of good writing we've discussed this quarter, including clarity, concision, and downshifting to include specific examples. The most successful philosophy statements will include

-an introduction that explains the purpose of the reflection and previews the organization of the rest of the document

-a reflective section that uses specific examples from the portfolio to demonstrate what you've learned about yourself and your strengths as a communicator from the portfolio. In other words, now that all of this work is together in one place, what does it show about you? What themes have developed in your work? What claims can you make about your approach to communication tasks?

-a forward-looking section that addresses the ways you imagine yourself continuing to apply and/or build upon these skills. What projects would you like to do more of in the future? What areas would you like to continue to develop? How can what we've seen here translate into your future career path?

Assessment

You will be given informal feedback on your progress (particularly your abstracts) by your peers and me throughout the quarter. You are also welcome to see me in my office to discuss any part of this project. Your final project will be assessed according to the specifications set forth in the Portfolio Rubric. Your choices of what to include in your portfolio and the amount of time you spend on writing and design will determine your final grade.

Appendix C

Fundamentals of Heat & Mass Transfer Prediction Activity and Follow-Up Questions

In-Class Activity

Make a prediction…

Both cups contain the same volume of water at room temperature. To one you add regular ice cubes, and to the other one you add SONIC® ice (crushed ice). Each cup will contain the same mass of ice. Assume no heat is gained/lost to the surroundings and no bulk-motion.

On your own, make the following predictions:

1. Which scenario will have a higher rate of heat transfer? What will you observe (visually see or measure) that confirms this? Explain why you made this prediction.

2. Once all the ice has melted, which scenario will have transferred more heat? What will you observe (visually see or measure) that confirms this? Explain why you made this prediction.

Follow-Up Questions

1. Recall the prediction activity in-class. Re-state your initial prediction below, including written explanation why you made this prediction. (2-3 sentences)

2. What happened in the activity? Describe the result you observed in 2-3 sentences.

3. Compare your initial prediction to what actually happened in the activity. Were your predictions completely correct? Yes / No

4. Please explain your selection from Question 3. In your explanation, you should pay particular attention to why your original predictions were correct or not correct and how you revised your thinking to explain what happened. If you made a correct prediction and revised your justification as to why you made that prediction in any way to include new ideas, mechanisms, models, or parameters, be sure to explain this.

5. Do the factors that increase the rate of heat transfer always increase the amount of heat transfer? Yes / No

6. Please explain your selection in Question 5. (2-3 sentences)

7. Given what you learned from this activity, answer the following question related to mass transfer: Do the factors that increase the rate at which a sugar cube dissolves in water always increase the final amount of sugar dissolved in water at equilibrium.? Yes/ No

8. Please explain your selection in Question 7. (2-3 sentences)

9. What, if anything, did you learn from this activity?

Summers earned her PhD in Rhetoric and Composition at Pennsylvania State University in 2014 and joined the RHIT faculty in 2014. Her work focuses on writing in the disciplines, particularly at the advanced undergraduate and graduate levels. She teaches courses in writing and engineering communication, including technical and professional communication, intercultural communication, digital writing, and grant writing.

Chenette earned her PhD in chemical engineering at Clemson University in 2014, and joined the RHIT faculty in 2014. Her work focuses on membrane materials, bioseparations, and engineering education research. She teaches courses in heat and mass transfer, bioseparations, and chemical engineering laboratory. Chenette is a graduate of the National Effective Teaching Institute, sponsored by the American Society for Engineering Education.

Ingram earned her PhD in biology at Indiana University in 2004, and joined the RHIT faculty in 2004. Her work focuses on ecology and evolution, especially in the context of student research. She teaches courses in ecology, scientific research methods, evolutionary medicine, and critical thinking. Ingram currently serves as the Director of RHIT's Center for the Practice and Scholarship of Education.

McCormack earned his PhD in mechanical engineering at Carnegie Mellon University in 2003, and joined the RHIT faculty in 2013. His work focuses on design methodology and computational design. He teaches courses in design at both the introductory and senior level, lean manufacturing, and design for manufacturing. McCormack has published frequently in the realm of engineering education, including teaching ethics and evaluating professional skills.

Cunningham earned his PhD in mechanical engineering at Purdue University in 2006 and joined the RHIT faculty in 2006. His work focuses on engine and emissions monitoring and control. He also conducts education research on engaging students in their metacognitive awareness and skill development. He teaches courses in mechatronics, measurement systems, and analysis of engineering systems. Cunningham recently completed a sabbatical year as a scholar in the Department of Engineering Education at Virginia Tech.

Exit Tickets Open the Door to University Learning

Angela Danley, EdD
Assistant Professor of Elementary and Early Childhood Education
University of Central Missouri

Ann McCoy, PhD
Associate Professor and Program Coordinator of Mathematics Education
University of Central Missouri

Rahila Weed, PhD
Associate Professor and Program Coordinator of Art Education
University of Central Missouri

Four instructors from a mid-western university implemented exit tickets in their university courses. The exit tickets were based on Marzano's (2012) four types of exit tickets and were analyzed for patterns. Faculty completed a journal to reflect on what was learned examining the exit tickets. A survey was completed by both instructors and university students to determine the benefits of the use of exit tickets as a formative assessment at the university. Researchers share the processes used for implementing exit tickets and the results of the data collected along with implications for the use of exit tickets at the university.

Changing the culture of the university classroom from one of passivity to active engagement requires purposeful planning by the university professor (Kuh, 2005). One way to plan purposely is to use formative assessments. Formative assessments are used to monitor student learning and provide valuable information to both the student and the instructor. By implementing formative assessments, the instructor is able to refine teaching practices based on the needs of the students (National Council of Teachers of English, 2013). An example of a formative assessment is an exit ticket.

Exit tickets offer easy, quick, and informative assessments that help encourage student connections to content, self-reflection, and a purpose for future learning (Marzano, 2012; Owen & Sarles, 2012). In an age of accountability, exit tickets inform the professor of misconceptions, attitudes, and knowledge of content learned during the class period (Soto & Anand, 2009).

Exit tickets are prompts given to students at the end of a lesson or class period, and they are an easy way to assess student learning.

Exit tickets have been used in different contexts and content areas as a formative assessment for learning (Robb, 2003; Sosa 2013). Exit tickets are prompts given to students at the end of a lesson or class period, and they are an easy way to assess student learning. They can provide evidence of mastered content or misunderstandings as well as help students to self-reflect on their understanding of content. They can be used for student self-evaluation or as a means for the student to clarify learning. Exit tickets allow for teachers to understand what the student is thinking and informs them of misconceptions and needed areas to instruct (Brookhart, 2013).

The lack of research on the use of exit tickets at the university level and the need for university faculty to become more knowledgeable about formative assessment was the basis for the design of this study. This research project will add to the existing literature on formative assessments at the university level and *open the door* for university instructors to implement exit tickets as a means for gaining information about the learning of their students.

Four Kinds of Exit Ticket Prompts

Formative assessment provides the information needed to adjust teaching in a timely manner. Marzano (2012) identifies four kinds of prompts used in exit tickets, which can serve as a means to formatively assess. The first prompt provides formative assessment data that gives information about the students' understanding.

> How would you rate your current level of understanding of what we did today? Score yourself a 3 if you understand everything we did and can even think of ways to use this learning. Score yourself a 2 if you understand everything we did but can't think of how you would use this information right now. Score yourself a 1 if you understand some of what we did today but are confused about some important parts. Put a 0 if you understand very little of what we did today or are completely lost. (Marzano, 2012, para. 5)

The second prompt is used to stimulate student self-analysis: "How hard did you work today? Explain why you think you worked at the level you did" (Marzano, 2012, para. 8). This type of prompt asks students to reflect on effort used during class rather than on the content learned. The third prompt focuses on gaining information about instructional strategies used during the class period. For example, if the instructor used cooperative learning groups, the prompt may be: "How did the group work help you understand the content? What are some things you would like to see in group work in the future (Marzano, 2012, para. 11)?" This allows the instructor to see if and how the strategies used were effective or meaningful to students. The fourth and least common prompt allows students to openly communicate to the teacher: "What is something I should be doing to help you understand the content (Marzano, 2012, para. 13)?" This kind of prompt is powerful in that it allows students to partner in shared learning (see Appendix A).

Implementing Exit Ticket Prompts

For this research study, four instructors participated in implementing the exit tickets in one designated 16-week course they taught. Faculty members represented three departments at the university, all a part of the Teacher Education Faculty (TEC). Two of the faculty members were from the elementary education department, one faculty member was from the art department, and another faculty member was from the math department. During the spring 2014 semester, the four instructors selected four consecutive weeks during which each would administer the exit tickets to the students. During this 4-week timeframe, instructors agreed to administer the same prompts for consistency when collecting student responses. The Marzano prompts used are included in the appendix. Fifty-four university students participated in this study of exit tickets. Participating university students completed one of the four exit tickets at the end of each class period over a 4-week time frame. Exit tickets were read to determine if there were similar responses.

Data Collection

Exit ticket prompts. The four faculty members used each of the types of exit ticket prompts (Marzano, 2012) weekly for four weeks during the semester. The instructors followed a timeline set by the research team for distributing the exit ticket prompt types for each week. For example, the Instructional Strategies prompt used in week 1 read, "How did the group work help you understand the content? What are some things you would like to see in group work in the future (Marzano, 2012, para. 11)?" The exit ticket was given to students at the end of the class period. The students filled out the tickets anonymously and the instructor collected the completed tickets. Additionally, three more exit tickets were given to

students over a four week time period, which were collected by the instructor. The instructors recorded responses from the exit tickets in Google Docs. This allowed for the instructors to share the student responses in an organized system. Using Google Docs provided the instructors an opportunity to create a portable document profile (PDF) file of the responses and share electronically when reviewing the exit tickets.

Faculty journaling. After reviewing the exit tickets, the faculty members responded to an online survey reflecting on their perceptions of what students learned. Additionally, the instructors were asked to rate the overall benefit of the exit ticket information as well as the perceived rate of the overall effort of the students during the class period. They were also asked to report what they had learned from examining the exit tickets and the next steps, if any, that they would take in response to what they had learned.

End of experience survey: Faculty and student. At the end of the implementation, the instructors and university students participating in the study completed an end-of-experience survey created by the researchers based on Marzano's prompts (Marzano, 2012) (see Appendix A). The surveys consisted of 10 Likert-type items and included two items for each of the four types of exit ticket prompts and two questions that were considered general for both faculty and student. An open-ended question that allowed students and faculty/researchers to provide additional comments about the use of exit tickets was also included in the survey. The questions on the faculty member survey were designed to mirror those on the student survey. For example, the first question on the student survey asked students to rate their agreement with the statement, "The exit tickets were beneficial in holding me accountable for what I learned in class," while faculty responded to the statement, "The exit tickets were beneficial in holding students accountable for what they learned in class;" (see Appendices A, B, and C).

Results

Exit Tickets

The four faculty members collected and analyzed student responses to 31 different exit ticket prompts. Ten sets of exit tickets were collected for self-analysis, 8 sets of exit tickets for instructional strategies, 7 sets of exit tickets for open communication to the teacher, and 6 sets of formative assessment data. There were fifty-four total responses on the exit ticket surveys completed by university students and analyzed by the researchers.

Faculty Journaling

Benefit of the exit tickets. The first question on the online *Faculty Journal* asked the faculty to rate the benefit of the exit ticket (1=*strongly disagree*; 2= *disagree*; 3=*agree*; and 4= *strongly agree*). Faculty also explained their thinking about the perceived benefits of exit tickets. Overall, 88% of the time exit tickets were used, the faculty indicated that the exit tickets were beneficial, noting that they agreed or strongly agreed with the statement, "The exit tickets were beneficial to me as an instructor." The explanations that were given to explain the rating included affirmations from the students about their level of learning, misconceptions that surfaced in student comments that could be used to help the instructor plan "next steps" in instruction, and new information that could contribute to additional strategies and processes to use to improve instruction for the course. One instructor explained the benefits of using exit tickets by stating,

> *The data from the exit ticket confirmed that they [university students] saw the power of manipulatives as an instructional strategy designed to enhance learning. They [university students] made some suggestions on the exit tickets regarding the amount of time spent on various manipulatives that will help me improve what I do.*

This comment was typical in addressing the benefits of using exit tickets.

Overall effort of students. The second item on the *Faculty Journal* asked faculty to rate the overall effort of their students for that class period (*1=strongly disagree; 2= disagree; 3=agree; 4= strongly agree*) in response to this statement, "The overall effort of my students today was high." The instructors were also asked to explain their rating. The instructors rated the effort of their students as very high with 100% of the rankings at the 3 level (32%) and 4 level (68%). The following comments from faculty members were typical of the explanations provided for the rankings, *"Students appeared engaged throughout and indicated excitement throughout the project,"* and *"The content of the class involved them doing activities they can use in their own classrooms, so they were quite engaged."*

Learning opportunity. Faculty were asked to report what they learned from examining the exit tickets. The instructors reported learnings that ranged from instructional strategies that seemed to support student learning to the relevancy of what was taught and practiced during the class period. One instructor stated,

> *The exit tickets affirmed that I was including a variety of instructional strategies. It also let me know that they were using the language of 'teaching' when they could identify that the cooperative groups could be used in their future classrooms. It also affirmed they were processing their own learning.*

Another instructor reported, "*I learned that I need to include a variety of instructional strategies and materials in order to engage my students in active learning.*"

Next steps. The last item on the *Faculty Journal* asked, "What are your next steps, if any?" This question allowed the faculty to reflect on what they had learned and make decisions for future action in their university classroom. The following comment by one instructor shows the depth and action-oriented thinking the exit tickets encouraged,

> *How can I continue to engage all students? One person mentioned that he/she wishes I would spend more time telling them how to use particular activities in their future classrooms. My preference is for them to think about this themselves, but perhaps, I need to be more direct in telling them this is what I want them to do.*

...instructors reported that the open communication prompt and the instructional strategies prompt provided the most beneficial information.

A summary of the results for the online *Faculty Journal* reveals instructors indicate they benefited from the implementation of all four exit tickets as it gave them insights into effective instructional strategies that supported learning, identified additional needs of the university learner, served as a means for formative assessment, and supported reflection-for-action in future teaching. The instructors reported that the open communication prompt and the instructional strategies prompt provided the most beneficial information. It was suggested that the formative assessment prompt and the self-analysis prompts would offer more

evidence of learning or effort, if the instructors asked students to evidence their learning or effort with additional explanations.

End-of-Experience Survey for Faculty and Students

The End-of-Experience Surveys included 10 Likert-type items including two questions for each type of exit ticket prompt and two questions that were considered general for both faculty and student. Questions posed to the faculty/researcher mirrored those posed to the students. Because of this, the researchers were able to compare and contrast the question items to see if there were similar or dissimilar responses from students and faculty (see Appendices for graphs of responses to each question).

Overall, students and faculty/researchers found the exit tickets to be beneficial. One hundred percent of the faculty and 94% of the students responded with "Strongly Agree" or "Agree" to the statement "Exit tickets were beneficial to me as the instructor/student." Responses provided for the open-ended prompt indicate the positive response of faculty and students. For example, a student wrote, "*I really like liked the exit tickets. They helped me review what I learned that day in class, which helped me remember things. I recommend them for any class."* A faculty member stated, "*I gained valuable information from the students regarding what they wanted and expected from the class, and was able to adapt my teaching accordingly."*

Results on items from the End-of-Experience Survey that were designed to gather information about specific exit tickets provided additional evidence of the positive view of students and faculty regarding the use of exit tickets. Between 86% and 98% of students responded with "Strongly Agree" or "Agree" on each of the items. Faculty/researcher responses were a bit more varied with responses of "Strongly Agree" or "Agree" ranging from 75% to 100%.

The researchers compared and contrasted student and faculty responses on the *End-of-Experience Survey* to determine similarities and differences in responses. The very small number of faculty participants, n=4, led to a degree of caution in making these comparisons. In general, the faculty and student responses were quite similar. "Strongly Agree" or "Agree" was selected by at least 75% of the faculty and of the students for each item. This indicates a positive response to the use of exit tickets. Perhaps the greatest disparity in results was seen in question 7 in which participants were asked to rate the level to which the exit tickets were a true reflection of student learning. On this item, 25% of the faculty members disagreed with the statement, "Student responses on the exit tickets were a true reflection of their learning," and no faculty member strongly agreed with it. Conversely, of the students, 67% agree and 31% strongly agreed with the statement, "My responses on the exit tickets were a true reflection of my learning." See Figures 1 to 10 for graphical representations of the findings.

Figure 1 Responses to Item 1: "Accountability for Learning"

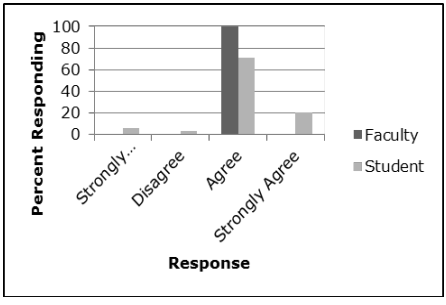


Figure 2 Responses to Item 2: "Reflect on Learning"

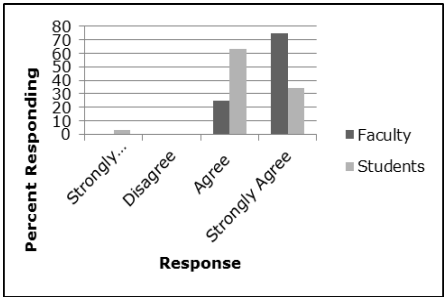


Figure 3 Responses to Item 3: "Instructor Adapted Based on Input"

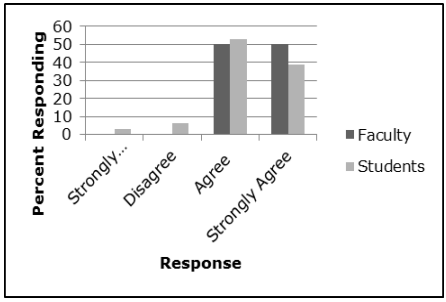


Figure 4 Responses to Item 4: "Apply Learning"

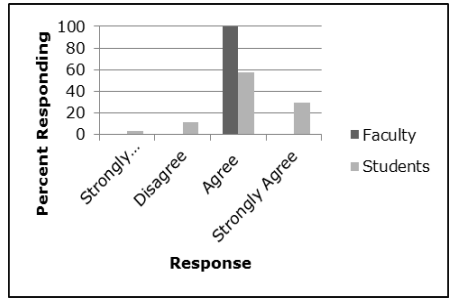


Figure 5 Responses to Item 5: "Communicate with Instructor"

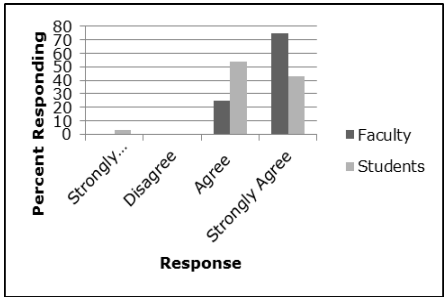


Figure 6 Responses to Item 6: "Reflection on Effort"

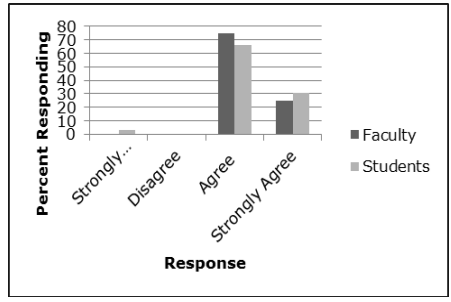


Figure 7 Responses to Item 7: "True Reflection of Learning"

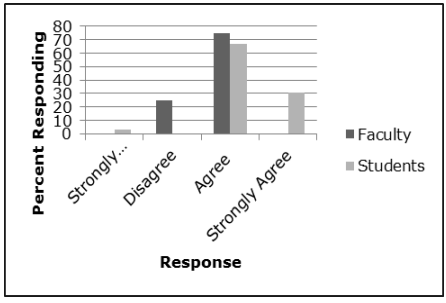


Figure 8 Responses to Item 8: "Helped Instructor Approve Approach"

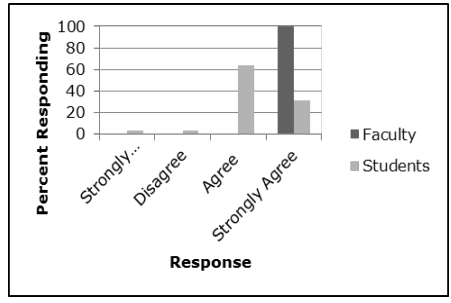


Figure 9 Responses to Item 9: "Allowed for Feedback"

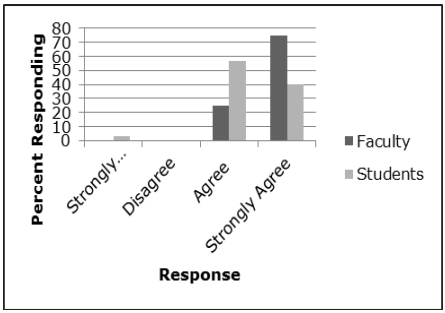
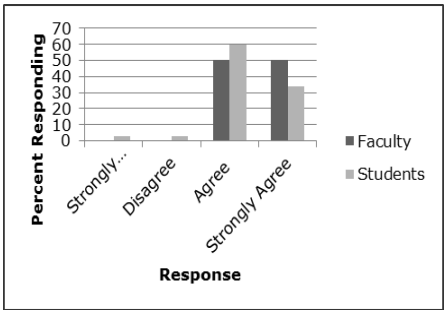


Figure 10 Responses to Item 10: "Exit Tickets were Beneficial"



Discussion

Limitations to the Study

Though the study provided the instructors with insights on the use of exit tickets, there were limitations to the study. There were only four instructors who participated in the study. Additionally, there was a low number of student participation in the study. There was also a low response rate on the exit tickets during the four-week time frame. With these three limitations, this provided the instructors next steps when conducting another research project on the use of exit tickets.

Conclusions and Next Steps

The data from the *Faculty Journal* and the *End of Experience Surveys* in this study support that exit tickets gather purposeful information in order to target student learning, provide immediate feedback to the instructor of the course, and offer university students an opportunity to reflect on their learning. Exit tickets are a beneficial way of gathering student feedback, so the instructor can plan lessons and assignments based on the input provided by students. The faculty in this study encourages their colleagues to consider using exit tickets for formative assessment.

The review of literature shows that little has been published regarding the use of exit tickets at the university level. Though the study had a limited number of students and instructors, the findings in this study add to the limited knowledge, and indicate some directions for future research.

The exit ticket questions need to be revised to include a reflection on the cognitive processes relevant to certain content areas as well as processes used for learning. For example, when addressing student self-analysis in a course centered on teaching language arts, a prompt centered on that discipline could be, “What will you do as a teacher to ensure phonics instruction is taking place in your classroom?” The researchers found insufficient feedback from students made it difficult to make decisions for future instruction or learning. Writing prompts specific to the discipline may elicit the targeted feedback.

Future Research Directions

The researchers in the study are all education faculty, and the students surveyed were education students with content areas of math, art, and elementary and early childhood majors. Future research will focus on a more diverse group of faculty and students to broaden the scope of the investigation. Future research will also provide for more participants in the study. The university has a three-day workshop each August to train new university-wide faculty members, and

volunteers will be solicited from that group to participate in a follow-up study on exit tickets at the university level. Finally, the researchers would like to explore the benefits of integrating technology into the exit ticket response as this would allow for immediately aggregating responses to use for instructional decision-making.

References

Brookhart, S. M. (2013). Develop a student-centered mind-set for formative assessment. *Voices from the Middle*, *21*(2), 21-25. Retrieved from http://www.ncte.org/journals/vm

Kuh, G. (2005). Putting student engagement results to use: Lessons from the field. *Assessment Update*, *17*(1), 12-13. Retrieved from http://www.assessmentupdate.com/

Marzano, R. (2012). Art and science of teaching: The many uses of exit tickets. *Educational Leadership*, *70*(2), 80-81. Retrieved from http://www.ascd.org/publications/educational-leadership.aspx

National Council of Teachers of English. (2013). *Formative assessment that truly informs instruction*. Retrieved from http://www.ncte.org/

Owen, D., & Sarles, P. (2012). Exit tickets: The reflective ticket to understanding. *Library Media Connection*, *31*(3), 20-23. Retrieved from https://www.researchgate.net/publication/263260699_EXIT_TICKETS_THE_REFLECTIVE_TICKET_TO_UNDERSTANDING

Robb, L. (2003). 3 strategies for getting the most from textbooks. *Instructor*, *112*(5), 36-39. Retrieved from http://com-sub.info/Scholastic-Teacher/Welcome

Sosa, T. (2013). Using digital exit tickets for formative assessment in a technology integration class. In R. McBride & M. Searson (Eds.), *Proceedings of society for information technology & teacher education international conference 2013* (pp. 2444-2452). Chesapeake, VA: Association for the Advancement of Computing in Education.

Soto, J., & Anand, S. (2009). Factors influencing academic performance of students
enrolled in a lower division cell biology core course. *Journal of the Scholarship of Teaching and Learning*, *9*(1), 64-80. Retrieved from http://josotl.indiana.edu/

Appendices

Appendix A

1. The first prompt provides information about the students' understanding: *How would you rate your level of understanding? Rate yourself a 3 if you understand everything your learned and can apply your learning in other settings. Rate yourself a 2 if you understand everything you learned, but cannot think of ways to apply your learning. Rate yourself a 1 if you did not understand and need more clarification*.
2. The second prompt is used to stimulate student self-analysis: *How hard did you work today? Explain why you think you worked at that level*.
3. The third prompt focuses on gaining information about instructional strategies used during the class period. For example, if the instructor used cooperative learning groups, the prompt may be: *How did the group work help you understand the content? What are some things you would like to see in group work in the future?*
4. The fourth and least common prompt allows students to openly communicate to the teacher: *What is something I should be doing to help you understand the content?*

Note. A description of Marzano's four kinds of prompts used in exit tickets.

Appendix B

Thank you for taking the time to provide feedback about the use of Exit Tickets in your course this semester. Your candid feedback will help us to make necessary adjustments and modifications to our work with university students. Please rate the following statements with 1=strongly disagree 2= disagree 3=agree 4= strongly agree

1. The exit tickets were beneficial in holding me accountable for what I learned in class (effort)
2. The exit tickets helped me reflect on my learning (rate your learning)
3. Based on the input I provided on the exit tickets, my instructor adapted lessons and instruction for the class (instructional strategies)
4. The exit tickets were a helpful tool to help me apply my learning (rate your learning)
5. The exit tickets were a way for me to communicate to my instructor (open communication)
6. The exit tickets were a useful tool for self -reflecting on my effort in class (effort)
7. My responses on the exit tickets were a true reflection of my learning (general)
8. Exit tickets helped my instructor improve on his/her approach in teaching

the content to the class (instructional strategies)

9. The exit ticket questions allowed me to provide feedback to the instructor about the materials and strategies used during class (open communication)
10. Exit tickets were beneficial to me as a learner (general)
11. What additional comments do you have about the use of exit tickets in this class?

Note. End of experience student survey

Appendix C

Thank you for taking the time to provide feedback about the use of Exit Tickets in your course this semester. Please rate the following statements with
1=strongly disagree 2= disagree 3=agree
4= strongly agree

1. The exit tickets were beneficial in holding students accountable for what they learned in class (effort)
2. The exit tickets helped students reflect on their learning (rate your learning)
3. Based on the input students provided on the exit tickets, I, as the instructor, adapted lessons and instruction for the class (instructional strategies)
4. The exit tickets were a helpful tool to help students apply their learning (rate your learning)
5. The exit tickets were a way for students to communicate to me, as the instructor (open communication)
6. The exit tickets were a useful tool for self -reflecting on student effort in class (effort)
7. Student responses on the exit tickets were a true reflection of their learning (general)
8. Exit tickets helped me, as the instructor, improve on my approach in teaching the content to the class (instructional strategies)
9. The exit ticket questions allowed the students to provide feedback to me, as the instructor, about the materials and strategies used during class (open communication)
10. Exit tickets were beneficial to me as the instructor. (general)
11. What additional comments do you have about the use of exit tickets in this class?

Note. End of experience faculty survey

Dr. Danley is an assistant professor of elementary education. She teaches undergraduate and graduate courses in elementary education, supervised candidates in the elementary clinical pathway, and supervises student teachers. Dr. Danley's research focuses on formative assessments, pedagogical practices, and dispositions of teacher candidates.

Dr. McCoy is an associate professor and program coordinator for mathematics education. She teaches undergraduate and graduate courses in mathematics education, supervises candidates in the elementary clinical pathway, and supervises student teachers. Dr. McCoy's research focuses on the development of elementary mathematics specialists and the impact these specialists have on the mathematics achievement of elementary students. She is currently president-elect of the Missouri Council of Teachers of Mathematics.

Dr. Weed teaches art education and foundational art history courses, and studio bookbinding, as well as supervising student teachers. Her work is in the areas of art and autism, and co-teaching as best practice during student teaching. In addition, she is an active member of the Missouri Art Education Association and the National Art Education Association. Previously, she taught elementary art.

The Role of Educators in Preparing the Confident Graduate Student

Geri Dickey, PhD
Assistant Professor, Master of Social Work Program
Park University

Joseph Kline, MSW-C
Social Work Graduate Student
University of Kansas

Gregory Lindsteadt, PhD
Associate Professor and Chair of the Criminal Justice, Legal Studies and Social Work Department
Missouri Western University

With large numbers of non-BSW graduates gravitating toward MSW programs of study, BSWs must demonstrate their ability to handle the rigor of graduate school in order to remain competitive in the classroom and field. This study utilized an online survey of MSW students (N=107) from four different universities to examine how well students believe their particular undergraduate degree program prepared them to meet the academic demands of the MSW programs. Bivariate and multivariate analyses were performed and results indicate BSW graduates feel more prepared than non-BSWs to complete their MSW program. The exception for BSWs was found in areas of research and statistics when compared specifically to those with psychology bachelor degrees.

The Bachelor of Social Work Degree

The Bachelor of Social Work (BSW) degree is designed to provide the knowledge, values and skills of generalist social work practice. BSW curriculum equips students with a broad understanding of the concept of social welfare and well-being. BSW students enter social work programs with a wide range of worldviews and life experiences. Undergraduate social work programs' curricula expose the BSW student to the rich traditions and history of the profession and how social work is shaped by the profession's vision, mission and purpose. Also, BSW curricula provide instruction on how generalists must understand and apply multiple theories to inform effective and efficient practice, and how social work core values serve to guide practice on multiple levels. Finally, the BSW student learns how social work research focuses on questions that directly address policies and interventions that serve to promote social well-being, prevention, and equal opportunity for all people. Consequently, BSW students are expected to develop a conceptual framework for the essential helping functions of generalist practice that span interventions within and between individuals, families, groups, organizations and communities (Kisthardt, 2015).

Therefore, to create a consistent curriculum amongst the over 490 accredited programs, the Council on Social Work Education has designed criteria for minimum non-elective content (CSWE, 2014). Since introduced in 1974, the criteria have continued to evolve, with the most recent Educational Policy & Accreditation Standards (EPAS) put in place in 2008.

Since the BSW program inception, the preparation for generalist social work education has focused primarily on promoting human and community well-being guided by a person and environment construct. The curriculum emphasizes that students gain a global perspective, respect, human diversity, and acquire knowledge based on scientific inquiry. Social work's purpose is actualized through its quest for social and economic justice, the prevention of conditions that limit human rights, the elimination of poverty, and the enhancement of the quality of life

for all persons (CSWE, 2011). Consequently, the broad knowledge base of a generalist social work education and the unique licensing opportunity for the graduates often leads to a variety of employment opportunities for the BSW graduate. However, Karger (2012) argues that in light of recent economic trends, concern exists around the livable means employment or career advancement potential that a BSW degree provides. He suggests the abundance of BSW graduates has driven down the value of the BSW degree in salary. Furthermore, evidence suggests that for career advancement and increased compensation the bachelor's level social worker will need to pursue an advanced degree (Jones et al., 2013; Whitaker & Wilson, 2010). Therefore, this paper emphasizes that when laying the groundwork for student success, BSW programing needs to keep current and monitor BSW curriculum to assure opportunities for advanced education for the BSW (Aguilar, Brown, Cowan, & Cingolani, 1997; Jones et al., 2013). The focus of this study is to investigate BSW students' feelings of preparedness for the academic rigor of MSW curriculum.

Literature Review

In the past decade the number of students seeking MSW degrees has grown exponentially (CSWE, 2014). Furthermore, the reach of social work education into vocational fields such as criminal justice, substance abuse counseling, and education underscores a need and increases the value of the MSW degree. However, the role the BSW degree contributes to the growth of the MSW programs is somewhat perplexing. In the most recent CSWE (2014) Education summary of the 2013 academic year, universities conferred over 5,400 more MSW degrees than BSW degrees. These data indicate the total number of BSW degrees awarded in 2011 fell about 8,000 students short of the MSW degrees awarded in 2013. Based on these data, it conservatively estimated a minimum of 35% of all MSW students are alumni of programs outside a BSW.

Reasons exist to explain this particular phenomenon. The MSW degree and subsequent advanced licensing opportunities give this degree a sense of practicality to those interested in the helping profession with a focus on the individual therapeutic employment (Aguilar et al., 1997; Osteen, 2011). Furthermore, individuals seeking a change of pace from their undergraduate education may find the MSW program complementary to their general education degree (Austin, 1997; Gelman & Lloyd, 2008).

The authors found limited research since 1990 that specifically evaluates BSW and non-BSW program success with the MSW degree (Johnson-Motoyanna, Petr, & Mitchell, 2014; Noble & Hepler, 1990). However, the limited literature found on the topic suggests BSW program graduates performed poorer than non-BSW students in MSW programs, as well as in placement exams (Fortune, Green, & Kolevzon, 1987; Johnson-Motoyanna et al., 2014; Noble & Hepler, 1990). Further, the literature indicates many BSW programs fail to provide academic rigor in their programs and experience inflated grading scales (Adam, Zosky, & Unrau, 2004; Bremner & Zastrow, 2008; Noble & Hepler, 1990; Sprecht, Britt, & Frost, 1984).

Although the literature underscores the importance of a research orientation, current evidence suggests it may be a point of weakness in BSW education. Historically, the practical use of research for the social work discipline lacks focus on empirically based modeling, but rather in the exploration of established methods to serve a specific client(ele) (Adam et al., 2004; Witkin, 1992). Evidence-based proponents support decision making at the generalist level remain in available intervention outcomes (Gitterman, 2014). The ability to evaluate and extract current information from the literature requires the generalist social worker to formulate a critical assessment of both the method and analysis a study utilizes (Davis et al., 2013). Peterson, Phillips, Bacon, and Machunda (2011) support providing the generalist with a research based education and suggest this may be the route to encouraging more research-informed practice in the field.

In 1995, Gibbs identified the application of research in practice to be the most common deficiency among programs in the accreditation or reaffirmation process. More recent research supports Gibbs' (1995) findings, identifying lower levels of research confidence in BSWs than non-BSW students (Elliot, Choi, & Friedline, 2013; Wells, Maschi, & Slater, 2012). In their field interviews, Hessenauer and Zastrow (2013) found a common theme among BSW graduates regarding research methods course work. Specifically, these BSW graduates were unable to identify the usefulness of methods courses or in some cases even had difficulty recalling research exercises and activities they found applicable to their work (Bolin, Lee, GlenMaye, & Yoon, 2012; Hessenauer & Zastrow, 2013; Morris, 1992). Relevancy to the field remains the pivotal component to making research and statistics courses meaningful to both student and faculty (Bolin et al., 2012; Peterson et al., 2011). Since self-efficacy or confidence is a result of success and mastery of a concept or activity, creating meaningful research and statistics courses could enhance the students' confidence (Bolin et al., 2012; Clem, Mennicke, & Beasley, 2014; Lane, Lane, & Kyprianou, 2004). Although self-reported preparedness is not a direct measure of success in coursework or competency in practice, research indicates that academic confidence does indeed predict academic achievement and persistence (Bolin et al., 2012; Dunlap, Henley, & Fraser, 1998; MacPhee, Farro, & Canetto, 2013).

CSWE required sections of EPAS 2.1.10 *Engage, Assess, Intervene, and Evaluate* outline research competencies; however, according to the literature, resistance at both undergraduate and graduate education have perpetuated what Elliot et al. (2013) refer to as the research reluctance of the social work discipline (Bolin et al., 2012; Davis et al., 2013).

Summary

An MSW degree is required if BSW professionals choose to advance their career and achieve advanced licensure. The literature suggests BSW students vary on level of preparedness for the rigors of an MSW education. Therefore, the purpose of this study is to investigate the perception of preparedness of BSW students for an MSW education.

This study compares those graduates who completed a BSW degree to those from Psychology, Sociology, Criminal Justice, and other Human Services disciplines. The BSW curriculum is unique in that graduates from accredited programs complete a standardized curriculum. Evidence of self-reported preparedness for the rigor of MSW studies will be gleaned through a survey. Based on the literature it is expected BSW graduates will report less confidence (feelings of being less than well prepared) than other disciplines in areas of research and statistics of graduate curriculum. Conversely, based on the completion of a standardized core curriculum, it is expected that the BSW graduates will self-report greater confidence in areas such as: case management, policy analysis, cultural competencies and ethics.

Method

This study is unique for several reasons. First, the goal of this project was to examine how BSW and non-BSW degree earning MSW students felt prepared by their individual bachelor's program for the academic rigor of a MSW degree (Rishell & Majewski, 2009). As stated, the literature is noticeably void when evaluating BSW success in MSW programs. Next, this study examined not only one institution's MSW students but four institutions.

This study sample's origin was shaped on information gleaned from a pre-accreditation assessment of alumni from one BSW program. This BSW program is a stand-alone program with no MSW program existing in the department and would be considered a *Bac/Diverse* institution by the Carnegie Classification. At the time of this study, the program had two full-time faculty, and about 132 declared or pre-

major/intended BSW students. A purposive sampling of six regional MSW programs listed most frequently as 'applied to' by this university's BSW seniors was utilized. This study's intent is to develop a better understanding of the unique features of MSW programs most frequented by this BSW program's students to improve advisement for advanced degree seeking students. In addition, these participating institutions were visited by faculty and BSW student researchers to interview and learn more from the MSW program faculty. Of these six programs, four agreed to participate in this process. Two of these universities are considered *Research Universities* (RU) by the Carnegie Classification; whereas, the other two universities are considered *Masters M* institutions. An electronic survey was developed (Scantron: Class Climate®) and sent to each participating MSW program. Surveys were electronically distributed to the MSW students by the participating MSW program. These surveys intentionally were released past the midpoint of the spring semester to ensure students receiving the survey had experience in their Master's level course work. MSW students at these four institutions were surveyed to determine how well they believed their specific bachelors program prepared them to succeed in their MSW education (Rishell & Majewski, 2009). The survey data were supplemented by face-to-face faculty interviews at each of the four participating institutions. Interviews were conducted using a collaborative interview team of four different BSW students and three different faculty members. This study did not focus on any single BSW program's alumni.

MSW students at these four institutions were surveyed to determine how well they believed their specific bachelors program prepared them to succeed in their MSW education.

Due to the participating MSW programs request to internally distribute the electronic instrument to their listserv, the method's return rate was hampered by the inability to control for distribution and to evaluate the number of surveys received and or declined. Based on the return a conservative estimate of response rate would be in the low range (16-22%). This rate should be considered when examining and evaluating results. Each participating institution received a summary report of their findings compared to the full sample of the four participating MSW programs.

The survey instrument requested participants to identify the institution and discipline they received their Bachelor's degree from prior to entering the MSW program. Of the 107 usable surveys, respondents identified 45 unique institutions that conferred their individual Bachelor's level degree. Of these 45 institutions, 29 were identified only once by these MSW students and 4 schools identified 5 or more MSW student respondents. Only 3 students from the research team's university participated.

Results

Table 1 provides a summary of self-reported (demographic, personal and educational) variables. The responses were compared based on their reported undergraduate degree earned: BSW (n=39; 36.4%) and non-BSW students (n=68; 63.6%). In sum, the sample was primarily white, female and had a mean age of 33.0. No statistically significant differences were found based on these three factors between the BSW and non-BSW groups (see Table 1). In addition, no statistically significant differences were found between these two groups self-reported undergraduate GPA (UGGPA) or graduate GPA (GGPA). As expected, the BSW group was significantly more likely to report longer undergraduate internships and more likely to be in advanced standing programs (see Table 2). No significant differences existed between these two groups in other areas of undergraduate applied learning experiences such as research presentations, publication, or study abroad.

Table 1

Description of Self-Reported Demographics: BSW & Non-BSW MSW Students (N=107)

Variable	Total	BSW	Non-BSW
N (%total)	107	39(36.4%)	68(63.6%)
Gender (%female)	95.4%	100. %	92.6%
Race (%white)	82.2%	79.5%	83.8%
Age (mean/sd)	33.0/10.01	30.6/8.33	34.3/10.68
UGGPA (%<3.0)	13.1%	10.3%	14.7%
MSW GPA (%<3.0)	2.8%	0%	3.0%
Employed (%>20 hours)	45.8%	46.2%	45.6%
Employed Social Service (%yes)	61.7%	64.1%	60.3%
Research Project (%yes)	23.4%	25.6%	22.1%
Internship (%>250 hours)**	45.8%	89.7%	20.6%
(%<100 hours)**	49.6%	7.7%	73.5%
Presentation (%yes)	29.0%	30.8%	27.9%
Publication (%yes)	9.3%	12.8%	7.4%
Study Abroad (%yes)	12.1%	7.7%	14.7%

Note. *p<.05, **p<.01. To determine significance chi-square was used to examine categorical data. A *t*-test was used to examine age in years.

Table 2

Description of Self-Reported Demographics by Bachelors Discipline (Four Categories; N=107)

Variable	Total	BSW	Psychology	Human Services	Non-Human Services
N (%total)	107	39(36.4%)	25(23.4%)	23(21.5%)	20(18.7%)
Gender (%female)	95.4%	100. %	92.0%	91.3%	95.0%
Race (%white)	82.2%	79.5%	88.0%	82.6%	80.0%
Age (mean/sd)**	33.0/10.01	30.6/8.33	30.9/8.57	32.8/9.82	40.4/11.8
UGGPA (%<3.0)	13.1%	10.3%	8.4%	13.2%	25.0%
MSW GPA (%<3.0)	2.8%	0%	0%	8.6%	0%
Employed (%>20 hours)	45.8%	46.2%	52.0%	34.7%	50.0%
Employed Social Service (%yes)	61.7%	64.1%	60.0%	56.5%	65.0%
R Project (%yes)**	23.4%	25.6%	44.0%	4.3%	15.0%

Variable	Total	BSW	Psychology	Human Services	Non-Human Service
Intern (%>250 hours)**	45.8%	89.7%	12.0%	30.4%	20.0%
(%<100 hours)**	49.6%	7.7%	84.0%	65.2%	70.0%
Presentation (%yes)	29.0%	30.8%	44.0%	13.0%	25.0%
Publication (%yes)	9.3%	12.8%	12.0%	4.3%	5.0%
Study Abroad (%yes)	12.1%	7.7%	12.0%	26.1%	5.0%

Note: *p<.05, **p<.01, To determine significance chi-square was used to examine categorical data. A t-test was used to examine age in years.

Due to the number of unique degree programs indicated by MSW students, a second independent variable was created utilizing four specific categories. In part, the creation of broader categories resulted from the interviews with MSW faculty who addressed their personal experience with non-BSW degreed students and specifically with students with a bachelor of psychology degree. Groupings were created using the most frequently reported non-BSW program of *Psychology* (23.4%), other *Human Services Field*[1] (21.5%) and *Non-Human Services*[2] (18.7%) (see Gelman & Loyd, 2008). The *Non-Human Services* category indicated students' ages as significantly older than each of the other three groups (M>7.54 years), but there were no significant differences in gender or race between these four groups.

Feelings of Preparedness

Participating MSW students addressed feelings of 'preparedness' through a series of 11 scaled questions (*very poorly prepared* to *very well prepared*). Students were asked to rate how well their particular bachelors program prepared them for areas of application within the MSW program. These areas included: *Research, Theory, Ethics, Statistics, Clinical Diagnosis, Policy Analysis, Case Management, Administrative Theory, Cultural Competencies, Leadership* as well as *Overall Success* in the program (see Table 3). As a second outcome measure, we created a dichotomous variable from the Likert-type scale: 1 (*uncertain to very poorly prepared*) and 0 (*well prepared or higher*). This measure is designed to secure an indicator of whether the MSW student defined being 'prepared' as opposed to 'uncertain'.

Table 3 provides a bivariate summary of the 11 categories utilizing χ^2 test of significance. Those students indicating that they completed a BSW program prior to entering the MSW graduate program self-reported a statistically significant higher level of 'preparedness' in areas of: *Ethics* ($p \leq .01$), *Policy Analysis* ($p \leq .01$), *Case Management* ($p \leq .01$), and *Cultural Competencies* ($p \leq .05$). BSW students reported a lower percentage of preparedness in areas of *Research* and *Statistics*, but not significantly lower. In addition, somewhat surprising was the finding that the category *Overall Success* was slightly lower for BSWs than non-BSWs.

[1] Human Services Fields include: Criminal Justice, Sociology, Human Services, Family Studies, etc.
[2] Non-Human Services Fields include: Business, General BS/BA, Accounting, Communication Arts, etc.

Table 3

Self-reported Preparedness by Degree Program: BSW (n=39) and Non-BSW (n=68) (χ^2)

Prepared for MSW	Degree: BSW	Degree: Non-BSW	χ^2	φ
Research	66.7%	72.1%	3.771	.188
Theory	76.9%	69.1%	2.228	.144
Ethics	100%	73.5%	13.272**	.352
Statistics	43.6%	51.5%	8.112	.277
Clinical Diagnosis	38.5%	33.8%	.118	.118
Policy Analysis	79.5%	35.3%	24.727**	.481
Case Management	87.2%	25.0%	42.738**	.635
Administrative Theory	43.6%	25.0%	9.184	.293
Cultural Competencies	92.3%	75.0%	9.807*	.304
Leadership	82.1%	75.0%	3.324	.176
Overall Success	76.9%	77.9%	5.906	.235

*Note: *p≤ .05; **p≤ .01, Percentage indicating 'prepared or higher' only reported. Phi coefficient values .1 small effect size, .3 medium effect size, .5 large effect size (Cohen, 1988).*

An analysis of the relationship between students identifying they received a BSW degree with those identifying specifically with a psychology degree is provided in Table 4. This analysis provides evidence that MSW students with a psychology bachelor's degree do indeed report they are more confident to face the rigors of graduate level course work, typically found in general in social sciences (*Research* and *Statistics*), but do not identify as feeling well prepared in areas that receive much attention in BSW programs (*Ethics, Case Management, Cultural Competencies & Administration*). No statistically significant differences were found between these two Bachelors program alumni for the categories of *Theory* or *Leadership.* Both groups identified themselves as being well prepared for the MSW (77% BSW, 88% Psychology).

Table 4

Self-reported Preparedness by Degree Program: BSW (n=39) and Psychology (n=25) (χ^2)

Prepared for MSW	Degree: BSW	Degree: Psychology	χ^2	φ
Research	66.7%	92.0%	8.378*	.362*
Theory	76.9%	88.0%	1.980	.176
Ethics	100%	60.0%	20.204**	.562**
Statistics	43.6%	76.0%	12.241	.437*
Clinical Diagnosis	38.5%	60.0%	9.649*	.388*
Policy Analysis	79.5%	20.0%	32.826**	.716**
Case Management	87.2%	24.0%	27.948**	.661**
Administrative Theory	43.6%	16.0%	13.864**	.465**
Cultural Competencies	92.3%	72.0%	12.308**	.442**
Leadership	82.1%	72.0%	4.257	.258
Overall Success	76.9%	88.0%	5.902	.304

*Note: *p≤ .05; **p≤ .01, Percentage indicating 'prepared or higher' only reported.*

Summated Scale

An overall measure was built by summating the scaled questions representing self-reported feelings of being 'well prepared' by their undergraduate degree program to successfully complete the MSW program. This measure provides a measure of internal consistency of our construct representing how prepared MSW students believe their bachelors program prepared them to be successful in the MSW program (Gliem & Gliem, 2003; Warner, 2008). A Cronbach's alpha (α) reliability measure was used to examine the internal consistency. This scale was found to have a standardized score of .85 which is considered to be in the strong range for a summated scale. A test for improvement *if items were deleted* failed to show scale strength would be gained if any of these 11 measures were deleted.

Utilizing the dichotomous independent variable BSW or non-BSW, results indicated a statistically significant difference between the summated measure for BSWs and non-BSWs, t (102) = 4.25, $p < .001$; equal variances assumed. Results indicate BSW alumni identified themselves as feeling more prepared for completion of the MSW program (M = 22.45, SD = 5.92) than those from other bachelor's programs (M = 28.72, SD = 7.94), when factoring in all areas addressed in the Likert-type scale. When utilizing the four categories of Bachelor's degrees, results showed a significant difference between groups, F (3,100) = 6.36, $p < .001$). Post-hoc test (LSD) indicates a significant difference between *BSW* and all other categories, but no statistically significant differences between the other categories *Psychology, Human Services*, or *Non-Human Services* for the summated scale ($p >$ .05) representing feelings of preparedness.

Again, those students identifying they did complete a psychology degree were examined using the summated total representing the overall feelings of perceived preparedness, with those identifying they completed a BSW prior to entering the MSW program. Summated scale scores representing the overall perceived feelings of preparedness, abbreviated Likert values equal (1-*less than agree*) and (0- *agree or higher*), resulting in higher than average scores for those with a Psychology degree indicating lower levels of perceived preparedness. There is a statistically significant difference between these two group of MSW students, t (61) =3.59, $p \leq .01$). Findings indicate those identifying themselves as receiving a BSW reported feeling more prepared (M = 22.45, SD = 5.92) when combining all categories, than did those from the Psychology major (M = 28.00, SD = 6.14).

Multivariate Models

To explore possible sources of MSW students' preparedness (individual or institutional), multivariate regression (OLS) was used. The summated scale again using values of 1 (*agree*) to 5 (*disagree*) representing an overall belief in preparedness for a MSW education was used as the dependent variable while controlling for individual, vocational, and educational/institutional factors (see Table 5). The first model provides the primary independent variable BSW or non-BSW while the second model introduces demographic factors: *gender*, *race* (white/not white) and *age*. The third model inserts institutional factors of grades into the equation. Employment in the field of social services was used in the fourth model. Finally, experiences in applied or experiential learning were inserted in model five.

Table 5

Multivariate OLS Models of Regression: Summated Preparedness as Dependent Variable (N=107)

	Model 1	Model 2	Model 3	Model 4	Model 5
R^2	.142	.133	.164	.186	.244
SEE	7.271	7.308	7.177	7.081	6.825
F	18.078**	4.963**	4.374**	3.951**	3.558**
df	1	4	6	8	13
Bachelors Program					
BSW/Non Demographic	-.388**	-.384**	-.361**	-.370**	-.232*
Gender		.076	.123	.105	.106
Race		-.104	-.098	-.093	-.090
Age (years)		-.005	.014	-.015	-.025
Academic/Vocational					
UGPA			-.204*	-.164	-.127
GGPA			.086	.086	.073
Employment					
Employed				-.191	-.164
Employed in Social Service				.187	.175
Experiential Learning					-.220*
Conference Presentation					
Internship (length)					-.188
Research Project					-.045
Study Abroad					.035
Publication					-.052

Note: **p<.01, *p<.05
Standardized coefficient reported

Results of the OLS models indicate students earning a BSW were significantly more likely to identify they believe they are well prepared for the MSW program. When controlling for demographic (model 2) indicators, demographic and institutional factors (model 3), as well as employment (model 4), BSW remained statistically significant. No other variables were found to be significant in models 2, 3, or 4, with the exception of the primary independent variable. When adding self-reported experiential learning experiences to these models the dichotomous variable representing '*presented at an academic conference*' was found to be a significant predictor of overall preparedness. This mitigated the impact of the bachelor's degree earned, moving the BSW/non-BSW degree, but it did remain significant at p<.05. On further examination of these data, psychology students were significantly more likely to present at conferences than all other degree categories, including BSW, with 44% of all psychology students reporting presenting at an academic conference as a part of their undergraduate experience (see Table 2).

Discussion

CSWE (2014) reports a significantly higher number of MSW degrees earned compared to BSW. Jones et al. (2013) argue for additional attention by BSW educators on preparing students to successfully navigate the next level of higher education. The results gleaned from this study support these findings. This study indicates approximately 35% of Masters of Social Work students' sampled self-identified completing a BSW as their undergraduate degree. This would imply BSW students enter a highly competitive arena when completing applications for

acceptance and funding to MSW programs. Specifically, these findings support the concerns found in the literature regarding the preparedness of the BSW alumnus to compete at the graduate level.

Although this study was specific to BSW education, the authors believe the findings suggest deep rooted issues regarding exposure to applied research learning at the undergraduate level of education. For this study, student feelings of preparedness to complete areas of the MSW (graduate course work) were the primary dependent variables. In this study, BSW students rated an overall perception of preparedness as higher than non-BSW students, but a lower percentage of preparedness in areas of research and statistics. Consequently, the literature found self-efficacy linked to previous tasks accomplished, such as individual course work and assignments, as a strong indicator of performance in academia (Lane et al., 2004). According to literature, those students more confident in their preparedness are more likely to pursue course work and opportunities outside their individual comfort zone (Elliot et al., 2013; MacPhee et al., 2013). In this study those students who reported having presented at a conference during the completion of their bachelors' degree were more likely to express confidence on the overall scale of feelings of being prepared for the MSW program. When examining BSW alumni only, those who reported presenting at conferences were more likely to indicate they felt prepared to complete research and statistics in graduate course work than did those who did not present at conferences. Only psychology students, rather than BSW students, were more likely to report having presented at a conference.

In this study those students who reported having presented at a conference during the completion of their bachelors' degree were more likely to express confidence on the overall scale of feelings of being prepared for the MSW program.

As expected, BSW students in this study did report they felt significantly more prepared in areas of policy, case management, ethics and cultural competencies in MSW program work. Furthermore, a summated measure of 'feelings of being prepared' showed BSW students in this sample felt more prepared to successfully complete the MSW than those who did not complete a BSW as a part of their bachelor degree. This indicates BSW students do in fact believe they are well prepared for MSW coursework in the discipline's language, application and interpretation. Also, as expected, this study found those who identified as completing a BSW were less likely to report they felt prepared to complete graduate course work in the areas of research and statistics. However, these differences were not statistically significant when compared to all non-BSWs in this study. Only when comparing BSW graduates to the psychology graduate category were these categories found to be statistically significant (Bolin et al., 2012). Results indicated no statistically significant differences between BSW graduates and those from other human services and non-human services bachelor programs in research and statistics. Sample size limited examination of BSW graduates to other individual social science degrees, such as Sociology, Criminal Justice, or Political Science, as well as Business (Bolin et al., 2012).

Limitations

Several issues should be considered when generalizing the results of this study. First, the MSW programs were not randomly selected, but selected due to the reported likelihood students from the particular BSW (home of study) would apply to as their first option after graduation. Of these, six MSW programs were originally requested to participate, but only four MSW programs assisted in this study. These findings should not be generalized to all MSW programs without replication utilizing a more 'diverse' group of MSW programs. Next, the sample size was relatively small (N=107). The sample limited groupings by disciplines, but did

provide evidence to what disciplines non-BSW students in MSW programs typically come from. As previously discussed, each MSW program distributed the online survey to their student listings, so it is difficult to assume an accurate response rate. This rate should be considered when examining and evaluating results. Finally, although prior research indicates a direct relationship between self-efficacy, confidence and achievement, we cannot provide a direct causal relationship between self-reported feelings of being prepared and actual success achieving the goals of the coursework or MSW degree program.

Conclusion

In order for BSW professionals to advance their careers and achieve advanced licensure, secondary degrees, such as the MSW, are required. Literature supports that many students from a variety of disciplines seek the MSW degree. Isolating the role a BSW degree program plays when measuring success in MSW education has been largely ignored in the literature. The evaluation and future of individuals provided advanced standing status seems to be the ongoing concern by researchers in social work education (Aguilar et al., 1997; Bremner & Zastrow, 2008; Fortune, 2003; Osteen, 2011). The lack of research evaluating the BSW students' overall success in MSW programs is somewhat disappointing considering the efforts to develop a consistent curriculum for accredited BSW programs. BSW educators should be concerned with how well prepared for success their students are after graduation, whether it is in the field or in the next level of education. Examining strengths and deficiencies of their former students in Masters, or Masters/PhD programs should precede a reevaluation of curriculum or service needs for the current BSW student. Accrediting bodies can incorporate indicators of program strengths in the design and delivery of BSW course requirements that support success in both the field and MSW or MSW/PhD programs.

Establishing new models of instruction specific to the discipline, but carrying the weight of social science methods and designs may indeed be the new call to arms for BSW educators if BSW alumni are to remain competitive at the next level of higher education. These models should include the components of research and evaluation (statistics) as well as appropriate dissemination for an intended audience.

The discipline's popularity and resulting expectations for BSW faculty can limit the amount of time for faculty and student collaborations that involve co-presenting or co-authoring in a formal environment. Therefore, building in-house academic presentations into existing curricula may produce a reasonable substitution. Similar to the conference presentation, these would include numerous reviews by faculty and peers and rewrites during the process. It would include formal presentation of the work in a public venue that may include other disciplines, peers, and family members of the student. Whether an informal local setting or in a formal setting of a conference the guided approach influences bachelor's students' feelings of being well prepared. Faculty and student collaborations are often supported by higher education institutions for faculty tenure and promotion, as well as course load. To further assist in experiential learning opportunities, many disciplines provide student-only or student-faculty opportunities for presentation.

In conclusion, BSW faculty should play a more active role when examining the success of BSW students in MSW or MSW/PhD programs. The role of the BSW educator remains crucial in the success of students whether in the field or academia. Research collaborations between MSW and BSW programs, such as in this present study, allow BSW programs to better grasp the challenges both student and faculty currently face at the 'next level' of social work education. Further, collaboration with MSW programs allow BSW faculty to better advise students of specific MSW program requirements, focus or faculty expertise. Lastly, these collaborations develop mutually beneficial relationships between degree programs, linking students to partners in Masters of Social Work programs, address student concerns.

References

Adam, N., Zosky, D. L., & Unrau, Y. A. (2004). Improving the research climate in social work curricula: Clarifying learning expectations across BSW and MSW research courses. *Journal of Teaching in Social Work*, *24*(3/4), 1-18. doi: 10.1300/j067v24n03_01

Aguilar, G. D., Brown, K., Cowan, A., & Cingolani, J. (1997). Advanced standing revisited: A national survey of advanced standing policies and programs. *Journal of Social Work Education*, *33*, 59-73. doi:10.1080/ 10437797.1997.10778853

Austin, D. (1997). The institutional development of social work education: The first 100 years and beyond. *Journal of Social Work Education*, *33*, 599-614. doi: 10.1080/10437797.1997.10778897

Bolin, B. L., Lee, K. H., GlenMaye, L. F., & Yoon, D. P. (2012). Impact of research orientation on attitudes toward research of social work students. *Journal of Social Work Education*, *48*, 223-243. doi: 10.5175/JSWE.2012.200900120

Bremner, J., & Zastrow, C. (2008). Advanced standing revisited: Current status, structure, and issues. *Journal of Teaching in Social Work*, *28*(1/2), 101-116. doi: 10.1080/08841230802179068

Clem, J., Mennicke, A., & Beasley, C. (2014). Development and validation of the experiential learning survey. *Journal of Social Work Education*, *50*, 490-506. doi: 10.1080/104377797.2014.917900

Cohen, J. (1988). *Statistical power analysis for the behavioral sciences* (2nd ed.). Hillsdale, New Jersey: L.

Council on Social Work Education—CSWE. (2011). *2010 Statistics on social work education in the United States.* Retrieved from http://www.cswe.org/File.aspx?id=52269

Council on Social Work Education—CSWE. (2014). *2013 Statistics on social work education in the United States.* Retrieved from http://www.cswe.org/File.aspx?id=74478

Davis, S., Gervin, D., White, G., Williams, A., Taylor, A., & McGriff, E. (2013). Bridging the gap between research, evaluation and evidence-based practice. *Journal of Social Work Education*, *49*, 16-29. doi: 10.1080/104377797.2013.755099

Dunlap, K. M., Henley, H. C., & Fraser, M. W. (1998). The relationship between admissions criteria and academic performance in an MSW program. *Journal of Social Work Education*, *34*, 455-462.

Elliot, W., Choi, E. & Friedline, T. (2013). Online statistics labs in MSW research methods courses: Reducing reluctance toward statistics. *Journal of Social Work Education*, *49*, *81*-95. doi: 10.1080/10437797.2013.755095

Fortune, A., Green, R., & Kolevzon, M. (1987). In search of the continuum: Graduate school performance of BSW and non-BSW degree holders. *Journal of Sociology and Welfare*, *14*, 169-189.

Fortune, A. (2003). Comparison of faculty ratings of applicants and background characteristics as predictors of performance in an MSW program. *Journal of Teaching in Social Work*, *23*(1/2), 35-54.

Gelman, C., & Lloyd, C. (2008). Pre-placement anxiety among foundation year MSW students: A follow up study. *Journal of Social Work Education*, *44*(1), 173-183.

Gibbs, P. (1995). Accreditation of BSW programs. *Journal of Social Work Education*, *31*(1), 4-16. Retrieved from http://www.cswe.org/Publications/JSWE.aspx

Gitterman, A. (2014). Social work: A profession in search of its identity. *Journal of Social Work Education*, *50*, 599-607. doi: 10.1080/10437797.2014.947898

Gliem, J., & Gliem, R. (2003). Calculating, interpreting and reporting Cronbach's alpha reliability coefficient for Likert-type scales. *Presented 203 Midwest Research to Practice Conference in Adult, Continuing and Community Education*. Retrieved from https://scholarworks.iupui.edu/bitstream/handle/1805/344/Gliem%20&%20Gliem.pdf?sequence=1

Hessenauer, S., & Zastrow, C. (2013). Becoming a social worker: BSW social workers' educational experiences. *The Journal of Baccalaureate Social Work*, *18*, 19-35. Retrieved from http://jbsw.org/

Johnson-Motoyanna, M., Petr, C., & Mitchell, F. (2014). Factors associated with success in doctoral social work education. *Journal of Social Work Education*, *50*, 548-558. doi: 10.1080/10437797.2014.947898

Jones, L., Kindle, P., Auch, N., Graupmann, J., Ray, A., Utech, S., & Visser, J. (2013). Advice for BSW students from alumni of rural programs. *The Journal of Baccalaureate Social Work*, *18*, 157-172. Retrieved from http://jbsw.org/

Karger, H. (2012). Lessons from American social work education: Caution ahead. *Australian Social Work*, *65*, 311-325. doi: 10.1080/0312407x.2012.678498

Kisthardt, W. E. (2015*). Accreditation review brief council on social work education vol. I*. Unpublished manuscript, School of Social Work, Park University, Parkville, MO.

Lane, J., Lane, A., & Kyprianou, A. (2004). Self-efficacy, self-esteem and their impact on academic performance. *Social Behavior and Personality*, *32*, 247-256. doi: 10.2224/sbp.2004.32.3.247

MacPhee, D., Farro, S., & Canetto, S. (2013). Academic self-efficacy and performance of underrepresented STEM majors: Gender, ethnic and social class patterns*. Analyses of Social Issues and Public Policy*, *13*(1), 347- 369. doi: 10.1111/asap.12033

Morris, T. (1992). Teaching social workers research methods: Orthodox doctrine, heresy, or an atheistic compromise. *Journal of Teaching in Social Work*, *6*(1), 41-61. doi: 10.1300/j067v06n01_04

Noble, J., & Hepler, J. (1990). A closer look at the advanced standing program in social work education. *Evaluation Review*, *14*, 664-676. doi: 10.1177/0193841X9001400607

Osteen, P. (2011). Motivations, values and conflict resolution: Students' integration of personal and professional identities. *Journal of Social Work Education*, *47*(3), 423-444. doi:10.5175/JSWE.2011.200900131

Peterson, S., Phillips, A., Bacon, S., & Machunda, Z. (2011). Teaching evidence based practice at the BSW level: An effective capstone project. *Journal of Social Work Education*, *47*(3), 509-524. doi: 10.5175/ JSWE.2011.200900129

Rishell, C., & Majewski, V. (2009). Student gains in self-efficacy in an advanced MSW curriculum: A customized model for outcomes assessment. *Journal of Social Work Education*, *45*(3), 365-383. doi: 10.5175/ JSWE.2009.200800101

Sprecht, H., Britt, D., & Frost, C. (1984). Undergraduate education and professional achievement of MSWs. *Social Work*, *29*(3), 219-224. doi: 10.1093/sw/29.3.219

Warner, R. M. (2008). *Applied statistics: From bivariate through multivariate techniques*. Thousand Oaks, CA: Sage Publishing, Inc.

Wells, M., Maschi, T., & Slater, G. (2012). Integration of research and practice: Innovations and challenges in social work programs. *Social Work Education: The International Journal*, *31*, 331-346. doi: 10.1080/02615479.2011.551827

Whitaker, T., & Wilson, M. (2010). Summary of key compensation findings: Prepared for the 2010 social work congress. *Report of the National Association of Social Workers, Center for Workforce Studies*. Retrieved from http://www.naswdc.org/pressroom/2010/salarystudy2010.pdf

Witkin, S. (1992). Should empirically-based practice be taught in BSW and MSW programs? No! *Journal of Social Work Education*, *28*, 265-268. doi: 10.1080/10437797.1992.10779169

Geri Dickey earned her bachelor's degree in social work from Southern Illinois University- Carbondale, her master's degree in social work from the University of Illinois Champaign-Urbana, and her PhD in social work, with emphasis on gerontology, from the University of Missouri- Columbia.
Dickey spent her twenty year MSW social work career providing clinical social work services primarily within the mental health social work community based clinics. Dickey served as Assistant Professor and Director of Bachelor of Social Work Program at Missouri Western State University for five years. Currently she is Assistant Professor at Park University teaching in the MSW Program.

Joseph Kline earned his BSW from Missouri Western State University (MWSU) in St. Joseph Missouri May 2015. Kline currently is an MSW student with a clinical concentration at the University of Kansas, expecting to graduate in spring 2016. He currently intends to pursue a Doctoral degree in Social Work after obtaining his Licensed Clinical Social Work (LCSW) credentials.

Dr. Greg Lindsteadt is an Associate Professor and Chair of the Criminal Justice, Legal Studies and Social Work Department at Missouri Western State University. Dr. Lindsteadt's research interests include juvenile justice, distance education and experiential learning in higher education.

Teaching Small Group Communication: The Do Good Project

Elizabeth M. Minei, PhD
Assistant Professor, Department of Communication
Baruch College

This paper focuses on the parameters of a semester-long project called the "Do Good" project, geared towards developing small group communication skills in undergraduate students. This project highlights participation in a social engagement project that allows students to bridge concepts learned in small group communication lectures (e.g., team dynamics, project management, conflict resolution, decision making, leadership) with community outreach. Included are an overview of the project, and examples for how each component both challenges students' ability to communicate in groups and provides motivation that foster students' ability to link in-class knowledge with practical, real world application.

Teaching Small Group Communication: The Do Good Project

While teachers have been making strides in connecting assignments to real world practice, (e.g., case studies; guided simulations; training modules), there is always room to motivate students to push student engagement a bit further. Students find interest in class assignments to be difficult, with only the threat of making the grade as a motivation to extend the effort. Wohlfarth et al. (2008) found that students worked harder and smarter when less emphasis was placed on measurable grades or on assignments like quizzes where students' main focus is memorization. Students who perceive an assignment as busywork do not find such assignments useful or fulfilling, particularly when the assignment takes a great deal of effort (Vandsburger & Duncan-Daston, 2011). Monge and Contractor (2003) demonstrate that prior to an individual making a group commitment, that individual considers the overall investment costs of participation in relation to the return received from their effort. Kemp (2010) found that disconnect from material can occur when students do not connect material toward practical applications, especially the workplace. Students who feel disconnected with assignments may wonder "What's in it for me?"

Challenge: Service Learning as a Motivator

Teachers can be aware of students' attention to social exchange by explicitly providing motivation for students. Williams and Williams (2011) outlined factors that motivate students' learning in the classroom ranging from student-driven, teacher-driven, content-focused, method/process focused, and environment focused. Overall, they conclude that "individuals who are motivated intrinsically tend to develop high regard for learning course information without the use of external rewards or reinforcement," (p. 3). Teachers who assign a service learning project can open dialogue with students about how focusing attention on the betterment of local neighborhood organizations can yield residents with stronger ties to each other and to their communities, resulting in an increase in the quality of life within that community (Lange, 2003). Highlighting efforts for the betterment and benefit of others as well as introducing elements that speak to the timely need of the effort may yield students who are more motivated and more engaged in creating worthwhile projects (Kiener, 2009). Creating opportunities for students to get involved in such a project can foster a bridge between academic classroom material and hands-on practice (Fritson, 2008). This paper outlines a complex group communication project titled "Do Good" that focuses on social engagement on a local level. Included are an overview of the project and examples for how each component both challenges students' ability to communicate in groups and provides

motivation that foster students' ability to link in-class knowledge with practical application.

Project Description: The "Do Good" Project

The "Do Good" project allows students to hone their group communication skills by working together to take on a small project that they can do well. By bridging the gap between theoretical concepts articulated during lecture and real world application of those concepts in practice, students can focus their skills through the lens of social awareness. College students typically spend the first portion of the semester (about six weeks) learning about the skills needed to successfully work as a team, including aspects of group structure and formation, decision making, shared leadership, conflict resolution, and the different types of tasks that predicate teamwork. Then the "Do Good" project is assigned. Each group is required to develop, create, and conduct a project, fundraiser or service project at the local level that does good (i.e., is philanthropic in nature). Conducting a fundraiser or service project can include: creating and hosting a community event; taking on a policy change (e.g., getting new desks in classrooms); making and disseminating a Public Service Announcement (PSA); hosting an event (e.g., a cultural event, hosting a speaker, collecting goods); sponsoring a family for the holidays; making a YouTube video that is uplifting or educational; hosting a community spotlight (e.g., elderly home visits, firefighters, local police, social work in some form); creating a teaching tool or an art exhibit; or sponsoring an event for children. Students have free range of options when determining the recipients of their efforts as long as local parameters are observed. Students can ensure that they are working in a local context by reaching out to organizations run within the neighborhood community rather than contributing to large nationally-well known organization. Williams and Williams (2011) found that giving students ownership and choice over the content of their projects serves two purposes. Students are more likely to be invested in the long term when they have autonomy over their projects, and students make connections to timely social issues occurring in the moment. Taken a step further, groups who are offered the opportunity to self-select their classroom work group members report higher levels of trust, relational satisfaction, and overall commitment (Myers, 2012).

By bridging the gap between theoretical concepts articulated during lecture and real world application of those concepts in practice, students can focus their skills through the lens of social awareness.

Each group is responsible for the development, promotion, and implementation of the plan, which includes the submission of a formal, written portfolio and presentation (see Appendix). The written portfolio should be a well-organized report reflecting the time and care the group will have put into the project. Likewise, the arrangement of the report should follow the criteria for effective communication in formal reports and proposals (e.g., executive summary, table of contents). The portfolio requires students to dedicate attention to process, process improvement, transparency, as well as an attention to the communicative steps towards implementation that they would have learned throughout the semester. An example of implementing material would be learning how to create an agenda and run a meeting and practicing those skills during "Do Good" project meetings.

The oral presentation should be organized based on the strategies and criteria for effective presentations either learned in skills-oriented courses (e.g., public speaking) or as described by the professor. Additionally, the presentation should be presented formally and professionally. Depending on the project, the instructor should inform students of the right to invite guests (e.g., the Dean, prominent community members, local legislators, beneficiaries of the project) to

these presentations in order to show off the accomplishments. The introduction of high-profile individuals beyond the scope of the classroom elevates the level of performance and as such, students may be more motivated to elevate their own and their teammates' performances (Liu & Olson, 2011). The combination of the formal portfolio, the presentation, and the responsibility of carrying out the event are necessary for encouraging students to think beyond directing the scope of writing or presenting to one audience (i.e., the teacher; Hastings, 2003). Additionally, preparing the portfolio and presentation provides a tangible takeaway that students can display during their post-graduation job hunt (Love & Mackert, 2013).

Parameters for the assignment require students to choose a project that is related to an underrepresented cause or issue. By selecting an underrepresented cause, students have the ability not only to assist with a monetary donation but also to include the bonus of raising awareness, a value which can be just as important as donations. Highlighting the benefit of raising awareness allows students to make additional motivational connections that include empowerment through giving voice to those who may have previously been underrepresented. When combining autonomy and timeliness of a project with a local requirement, students look to their own communities for inspiration. Hu and Liden (2014) find that pro-social motivation allows students to see firsthand that recipients of goodwill can increase the connectivity to the project and can enhance student investment.

Discussion

Students are challenged by the "Do Good" project in a variety of ways. First, the very nature of group work requires greater attention to both task and relational communication than solo endeavors. Students who successfully attend to both task and relationship are practicing communication competence (Canary & Spitzberg, 1987). Additionally, Meinecke, Smith, and Lehmann-Willenbrock (2013) suggest that students will likely experience working with coworkers from other cultural backgrounds upon graduation, so practicing a task with students who may be from culturally different backgrounds provides opportunity for competent intercultural communication practice. Naturally, logistical issues arise during group work that requires communication competence. Students should be encouraged to handle the creation of all deadlines and specifics concerning the group's plans and ideas without influence from the instructor. Consequently, difficulty arises during an undertaking as large as a semester-long group communication project, and although the instructor may offer to listen and provide guidance, the bulk of conflict resolution and problem solving should remain the responsibility of the students. Placing the onus on the students encourages them to work as a team and empowers them to work together to find appropriate solutions (Williams & Williams, 2011). An additional, yet optional parameter that teachers may employ is the requirement for the peers in the group to evaluate each team member's participation. The confidential completion of an evaluation speaks to external motivation in that participants who know they will be judged by their peers may abandon a common tendency to engage in social loafing, the phenomenon occurring when individuals slack during involvement with a collective (Harkins & Jackson, 1985).

Second, students must find ways to negotiate roles within the group. Because of the nature of a longitudinal project, the emergence of leadership must be self-managed by students as the project evolves. Unlike short-term, lab-based groups where one leader emerges for the duration (e.g., a simulated group activity that spans one class period), leadership emergence is a fluid process where individuals share leadership at various times during the project to assist the group in completing a range of tasks (Kramer, 2006). Shared leadership is a bottom-up process that relies on empowerment of members to co-create the goals and tasks of the group, rather than carrying out a directive assigned by a singular individual (Graen, 2003). One of the primary appeals of group communication is the opportunity to work with different individuals who bring a range of expertise to the

group. Students can learn ways to position their individual expertise in a meaningful way that can enhance the outcomes of the group (Minei & Bisel, 2013). Weick and Sutcliffe (2007) find that group members who practice deference to expertise allow decision making to be pushed down and around allow contributions from members who can contribute meaningfully in the moment. Decision making that spans the group allows all members the opportunity for meaningful participation. Pearce and Conger (2003) suggest that when students view leadership as participatory, they have greater influence over ongoing leading and decision making. When sharing or participation in process occurs, collaboration emerges among group members (Hiller & Day, 2003). One of the more prominent comments that students relayed during final presentations was benefits of a shared leadership approach during the "Do Good" project, with one or two students leading the event, another doing the presentation, another having control over the creative design, and so on.

Third, students must work within the parameters of the semester, which include developing a creative fundraiser or service project suitable for the time frame for the remainder of the semester. Given that a typical semester is about 14 weeks, students are limited in that the first six weeks of the semester are spent learning the skills needed to function successfully, and the last two weeks are spent giving the presentations; so students have roughly six weeks to complete the task. Students are encouraged to take into account the steps that they need to accomplish the task, including but not limited to: investigating the recipient of the service/funds; reserving a suitable location; advertising and promoting the activity; identifying the specifics concerning how funds will be ethically raised and delivered; researching city or county guidelines; contingency planning for unforeseen circumstances (e.g., weather); and carrying out the actual fundraiser or service project. Often students underestimate the time they need to complete the project and overestimate the ease with which the project can be completed. Learning through the trial and error approach can sometimes result in non-linear but still productive learning opportunities (Brown, Armstrong, & Thompson, 2014). Guiding students through a strategic conversation about the pitfalls of poor time management during the "Do Good" project from the start can yield greater awareness of external factors that can hinder overall group performance. Upon completion of the project, students will be able to: (1) utilize group communication skills towards the completion of a philanthropic event, (2) navigate group dynamics and tensions occurring during long-term event planning situations, (3) communicate effectively with diverse group members, and (4) develop content geared towards public presentations.

Students can be encouraged to add completed projects and presentations to their resumes for job seeking upon graduation, a motivating factor that can answer the "what's in it for me" questions.

Conclusion

In conclusion, the "Do Good" project benefits students in a number of ways. First, students leave this project with a greater knowledge of group communication and the complexity of decision making and problem solving in small groups. Secondary benefits include the opportunity for individual benefits stemming from group effort that extend after the semester. Students can be encouraged to add completed projects and presentations to their resumes for job seeking upon graduation, a motivating factor that can answer the "what's in it for me" questions. Beyond the practical use towards resumes, students have also described a range of unexpected takeaways, such as greater empathy for the plight of others (e.g., elderly, homeless, animals); newfound dedication towards service learning; and unexpected friendships. Lastly, tertiary benefits include the main purpose of this project: To Do Good. Real life examples of previous projects include: on-campus

educational events such as supporting the #X—Don't Text and Drive Movement; a Princess Party for local underprivileged children; PSA's for topics such as environmental awareness and nutrition; YouTube videos that outline how to get involved in a local No-Kill animal shelter; efforts towards decreasing homelessness; a documentary interviewing senior citizens in elderly care facilities; Thanksgiving food drives and Christmas coat drives; Social Media movements that support soldiers overseas (#Baruchthanksyou on Instagram) and gives others reason to smile (#SmilewithmeNYC on Facebook); and one project that, in a ripple effect, spanned the globe. One group of five did five random acts of kindness and then challenged five strangers to complete random acts of kindness (#kindnesseffect on Facebook) and post about those acts on a designated Facebook page. A professor in Sri Lanka heard about the project and challenged 500 of her students to do one random act of kindness for a total stranger. At the time of presentation, all 500 had met the professor's challenge.

Students have the unique opportunity to help individuals or a cause by raising funds, serving, and creating awareness. For those that have ever questioned the working-world applicability of assignments or class projects, then the "Do Good" project is an opportunity for them to embrace. Students who take the project to heart and get immersed in the cause and goal truly have the chance to take advantage of the opportunity and make a difference.

References

Brown, S., Armstrong, S., & Thompson, G. (2014). The art of motivating students in higher education? [Notes on Contributors]. In S. Brown, S. Armstrong, & G. Thompson (Eds.), *Motivating students* (p. 1). New York, NY: Routedge, Taylor & Francis.

Canary, D. J., & Spitzberg, B. H. (1987). Appropriateness and effectiveness perceptions of conflict strategies. *Human Communication Research*, *14*(1), 93-120. doi: 10.1111/j.1468-2958.1987.tb00123.x

Fritson, K. K. (2008). Impact of journaling on students' self-efficacy and locus of control. *InSight: A Journal of Scholarly Teaching*, *3*, 75-83. Retrieved from http://insightjournal.net/

Graen, G. B. (2003). Role making onto the starting work team using LMX leadership: Diversity as an asset. In G. B. Graen (Ed.), *Dealing with diversity: LMX leadership: The series* (Vol. 1, pp. 1-28). Greenwich, CT: Information Age.

Harkins, S. G., & Jackson, J. M. (1985). The role of evaluation in eliminating social loafing. *Personality and Social Psychology Bulletin*, *11*(4), 457-465. doi: 10.1177/ 0146167285114011

Hastings, S. O. (2003). Motivating perspective taking through oral performance. *Academic Exchange Quarterly*, *7*(4), 256. Retrieved from http://rapidintellect.com/AEQweb/

Hiller, N. J., & Day, D. V. (2003). LMX and teamwork: The challenges and opportunities of diversity. In G. B. Graen (Ed.), *Dealing with diversity: LMX leadership: The series* (Vol. 1, pp. 29-57). Greenwich, CT: Information Age.

Hu, J., & Liden, R. (2014). Making a difference in the teamwork: Linking team prosocial motivation to team processes and effectiveness. *Academy of Management Journal*, *58*(1), 2012. doi: 10.5465/amj.2012.1142

Kemp, L. (2010). Teaching & learning for international students in a learning community: Creating, sharing and building knowledge. *InSight: A Journal of Scholarly Teaching*, *5*, 63-74. Retrieved from http://insightjournal.net/

Kiener, M. (2009). Applying the scholarship of teaching and learning: Pursuing a deeper understanding of how students learn. *InSight: A Journal of Scholarly Teaching*, *4*, 21-27. Retrieved from http://insightjournal.net/

Kramer, M. W. (2006). Shared leadership in a community theater group: Filling the leadership role. *Journal of Applied Communication Research*, 34, 141-162. doi: 10.1080/ 00909880600574039

Liu, J., & Olson, D. (2011). Putting business students in the shoes of an executive: An applied learning approach to developing decision making skills. *InSight: A Journal of Scholarly Teaching*, *6*, 14-27. Retrieved from http://insightjournal.net/

Love, B., & Mackert, M. (2013). Capstone and building block: Helping students manage ambiguity about their futures through writing. *Communication Teacher*, *27*(4), 202-206. doi: 10.1080/17404622.2013.798012

Meinecke, A. L., Smith, K. K., & Lehmann-Willenbrock, N. (2013). Developing students as global learners: Groups in our world blog. *Small Group Research*, 44, 428-445. doi: 10.1177/1046496413487020

Minei, E., & Bisel, R. (2013). Negotiating the meaning of team expertise: A firefighter team's epistemic denial. *Small Group Research*, *44*(1), 7-32. doi: 10.1177/1046496412467830

Monge, P. R., & Contractor, N. (2003). *Theories of communication networks*. New York, NY: Oxford University Press.

Myers, S. A. (2012). Students' perceptions of classroom group work as a function of group member selection. *Communication Teacher*, *26*(1), 50-64. doi: 10.1080/ 17404622.2011.625368

Pearce, C. L., & Conger, J. A. (2003). All those years ago: The historical underpinnings of shared leadership. In C. L. Pearce & J. A. Conger (Eds.), *Shared leadership: Reframing the hows and whys of leadership* (pp. 1-18). Thousand Oaks, CA: Sage.

Vandsburger, E., & Duncan-Daston, R. (2011). Evaluating the study guide as a tool for increasing students' accountability for reading the textbook. *Journal of College Reading and Learning*, *42*(1), 6-23. doi: 10.1080/10790195.2011.10850345

Weick, K. E., & Sutcliffe, K. M. (2007). *Managing the unexpected: Resilient performance in an age of uncertainty* (2nd ed.). San Francisco, CA: Jossey-Boss.

Williams, K. C., & Williams, C. C. (2011). Five key ingredients for improving student motivation. *Research in Higher Education Journal*, 12, 1-23. Retrieved from http://www.aabri.com/rhej.html

Wohlfarth, D., Sheras, D., Bennett, J. L., Simon, B., Pimentel, J. H., & Gabel, L. E. (2008). Student perceptions of learner-centered teaching. *Insight: A Journal of Scholarly Teaching*, *3*, 67-74. Retrieved from Retrieved from http://insightjournal.net/

Appendix

Portfolio Rubric 100 pts total:
The portfolio you will be evaluated on will require great attention to process, process improvement, transparency, and an attention to the communicative steps we have learned throughout the semester. The portfolio is a written component that you will create that keeps your group organized, and documents the progression of the project. The portfolio should be neat, organized, cohesive, and complete for submission on the day you present. Your portfolio should include the following pages, in order:

Checklist:

- Cover Page/Title of your project — 5 pts _____
- Table of Contents — 5 pts _____
- Introduction to team members (aim for a paragraph, include aspects of Personality Type and be completely creative with the design) — 10 pts _____
- Calendar or Schedule including: Meeting Dates, Event Dates, Coordination Dates, Dates of Project Presentation, any other dates important to the group — 5 pts _____
- Section of Meeting Agenda's and corresponding Meeting Minutes—including any correspondence between members pertinent to project. — 10 pts _____
- The Mind Mapping/Brainstorming Document that you create as a group when deciding on your project focus — 10 pts _____
- Advertisements/ Promotion Material — 10 pts _____
- Visual Documentation (if any—This includes pictures from the event, pictures that you take during meetings, any kind of input that you want to include in the portfolio) — 15 pts _____
- Professional, Neat, Adhering to the 10 writing tips, properly cited? — (-1/5) pt _____
- An Executive Summary: The following questions should be answered in your executive summary in a detailed manner:
  - What organization/person/group did the fundraiser/service project benefit? Why did you choose this organization/person/group? How did you come to this decision?
  - What was your project, fundraiser or service project? How did you decide on this specific activity?
  - What organizational and practical issues did you have to consider in planning this event? How did you arrive at these considerations?
  - How did you promote the project, fundraiser, or service project? How was the project decided?
  - Was the project/event/fundraising opportunity a success? Why or why not?
  - What were some of the challenges your group faced? How did you deal with these challenges?
  - As a group, what were your strengths and weaknesses? How would you have approached group work differently knowing what you now know? — 30 pts _____

Total: _____

Elizabeth Minei is interested in interpersonal communication within organizations. She specializes in team dynamics, leadership, and high-reliability organizations. She is also passionate about teaching and discovering ways to make learning interesting and most importantly, applicable for students.

"I Hate Group Work!": Addressing Students' Concerns About Small-Group Learning

Elizabeth G. Allan, PhD
Assistant Professor, Department of Writing and Rhetoric
Oakland University

This article identifies the strategies used by architecture professors and their undergraduate students to mitigate common issues that students raise about group work. Based on participant-observation, interviews with students and faculty, and analysis of instructional materials and student work, this IRB-approved ethnographic case study complicates the separation of collaborative, cooperative, and problem-based learning into distinct pedagogical models. Rather than viewing students' concerns as a form of resistance that can be avoided with the right approach to small-group learning, this article explores how the hybrid model operating in design studio pedagogy confronts the problems inherent in any form of group work.

The Scholarship of Teaching and Learning (SoTL) literature has a long history of persuading educators to add group work to their existing pedagogy in order to promote active learning and student engagement (Cooper, MacGregor, Smith, & Robinson, 2000; Dunn, 1994; Johnson, Johnson, & Smith, 2014). Approaches to small-group learning range from asking students to contribute to the course design (Brecke & Jensen, 2007; Cassard & Sloboda, 2014) to using *quick-thinks* with a partner during a lecture (Cooper & Robinson, 2014; Johnston & Cooper, 2003). A common argument for small-group instruction asserts that group work does not have to be burdensome for instructors and that students will embrace group activities as a welcome change of pace from routine, lecture-based classes and a competitive, test-taking environment (Cooper & Robinson, 2014; Lane, 2008). However, Walker and Barwell (2009) found that even low-stakes clicker polls made students anxious. If teachers are not prepared to address their students' concerns about group work, then innovative group assignments will be frustrating for all concerned—and, therefore, ineffective and short-lived.

Resistance to group work is often explained by asserting that students are passive learners who do not have the necessary skills to work in groups effectively and who will carry a free-loader in order to get a good grade; students' concerns are quickly dispatched by claims that the right approach will counteract negative prior experiences (Johnson et al., 2014; Michaelsen, Davidson, & Major, 2014). However, educational ethnography research complicates the notion that there is an antidote to *grouphate*, the term used to describe students' negative attitude toward group work (Myers & Goodboy, 2005; Parrot & Cherry, 2011; Sadler, 1994).

This article first defines educational ethnography as a research methodology and describes the author's research context, followed by a brief review of recent SoTL literature on popular models of small-group instruction. Davidson, Major, and Michaelsen (2014), editors of a special issue of the *Journal on Excellence in College Teaching* on small-group learning, argued that educators' failure to understand the theories of learning that underlie different pedagogical approaches can lead to confusion in practice. Certainly, if instructors themselves are not clear about the ideological and procedural differences among the various models of small-group learning, students are likely to perceive group work experiences as inconsistent and confusing. Effective small-group instruction does not have to conform to a single approach, however. The case study examples discussed below illustrate how two experienced

…if instructors themselves are not clear about the ideological and procedural differences among the various models of small-group learning, students are likely to perceive group work experiences as inconsistent and confusing.

professors with very different teaching styles used small-group strategies that do not fit neatly into one established model. Each section foregrounds the concerns that their students voiced and examines how the instructors and students addressed those concerns. The conclusion considers what educators who do not teach in a studio environment might learn from the strategies used in studio classes.

Educational Ethnography: Researching Classroom Cultures and Students' Perspectives

Educational ethnography is a well-established research methodology that has been used to improve teaching and learning practices in writing studies, literacy studies, and education (Bishop, 1999; Frank, 1999; Heath & Street, 2008). Frank (1999) argued that ethnography allows researchers "to make visible what members are doing and learning in classrooms and to record, analyze, and represent the particular kind of classroom culture that is being created" (p. 3). As Heath and Street (2008) defined it, within an academically-based "ethnographic time scale" (p. 62), educational ethnography accomplishes the "goals of rigor and validity" (p. 63) by conveying "rich details" to make the "situations and scenes depicted come alive" (p. 45). Bishop (1999) refers to such studies as "microethnographies" that "report on the culture of a single classroom, the single learner, and even the single learning event" (p. 13). In educational ethnographies, "the complexities of the discrete event, location or setting are of greater importance than overarching trends or generalizations" (Pole & Morrison, 2003, p. 3). Thus, educational ethnography examines how pedagogical theories are enacted in specific academic contexts.

The case study examples discussed below are drawn from an educational ethnography conducted at a large, public, mid-Atlantic, Research 1 University that offered a five-year undergraduate Bachelor of Architecture (B.Arch.) degree. The semester-long, IRB-approved study included participant-observation, semi-structured interviews, and analysis of artifacts (teaching materials and students' work) in first-year, third-year, and fifth-year (thesis) design studio classes. These studio classes met three times a week for three hours and twenty minutes per class session in a fifteen-week semester. In addition, the students had around-the-clock access to dedicated studio workspace. Data were collected during scheduled studio meetings using field notes, audio recordings, and photographs. This article focuses on the two third-year studio classes because they required group work. The third-year cohort of participants included twenty-three students and two instructors, Lynn and Tracy (all names used are pseudonyms), both of whom are licensed architects as well as studio professors. As a participant-observer, the researcher was explicitly invited to "contribute to the studio" by asking questions and sharing observations from the perspective of a non-architect with expertise in communication. Data was analyzed using the constant-comparative method, an iterative approach that involves descriptive and analytical coding and member-checking (Heath & Street, 2008; Hesse-Biber & Leavy, 2006). The findings presented below analyze Lynn's and Tracy's pedagogical approaches through the lens of SoTL scholarship on small-group instruction.

Collaboration, Cooperation, or Real-World Problem-Solving?

Davidson et al. (2014) identified the similarities and differences among four models of small group instruction: collaborative learning, cooperative learning, problem-based learning (PBL), and team-based learning (TBL). The TBL system has the most rigid requirements, while collaborative learning is portrayed in SoTL literature as the most vaguely defined and least structured model. It is the only small-group instructional method that is considered "research-based" (as opposed to "evidence-based") because no causal relationship between collaboration and increased learning has been statistically established (Davidson et al., 2014, p. 2). As such, collaborative learning has been dismissed as a less rigorous small group

learning model by some SoTL scholars whose disciplinary stances valorize quantitative research and highly structured learning assessment methods (Michaelsen et al., 2014; Millis, 2014). However, there are several problems with this negative characterization of collaborative small-group instruction.

First, as Davidson and Major (2014) acknowledged, the research supporting collaborative learning tends to be qualitative and descriptive, rather than quantitative and statistics-driven, because the collaborative learning model originated in the humanities. Pole and Morrison (2003) argued that when researchers from a positivist tradition raise "epistemological challenges about the nature of the knowledge which ethnography yields," it is pointless "to counter them by arguing that the findings from ethnographic research are precise or objective or generalizable" because "to do so would be to fall into a technical trap of judging ethnography by characteristics to which it does not aspire" (p. 15). Such criticism of *qualitative* collaborative learning research (on the grounds that it does not meet the standards of *quantitative* research) clearly undermines the spirit of interdisciplinary dialogue that enriches SoTL scholarship. As Cassard and Sloboda (2014) recently argued in this journal, "Cross-disciplinary efforts in promoting the scholarship of teaching and learning are crucial since they enhance the teaching and learning process" (p. 45).

Secondly, in SoTL scholarship that favors other models, such as Millis's (2014) work on cooperative learning, criticism of collaborative learning is based on the inaccurate image of an undisciplined free-for-all, where the teacher abdicates his or her authority and the students run amok. Descriptive case studies of collaborative learning practices, including the ethnographic educational research presented below, counter this unfair characterization.

Finally, there is a language problem. It is not always clear whether educators are using *collaboration* as a technical term referring to a specific model of small-group learning or as a general term for people working together. Therefore, much of what instructors in the humanities describe as *collaboration* would actually count as *cooperative* learning from the perspective of STEM or professional programs. As Davidson et al. (2014) observed, "Many educators use the terms cooperative and collaborative learning interchangeably, when in fact these methods differ widely in philosophy and approach" (p. 2). For example, although it is identified as an analysis of *cooperative* learning, Brecke and Jensen's (2007) *InSight* article described features that would be classified as *collaborative* by other SoTL scholars, such as the division of labor (cf., Davidson & Major, 2014) and responsibility for the learning environment (cf. Asgari & Dall'Alba, 2011).

In general, cooperative learning emphasizes the instructor's responsibility for establishing structured group work procedures and for explicitly teaching social and communication skills (Asagari, & Dall'Alba, 2011; Millis, 2014). Proponents of cooperative learning insist that each student is held accountable for learning everything the task involves, as opposed to collaborative work, which may encourage students to develop individual expertise or component parts that they contribute to the group effort (Davidson & Major, 2014). The distinctions between cooperative and collaborative learning models hinge on the roles of the instructor and the students. In contrast, PBL, which was originally developed for medical and professional fields (including architecture), has one non-negotiable defining characteristic: the group's task must address a real-world problem and share "a tangible expression" of the solution as evidence of the knowledge gained (Davidson & Major, 2014, p. 25). A "theoretical synthesis" of collaborative and cooperative learning models, Davidson and Major (2014) argued, can also be extended to PBL (p. 30). The ethnographic case study below illustrates what such a theoretical hybrid model looks like in practice.

The key differences among these three approaches fall into the following categories: "how groups are formed, how or whether to teach interpersonal skills, the structure of the group, and the role of the teacher" (Davidson & Major, 2014, p. 30). These factors also relate to the concerns that students raise when they resist, struggle with, or even embrace the inevitable messiness of group work. Cooper et

al. (2000) stated that student resistance is tied to "lack of clarity in small-group assignments; unclear or unfair grading of small-group work . . .; inequitable commitments to teams by individual members; poor planning and organization of the group activities; and inadequate introduction or rationale for group work" (p. 25). The examples below explore some of these issues and describe how students' concerns were mitigated. It would be disingenuous, however, to claim that any pedagogical model could (or even should) eliminate the issues that must always be negotiated when group work is used.

"Loosey-Goosey" or "Helicopter" Teachers: Concerns About the Instructor's Role

In SoTL literature, educators who employ collaborative learning have been characterized as "loosey-goosey" (Millis, 2014, p. 140), while those who adopt a structured, prescriptive approach have been labeled "helicopter" teachers (Love, Deitrich, Fitzgerald, & Gordon, 2014, p. 193). Ideally, the instructor's role in small-group learning should be responsive to students' needs. The third-year design studios taught by studio professors Lynn and Tracy followed Boyer and Mitgang's (1996) recommendations for an architecture curriculum "built around collaboration and teamwork, not only with other architects but with other disciplines" (p. 45). In each studio, PBL was clearly present, as students worked in groups to design a solution to a real-world problem. Lynn's students designed an ideal settlement to revive a desert ghost town while preserving its historic culture and natural environment. Tracy's students consulted with a community organization in a struggling neighborhood that bordered the inner-city campus to design an "urban intervention" to "potentially rejuvenate" the "interface of the 'town' with the 'gown.'"

Tracy's teaching style was more directive than Lynn's, yet they both incorporated cooperative and collaborative small-group learning strategies. Lynn deliberately took a hands-off approach, saying "I'm not going to tell you what to do." She expected her students to work out their differences and set their own deadlines as part of the process of learning to work as a design team. In contrast, Tracy created long lists of requirements for her students' presentations. Although Tracy viewed the "fixed" guidelines as necessary preparation for methodical, disciplined inquiry and as a starting point for individual exploration, her students sometimes interpreted Tracy's lists as restrictive, rule-based, and even arbitrary. Although her students felt that they needed explicit permission to deviate from the written requirements or they would risk getting a lower grade, Tracy viewed the requirements as negotiable and expected her students to use their own discretion: "Think about it. Make it so that it's meaningful for your exploration—not to check off a box because 'Tracy told me to do this.'"

Tracy's students welcomed explicit direction when they were stuck or wanted to try something new, but they resisted it when they felt that it was being imposed upon them. For example, Chuck complained that Tracy was "all about hand drawing," which he saw as inefficient because digital drawing was so much faster for him. Less than two weeks before the final review, Tracy insisted that Chuck hand draw an alternative design that would feature horizontal rather than vertical expansion of a building, telling him to "stop arguing" and "draw faster" when he protested. At the next studio meeting, Chuck commented, "I changed my design to all horizontal, and she loved it today. Sometimes you just have to do what you have to do." Chuck complied with Tracy's directive; however, as a designer, he was frustrated by what he perceived as a loss of agency in terms of the design process he had developed in consultation with his peers.

Lynn rarely intervened in her students' design process directly, but she acted as a consultant when her students were at an impasse. When Lynn's students asked her for specific direction, she would pose questions, offer suggestions, clarify or supply information related to their site, and demonstrate techniques instead. For

example, Lynn's student Jeff invited her to use his pen to illustrate an alternative drawing technique during an informal critique of his work. Lynn told him she preferred a pencil, but she did not question his practice of using pen, a tool typically associated with final drawings, to sketch in his sketchbook. In contrast, Tracy was particular about the drawing tools her students used. When reviewing her student George's sketchbook drawings, Tracy told him to "get rid of that pencil" because she wanted him to work with a finer, harder lead to make more precise lines. Although their communication styles were quite different, Tracy and Lynn both challenged the students to push themselves beyond their comfort zones. Neither Tracy's nor Lynn's pedagogical practices conformed to the expected role of the instructor in a purely collaborative, cooperative, or PBL small-group learning model.

"All Up in Each Other's Business": Concerns About Students' Roles

Students in both studios complained that they had done "so many group projects with the same people," that their close relationships could be a liability as well as an asset. Lynn's student Nora joked, "We are all up in each other's business all the time." The cohort's history of positive and negative group work experiences affected both their selection of partners (when they were given a choice) and the division of labor within groups. Interpersonal relationships, design method preferences, group dynamics, and the strategies Lynn and Tracy used to form groups all shaped the way the studios functioned as learning communities.

Both studios began with instructor-selected groups charged with doing preliminary research on one aspect of the problem and sharing the results with the entire studio. Lynn explained that this collaborative division of labor avoided duplication of time-intensive work. Lynn then allowed her students to form their own design teams, which worked together for the remainder of the semester. In Lynn's studio, each design team was responsible for the entire project site. No two students on the same team could focus on exactly the same area of the site, and all of the individual designs within a team had to complement each other. Thus, Lynn designed the task so that, to be successful, her students needed to cooperate with each other at every stage of the process, since each student's choices impacted the rest of the team's designs.

In contrast, Tracy divided her students into groups and assigned a different neighborhood site to each group. Within these boundaries, students in the same group could design entirely different interventions that occupied the same space without considering how one person's design might affect another's. The students in Tracy's studio groups coordinated their efforts only when they needed to prepare for formal presentations. Otherwise, they worked independently and gravitated toward informal partnerships. For example, Chuck and Ned, who were in different groups, regularly debated difficult design decisions and informally critiqued each other's work, coaching each other on how to respond to Tracy's formal feedback. During the scheduled whole-studio reviews of each other's projects, Tracy's students politely responded to her prompting, but they were reluctant to challenge each other's designs openly.

During reviews, the design teams in Lynn's studio were animated, even confrontational. Lynn explicitly coached them in "asking the right questions," shifting the students' practice from arguing for specific changes to asking open-ended questions that exposed issues that had not been adequately addressed in each other's designs. During this intense group-learning process, every team experienced interpersonal conflicts. When Lynn's studio debriefed at the end of the semester, Rose commented, "I'm a people person, but—wow—that was…that was interesting. Not just my group. Watching everybody else, too." Nora and her partner Sheila, for example, did not speak to each other for a week. Yet as Jeff observed, each group had also "had a moment" when they had really excelled as a group. As a studio, Lynn's students were able to laugh at themselves and talk freely about the problems they had all experienced. Despite the structural differences in the two studios, the students developed ways to manage their

concerns about group dynamics, whether overtly (in Lynn's studio) or by creating their own informal structures (in Tracy's studio).

"We Don't Have Time for That": Concerns About Fairness and Resources

The largest group in Lynn's studio (Stephanie, Mary, Jeff, and Allen) "hung together as a group for most of the semester," only to fall apart in the last week. Mary's model was unfinished, and Jeff had not started his (in part because he needed information from Mary). Her body tense and her voice strained, Stephanie told Allen, "I hate group work!" Even though Lynn's grading system took both individual and group work into account, Stephanie's fear was that if her teammates did not finish their individual components in time to help with the remaining tasks that the group needed to accomplish together, she and Allen would "end up doing everything [them]selves" so that their group would "get a good crit" at the final review. Instead, during a scheduled consultation with Lynn, Stephanie confronted Jeff directly and explained what Mary was doing, and the group survived the normal end-of-semester stress.

In Tracy's studio, students complained about her grading policy: "The entire group will be given the same grade unless it is obvious that a student is not pulling his weight or if they are far exceeding the output of the other team members." Tracy asserted, "I do not anticipate great disparities as you are all in the professional program and have a good deal of experience." Nevertheless, Tracy's students covered for each other when they feared their own grades were on the line. For example, Lee interrupted her own work to edit her group members' digital drawings so that they would all be consistent. Regardless of the grading policy, students in both studios experienced conflicts over the division of labor, but they handled those problems differently.

Although sharing knowledge was a core value of the studio community, the extent to which that occurred was mediated by time, spatial arrangements, and the nature of the projects. In their second-year studios, the students had all worked in one open area. Stephanie reflected, "There were probably twenty-five people I could see from my desk. And we all worked on the same sites. We went in different directions, but there was a lot of sharing that happened." However, in their third year, the students were physically divided into different studios with completely different projects. Also, Lynn's and Tracy's decisions about how to structure their respective studios undermined the collaborative and cooperative learning strategies the students had previously developed. As Stephanie explained,

> Now, we really don't talk to each other about our projects in that way . . . because I can only help you so much without you having to explain your entire project to me, and we don't have time for that.

Conclusion: Developing a Hybrid Model of Small-Group Instruction

As Davidson and Major (2014) suggested, "Those who use any given approach [to small-group instruction] might learn from those who use the other approaches" (p. 42). Yet few instructors in higher education teach under the seemingly ideal conditions for small-group learning that were inherent in Lynn's and Tracy's studios. Studio classes are small by definition, and most of the ten hours per week of studio class time was used for hands-on, production-focused activities—a feature of design studio pedagogy that pre-dates the flipped classroom model. Both instructors were well-prepared, organized practitioners who had carefully designed projects based on real-world problems for their experienced, engaged students. Yet in both studios, those students raised concerns about group work that have typically been attributed to students' inexperience or negative attitudes, inadequate infrastructure, poorly-designed assignments, and instructors' shortcomings. If these factors cannot account for the problems associated with

small-group learning in Lynn's and Tracy's studios, then perhaps educators need to consider a paradigm shift. The goal in designing effective small-group instruction is not to eliminate the problems that both students and instructors will encounter but to confront those concerns in productive ways.

It goes without saying that poor pedagogy will not produce successful learning experiences. Many of the criticisms leveled at particular models of small-group learning have more to do with bad teaching than with the inherent features of the pedagogical model itself. Clarity, fairness, effective communication, and organization are always necessary, whatever the model. Yet there are some lessons that all instructors can learn from the studio case study examples presented here:

- When designing and implementing small-group learning experiences, instructors need to balance freedom and control—to be flexible and responsive to students' needs.
- If students have no control over how groups are formed for long-term, high-stakes projects, they may subvert the group process by disengaging, taking over, or creating alternative partnerships.
- There is *never* enough time for group work, and there are *always* going to be interpersonal conflicts—but these issues do not have to derail the learning process.
- Purely collaborative or purely cooperative group work is rare in practice, and PBL encompasses both, whether overtly or implicitly.

Based on these insights from educational ethnography, instructors who want to incorporate small-group learning into their pedagogy face a more challenging task than simply choosing from a menu of models. Instead, they should consider how real-world problem-solving, cooperation, and collaboration can best be combined, perhaps at different stages of the learning process, to meet their specific learning goals and objectives. Above all, instructors should not presume that if they select the *best* model, their students will not experience grouphate. In fact, as the examples from Lynn's and Tracy's studios demonstrate, productive teachable moments occur when students openly express their concerns about group work.

Cooper et al. (2000) argued, "When it comes to student resistance, we do not think we can underestimate the shifted expectations students have to experience as they begin to understand, see the value in, and invest energy in small-group learning" (p. 26). Lynn's and Tracy's students were accustomed to group work and understood the reasons for it, even when they were frustrated. Yet "experience alone will not always create more positive attitudes about learning in groups" (Hillyard, Gillespie, & Littig, 2010, p. 18). Therefore, educators need to be proactive and explicit in communicating the rationale for small-group learning so that the students can begin to trust the process. Instructors who do not teach in programs where collaboration, cooperation, and problem-based learning are core values will need to work even harder than Lynn and Tracy did to create a classroom culture that supports small-group learning. First, educators must address two issues about collaboration that Cassard and Sloboda (2014) raised in this journal: engaging in "cross-disciplinary conversations" about pedagogy (p. 48) and "incorporating [students'] perspectives" when designing courses (p. 45). Rather than blaming students or instructors, defending a preferred model, or viewing difficulty and resistance as failure, educators can develop hybrid models of small-group learning that are supported by SoTL scholarship, meet discipline-specific goals, and address students' concerns.

… productive teachable moments occur when students openly express their concerns about group work.

References

Asgari, S., & Dall'Alba, G. (2011). Improving group functioning in solving realistic problems. *International Journal for the Scholarship of Teaching and Learning*, *5*(1), Article 8. Retrieved from http://digitalcommons.georgiasouthern.edu/ij-sotl/vol5/iss1/8

Bishop, W. (1999). *Ethnographic writing research: Writing it down, writing it up, and reading it*. Portsmouth, NH: Heinemann.

Brecke, R., & Jensen, J. (2007). Cooperative learning, responsibility, ambiguity, controversy and support in motivating students. *InSight: A Collection of Faculty Scholarship*, *2*, 57-63. Retrieved from http://www.insightjournal.net/

Boyer, E. L., & Mitgang, L. D. (1996). *Building community: A new future for architectural education and practice*. Princeton, NJ: Carnegie Foundation for the Advancement of Teaching.

Cassard, A., & Sloboda, B. (2014). Leading the charge for SoTL: Embracing collaboration. *InSight: A Journal of Scholarly Teaching*, *9*, 44-53. Retrieved from http://www.insightjournal.net/

Cooper, J. L., MacGregor, J., Smith, K. A., & Robinson, P. (2000). Implementing small-group instruction: Insights from successful practitioners. *New Directions for Teaching and Learning*, *81*, 63-76. doi: 10.1002/tl.8105

Cooper, J. L., & Robinson, P. (2014). Using classroom assessment and cognitive scaffolding to enhance the power of small-group learning. *Journal on Excellence in College Teaching*, *25*(3&4), 149-161. Retrieved from http://celt.miamioh.edu/ject/issue.php?v=25&n=3%20and%204

Davidson, N., & Major, C. H. (2014). Boundary crossings: Cooperative learning, collaborative learning, and problem-based learning. *Journal on Excellence in College Teaching*, *25*(3&4), 7-55. Retrieved from http://celt.miamioh.edu/ject/issue.php?v=25&n=3%20and%204

Davidson, N., Major, C. H., & Michaelsen, L. K. (2014). Small-group learning in higher education—cooperative, collaborative, problem-based, and team-based learning: An introduction by the guest editors. *Journal on Excellence in College Teaching*, *25*(3&4), 1-6. Retrieved from http://celt.miamioh.edu/ject/issue.php?v=25&n=3%20and%204

Dunn, J. P. (1994). Reflections of a recovering lectureholic. *National Teaching and Learning Forum*, *3*(6), 1-3. doi:10.1002/ntlf.10018

Frank, C. (1999). *Ethnographic eyes: A teacher's guide to classroom observation*. Portsmouth, NH: Heinemann.

Heath, S. B., & Street, B. V. (2008). *On ethnography: Approaches to language and literacy research*. New York, NY: Teachers College Press.

Hesse-Biber, S. N., & Leavy, P. (2006). *The practice of qualitative research*. Thousand Oaks, CA: Sage.

Hillyard, C., Gillespie, D., & Littig, P. (2010). University students' attitudes about learning in small groups after frequent participation. *Active Learning in Higher Education*, *11*, 9-20. doi: 10.1177/1469787409355867

Johnson, D. W., Johnson, R. T., & Smith, K. A. (2014). Cooperative learning: Improving university instruction by basing practice on validated theory. *Journal on Excellence in College Teaching*, *25*(3&4), 85-118. Retrieved from http://celt.miamioh.edu/ject/issue.php?v=25&n=3%20and%204

Johnston, S., & Cooper, J. L. (2003). Quick thinks: Active-thinking in lecture classes and televised instruction. In J. L. Cooper, P. Robinson, & D. Ball (Eds.), *Small group learning in higher education: Lessons from the past, visions of the future* (pp. 122-134). Stillwater, OK: New Forums Press.

Lane, D. R. (2008). Teaching skills for facilitating team-based learning. *New Directions for Teaching and Learning*, *116*, 55-68. doi: 10.1002/tl.333

Love, A. G., Dietrich, A., Fitzgerald, J., & Gordon, D. (2014). Integrating collaborative learning inside and outside of the classroom. *Journal on Excellence in College Teaching*, *25*(3&4), 177-196. Retrieved from http://celt.muohio.edu/ject/issue.php?v=25&n=3%20and%204

Michaelsen, L. K., Davidson, N., & Major, C. H. (2014). Team-based learning practices and principles in comparison with cooperative learning and problem-based learning. *Journal on Excellence in College Teaching*, *25*(3&4), 57-84. Retrieved from http://celt.miamioh.edu/ject/issue.php?v=25&n=3+and+4

Millis, B. J. (2014). Using cooperative structures to promote deep learning. *Journal on Excellence in College Teaching*, *25*(3&4), 139-148. Retrieved from http://celt.miamioh.edu/ject/issue.php?v=25&n=3%20and%204

Myers, S. A., & Goodboy, A. K. (2005). A study of grouphate in a course on small group communication. *Psychological Reports*, *97*, 381-386. doi: 10.2466/pr0.97.2.381-386

Parrot, H. M., & Cherry, E. (2011). Using structured reading groups to facilitate deep learning. *Teaching Sociology*, *39*, 354-370. doi: 10.1177/0092055X11418687

Pole, C., & Morrison, M. (2003). *Ethnography for education*. Maidenhead, United Kingdom: Open University Press.

Sadler, C. (1994). Guidelines for group work. *National Teaching and Learning Forum*, *3*(6), 8-11. doi: 10.1002/ntlf.10018

Walker, R., & Barwell, G. (2009). Click or clique? Using educational technology to address students' anxieties about peer evaluation. *International Journal for the Scholarship of Teaching and Learning*, *3*(1), Article 13. Retrieved from http://digitalcommons.georgiasouthern.edu/ij-sotl/vol3/iss1/13

Elizabeth G. Allan, PhD, is an assistant professor in the writing and rhetoric department at Oakland University. She teaches first-year writing and upper-level courses in the undergraduate writing and rhetoric major, including the history of rhetorical studies; literacy, technology, and civic engagement; and writing about culture. An experienced qualitative researcher, Dr. Allan serves on Oakland University's Institutional Review Board (IRB) for human subjects research. Her research interests include writing pedagogy, writing assessment, writing program administration, writing across the curriculum/writing in the disciplines (WAC/WID), multimodal literacy, rhetoric in disciplinary contexts, ethnography, undergraduate research, and the scholarship of teaching and learning (SoTL).

Reaching Resisters in a Teaching Assistant Training Program

Carolyn I. Brown, PhD
Writing Center and Plagiarism Prevention Program Coordinator
Webster University

In the past decade, there has been limited longitudinal qualitative research examining the effects of training programs on graduate students' teaching performance. One gap in this research is a discussion of Teaching Assistants (TAs) who resist such programs and an examination of strategies for overcoming this resistance. This action research study attempts to fill that gap by evaluating the relationship between TAs' participation in one university's Certificate in University Teaching (CUT) program and their resistance to its pedagogical strategies. The study defines the types of resistance and analyzes the reasons behind it. Findings address ways to more effectively reach resisting TAs and improve our own teaching practices.

In the past decade, there has been limited longitudinal qualitative research examining the effects of training programs on American graduate students' teaching performance (Park, 2004). Previous research focused on developing graduate courses on teaching in college/university environments (Ebest, 2005), identifying the need for TA training programs and program design (Lewis, 2002), and assessing the effectiveness of such programs (Davis & Kring, 2001; Speer, Gutmann, & Murphy, 2005), while the last 15 years have seen a marked increase in efforts to develop teaching excellence and student engagement in higher education (Abbott, Wulff, & Szego, 1989; Gaff, Pruitt-Logan, Sims, & Denecke, 2003).

One gap in this research is a discussion of Teaching Assistants (TAs) who resist such programs and an examination of strategies for overcoming this resistance. This research is part of a four-year longitudinal study that analyzes the effectiveness of one Midwest public land grant university's Certificate in University Teaching program (CUT) and unpacks graduate teaching assistants' classroom experiences. This part of the study defines the various types of resistance and analyzes the reasons behind it, focusing specifically on the following questions: What differentiated resisters from the rest of the CUT participants? Why did these students appear to resist and reject CUT principles? What role did the TA coordinators play in this resistance? Findings address ways to more effectively reach resisting TAs and improve our own teaching practices.

Literature Review

One of the challenges of training TAs is their varied teaching experience. In any given group, some may have teaching experience at the elementary, secondary or community college levels; some may have no teaching experience; and some may have had TA training during their M.A. program. "Not only do TAs enter at different levels, but, obviously, they grow at different rates in different dimensions" (Nyquist & Sprague, 1998, p. 84). As with any developmental stage, those described above do not necessarily occur linearly. More importantly, as the authors note, growth and development are never finished. TAs benefit most from supervisors who are able to adapt as TAs develop, providing more supervisory support in the beginning stage and scaling back as TAs mature (Nyquist & Sprague, 1998; Wulff, Austin, Nyquist, & Sprague, 2001).

Keeping these developmental stages in mind, Nyquist, Abbott & Wulff (1989) argue that TA training should focus on multiple dimensions of the TA experience and on the interrelatedness of those dimensions. The dimensions that the authors refer to include the needs and characteristics of the TAs themselves, the relationships that TAs have with other TAs, the demands of their students, and the

expectations of supervisors, administrators, and instructional developers. Korpan (2014) suggests the model of workplace learning over the more traditional apprenticeship model that "provides a more holistic approach to work and learning" (p. 2).

In her study of composition graduate students' introduction to action research, Ruth Ray (1993) argues that students may resist new methods of teaching and research for rhetorical, pedagogical, or epistemological reasons. Students who resist for *pedagogical* reasons often question and challenge new teaching theories in the university classroom, while those who resist for *rhetorical* reasons do not believe that constructivist teaching strategies and active learning activities are appropriate in the academic classroom. Students who resist for *epistemological* reasons hold divergent beliefs about how knowledge is constructed and disseminated. The TAs in the resistance group demonstrated one or more of these areas of resistance to the CUT program.

A fourth type of resistance—*oppositional*—was demonstrated by two TAs in the low resister group. Henry Giroux (1983) argues that the category of opposition can be political: "Some acts of resistance reveal quite visibly their radical potential, while others are rather ambiguous; still others may reveal nothing more than an affinity to the logic of domination and destruction" (p. 109). Shor (1992) adds that *oppositional* students' behavior is a "reflexive resistance to authority" (p. 138). Students internalize this resistance and "take their sabotaging skills wherever they go" (p. 139). The *oppositional* TAs in this section demonstrated poor attitudes and rejected both positive feedback and constructive criticism for no particular reason.

Method

Data sources included the following: intake and exit interviews, teaching observations, program observations, teaching logs, and workshop evaluations.

In this four-year study, I engaged in recursive cycles of observation—examining TAs' workshop participation and teaching performance; reflection—considering TAs' teaching and learning processes and performance; and action—seeking to improve my role in the CUT program as instructor, supervisor, and mentor. I also examined TA outcomes and evaluated my actions for outcome effectiveness. Changes in my approach to participants and alterations in curriculum were informed by the cyclical nature of the action research process. Simultaneously, TAs were engaged in their own recursive cycles of: observation—watching dynamic faculty teach across the curriculum; reflection—contemplating faculty teaching strategies as well as their own; action—changing their teaching performance based on feedback and reflections; and evaluation—assessing the effectiveness of their actions in their teaching logs. This recursive cycle allowed TAs the opportunity not

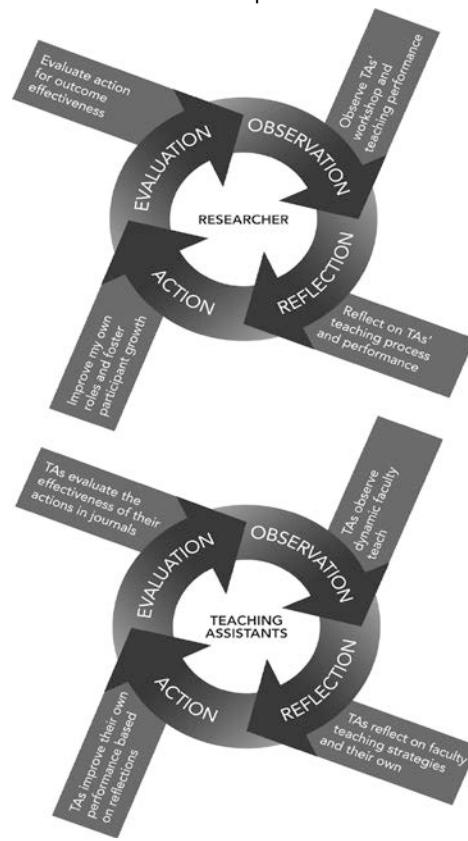


Figure 1. Action research study cycles of researcher and teaching assistants.

only to strengthen their metacognitive skills, but also to develop a sense of self-efficacy as they began to understand their teaching. I met with study participants informally biweekly throughout the semester to share observations and listen to their ideas and concerns.

The CUT Curriculum

It is important to make clear that participation in the CUT program is voluntary for teaching assistants, though in order to receive the university certificate, all of the requirements of the program must be met. At the time of this study, CUT was comprised of four face-to-face units: Unit 1, Teaching for Learning in the University, which guided graduate students to promote active and meaningful learning in college classrooms and develop college students' critical thinking skills; Unit 2, Preparing for University Teaching, which required participants to expand their pedagogical knowledge of learning theory and practical classroom application; Unit 3, the Teaching Practicum, which monitored students' teaching, required reflective teaching logs, and provided regular feedback; and Unit 4, Professional Development, which focused on developing job talks, presenting at conferences, and preparing for publication. This study focused on behaviors in Units 1-3. Although this was a four-year study, teaching assistants generally completed this program within two years, so participants changed over time.

Sample and Data Sources

Forty TAs participated in various phases of the total research over nine semesters with IRB approval. Nine TAs comprised the resister focus of this portion of the study. Research participants represented the following fields: Political Science, Philosophy, History, Sociology, Biology, Education, English, Business, Communication, Psychology, Math, Gender Studies, and Nursing. Approximately half of the participants were doctoral candidates (n = 20); the others were pursuing their M.A. Of those who responded to the demographic data survey, 11 were males and 18 were female. The age range of the sample was 21-55+ years old with the majority under 30 years. Twenty-one participants identified as Caucasian; five as African-American; five as Asian; one as Hispanic; and one as multiracial. Forty seven percent of the TAs enrolled in the CUT program over nine semesters had no prior teaching experience and 20 percent had one semester, while 55 percent had no teacher training. Fifty two percent were responsible for teaching one section of a course; 34 percent taught two or more sections. Eighty seven percent were planning a career in teaching and/or academia; nine percent were not; and three percent were undecided.

I worked with three levels of participants. Level 3 (L3), those who participated most in my study, included nine TAs in the Teaching Practicum; they were interviewed at the beginning and the end of their Practicum experience. Level 2 (L2), consisted of 14 participants whose teaching logs and teaching performance were evaluated, but they were not interviewed. Level 1 (L1) included all of the participants who attended CUT Units 1, 2, and 4, but who neither took the Practicum nor participated in personal interviews. This latter group varied per workshop and unit; therefore, attendance was inconsistent because participants could miss one (out of eight) workshop in Units 1 and 2 without penalty. Overall, approximately 17 additional graduate students (some TAs; some not) participated in L1. The data collected from this group included field notes and workshop evaluations; however, because they did not participate in the Teaching Practicum, I did not interview them.

Table 1

Data Collection Sources and Procedures

Sources	Procedures
Interviews (L3) A total of 18 interviews were conducted (9 participants x 2 interviews each)	Semi-structured, conducted at the beginning and end of the CUT program; participants were audio taped for transcription and coding
Program Observations (L1, L2, L3)	Field notes taken at every session of CUT Units 1, 2, and 4
Teaching Observations (L2, L3)	Participants were observed three times during a semester for a class period using an observation protocol and then given written and verbal feedback at a conference following each teaching session
Document Collection (L2, L3)	Participants submitted course syllabi and assignments for evaluation throughout study
Teaching Logs (L2, L3) (A total of 15 entries for fall and spring semesters; 8 for summer semesters)	Participants submitted their weekly teaching journals written during the Unit 3 Practicum for evaluation
Participant Evaluations (L1, L2, L3)	Evaluations were distributed to participants at the end of each two-hour workshop for all units

Results

Interview transcripts from participants were examined through narrative analysis (Bruner, 1991) and grounded theory using open coding (Glaser & Strauss, 1967). Narrative analysis was used to interpret problem solving, conflict, and interpersonal relationships of the CUT participants as they experienced what it meant to become a teacher. Throughout the course of this study, I assumed multiple roles in the CUT program: researcher, teacher, supervisor, and mentor. I discovered that at times these roles somewhat conflicted, particularly when I simultaneously supervised the Practicum students and conducted research. As a supervisor, I was admittedly disappointed when participants did not perform as well as I had hoped in the classroom. With the resister group, especially, I became frustrated at their unwillingness to take my pedagogical advice. As a researcher, having these subjective feelings added layers to the analysis.

In the following sections, I illustrate the students' behaviors as *pedagogical, rhetorical, epistemological*, and *oppositional* resisters. As my analysis demonstrates, resistance could not and should not be confined to a single category. All names used in this study are pseudonyms to protect participant identity.

Struggle in Resisters

Pedagogical, rhetorical, and epistemological resistance. Matt was a TA in Sociology. In the CUT workshops, he seemed bored; when called on for his ideas, he declined to contribute to group exercises. Matt's teaching logs—which were supposed to focus on his professor's teaching methods when he [Matt] was not teaching—were undeveloped and unfocused. He failed to comment on what he

would do differently if he were teaching the class; instead, he blamed the students for failing to learn and engage. During debriefing sessions following his teaching observations, I thought I was clear in relaying my concern that he should use CUT strategies and believed that Matt was amenable. Yet the very next week, instead of discussing his teaching session or his professor's, Matt wrote the following in his teaching log:

> As the semester reaches mid-term I am stunned by student 'sign-of-life' postings within the course weekly discussion board forums. Questions are being asked over content that was presented in-class during weeks 1-3. Formal clarifying retorts to those student comments are met with a plethora of logical fallacies. It is quite depressing to my own teaching motivation when students fail to consider the preponderance of available empirical data demonstrating support for a particular stance on a controversial issue. I expect diversity in the classroom, but I also expect logical, objective examination of social phenomena that draws from pre-existing data sets and sociological theories.

I noted that Matt had slipped to me that his students were "not smart" because their perspectives differed from his. He did not consider that his didactic teaching style, as well as his professor's, may have contributed to their students' performances. Further, by referring to the perceived lack of student motivation at length in every one of his journals, Matt avoided reflecting on the teaching environment he either observed or was a part of each class period.

When he failed to practice active learning strategies, I saw Matt as a singularly teacher-centered instructor, for that is where his comfort zone was. In other words, he was a *pedagogical* resister based on the strategies and holistic teachings of the CUT program. According to Ray (1993), *pedagogical* resisters maintain a teacher-centered classroom because they believe that students are either unmotivated or not intellectual enough. In *Empowering Education,* Ira Shor (1992) refers to the classroom's "alien culture" (p. 138) which resisters often feel prevents them from being noticed or heard. Given the emphasis on student engagement, the CUT program was alien to what Matt experienced in his own classroom as a student and in watching his supervising professor. Matt could also be considered an *epistemological* resister because he rejected educational psychology theories pertaining to learning and motivation. I witnessed Matt's resistance at every CUT workshop, for even though he did not comply with the teaching strategies offered, he complied with the program requirement of attending Friday sessions regularly.

Danny, also a Sociology major, claimed he found little value in most of the CUT program, although he did find his teaching experiences to be positive. Yet on the occasions that I observed Danny teach, he used few active learning elements and relied mostly on lecture. In his teaching logs, his negative attitude was difficult to ignore and even more difficult to influence. Danny admitted "he often [felt] bored in any learning environment," so I was challenged to understand why he would remain in the CUT program and surprised that he planned to continue his education at the doctoral level. Danny was a *pedagogical* resister because he did not believe in the teaching strategies the program offered; he was a *rhetorical* resister because he did not think anything other than lecture was appropriate for the college classroom. In sum, Danny's *pedagogical* and *rhetorical* resistance contributed to his overall dissatisfaction with the CUT program and resulted in his classification as a low implementer of active learning strategies.

Eric was a master's student in History; his thesis was so impressive it was accepted for publication. Clearly, Eric was a serious student. At the CUT workshops he sat alone and had to be coaxed to work with his peers during small group activities. Based on our conversations, I knew that Eric had struggled with a difficult personal and academic past, which may have contributed to his defensive

attitude. But whereas Eric was passively resistant in CUT Units 1 and 2, he was actively resistant in the Practicum. As a teaching assistant, Eric was the discussion leader for an introductory History course and worked with a professor in his department who led the lecture. So even though Eric formulated his teaching logs into four basic questions—*What were the day's goals and strategies? What worked well? What didn't? What would you do differently next time?*—his responses were terse. Although he discussed what he did in class, he did not reflect on his teaching.

I hypothesized that there were several reasons why Eric was a resister. First, he preferred working alone and resisted peer response, declaring it intrusive and unnecessary. This mindset translated into the classroom—he would rather speak authoritatively to his students than work with them. Another contributing factor was his field—History is most often taught in a traditional lecture format, and it is doubtful that Eric had witnessed other types of pedagogical approaches from his professors. Most likely CUT's emphasis on de-centered teaching curriculum was new to Eric, so it was easier for him to resist than be uncomfortable trying to enact them in the classroom. Further, at the time he took the Practicum, Eric was focused on completing his master's thesis and applying for doctoral programs. Most likely, he wanted to please his professor and did not want to risk using teaching methods that he perceived to be out of his field's norm, if not inferior.

Oppositional resistance. Whereas Matt, Danny, and Eric were *pedagogical*, *rhetorical*, and *epistemological* resisters, Lesley could be classified as *oppositional*. She was distracted in CUT workshops and spent her time during group activities socializing with peers or misdirecting them away from relevant discussion, behaviors which Shor (1992) describes as resisting authority. On many occasions I had to ask Lesley to focus on the task at hand; likewise, I wrote in my field notes that Lesley did not appear to take the workshops seriously, for she regularly arrived late, rarely paid attention (e.g., surfing the internet and reading email), refused to participate, and generally exhibited a lack of respect for her peers and for the CUT program director. Shor (1992) calls this behavior "getting by," an *oppositional* strategy characterized by defensive and negative behavior used to manipulate teachers (p. 138).

Lesley's lack of professionalism carried over into her teaching. I visited her classroom separately on two occasions and once with my colleague. Lesley's class (ironically, Educational Psychology) was taught in a computer classroom, which meant the students sat in fixed rows with a computer in front of them. Each time I observed, I saw the same environment: approximately the first 15 minutes of class consisted of small talk with no instruction; worse, there was little evidence of preparation; limited control of the classroom (students were shopping online, visiting social network sites, doing homework); and no instructional objectives. In sum, Lesley's behavior mirrored that of her students—and vice versa. During my debriefing sessions following her teaching observations, Lesley declared she was committed to positive changes in the classroom, but could not articulate specifics on what strategies she would use, and I found no improvements in subsequent visits. As a result, Lesley did not receive a certificate of completion for the Practicum and left the CUT program before completing the final unit.

Like Lesley, Elliott was *oppositional*. Elliott was a Philosophy TA and taught medical ethics during the semester I observed. My colleague conducted the first observation three weeks into the semester, when she noted that

> the classroom climate was a little reserved and the mix of teacher talk and student talk was 75/25. I didn't see any active learning strategies. Worse, he used inappropriate examples including revealing a family member's sexually transmitted disease out of context, when a more suitable example, with as much if not more relevance could have been used.

My colleague discussed her concerns with Elliott in their debriefing, explaining that his comments could be problematic and advising him to be more careful in his examples. I observed Elliott one month later for his second visit. He arrived at least five minutes late and spent most of the class period off topic with little to no student involvement. While I noted that he seemed confident and appeared comfortable in front of the class, in a medical ethics example, he gave more revealing information about a recent physical exam he had. Not only were these comments inappropriate, they also suggested a misuse of authority. Though the subject matter of the course was medical ethics which allowed for sensitive information to be discussed, Elliott's choices clearly made students uncomfortable, as whole class discussion ceased.

I discussed Elliott's comments with my colleague, and then I met with him to review his conduct. It is important to note that the CUT program is voluntary, and there is an agreement with the TAs that their performance is not reported to their superiors unless I witness highly egregious behavior. Otherwise, it is the responsibility of TAs' supervising professors and/or department chairs to monitor them. My role is to serve as an advocate for the TAs and to help them make pedagogical and classroom management choices that contribute to an effective classroom. But Elliott's comments, while out of place and unprofessional, were just one part of his resistance — he also stopped writing teaching logs prior to my visit, and shortly after our discussion, dropped out of the CUT program.

Elliott is another example of *oppositional* resistance. I suspected he was a resister given his behavior both in and out of the classroom. At the pre-semester Graduate Student Professional Development Conference and during every CUT workshop, Elliott sought attention via inappropriate comments. Needless to say, he did not receive an abundance of positive response from either my colleague or me following his teaching observations, so he may have felt marginalized. It is important to note that he and Lesley sat next to each other at CUT workshops and were almost always off task together, so perhaps they both felt like outsiders. According to Shor (1992), Elliott and Lesley established a "peer group identity based on their prestige as rebels"—though their peers were not impressed (p. 139).

Rhetorical resistance: Rule-governed cultures. TAs Rena and Beth shared similar characteristics: they were both pursuing their MAs in English, they taught the same courses, and they came from rule-governed cultures. These cultures, which were patriarchal and did not focus on the development of a female as an intellectual, appeared to affect their roles in the classroom. Rena was raised in a highly religious community. And while modern religious women have more educational opportunities than their foremothers, in Rena's culture, women are still assigned traditional gender roles of wife and mother first. Beth was Asian-American. Joel Spring (2006) notes that "in Confucian tradition, the teacher is an extension of the parent. Teachers are given a great deal of respect and status. Students are expected to obey and respect their teachers in the same ways they respect their parents" (p. 155). My observations confirmed that Beth held this belief.

In spite of the intensive pedagogical training they received in their home department and in the CUT program, Rena and Beth were clearly teacher-centered in their approach. Both women lectured from the front of the classroom, and neither drew on any of the CUT teaching strategies. Rena appeared more open than Beth in discussing ways to improve her teaching; however, she resisted making any changes in the classroom. Each woman discussed her cultural influences with me during our teaching debriefings and attributed her teaching style in part to environment. I observed each of them during the Practicum, and noted that they were rather inaccessible as instructors and somewhat distant from their students. In a class of which one quarter were minority students, Beth made disparaging remarks about rampant illiteracy in the African-American community; in her computer classroom, Rena lectured on grammar and mechanics but did not follow

through with practical applications. My colleague corroborated my observations during her own visits.

It was not until the end of that semester when I compared Rena and Beth's backgrounds and teaching styles that I recognized similar patterns. Both women were *rhetorical* resisters, for they questioned the appropriateness of using CUT strategies in the classroom context. Because each woman still strongly identified with her own culture and because the values of those cultures were highly traditional and rule-governed, there appeared to be a transfer into the classroom. It is possible that Rena and Beth found value in CUT strategies; whether they applied them as new faculty is unclear.

Discussion

I had hoped that the resisters would engage in parallel cycles like their more successful peers; however, this group had difficulty not only with their teaching but also in achieving metacognition and self-awareness. In analyzing the findings, I looked closely at my own behavior toward the resisters. I realized that my professional and personal beliefs became increasingly blurred as I grew uneasy and frustrated with the students during the Practicum. I wanted the TAs to succeed and I attempted to give them specific strategies and encouragement in writing and during our debriefings. But as their teaching logs continued to be indifferent, condemning, and tangential, and when my second and third observations showed little to no enactment of strategies, I felt deflated as a practitioner. The action research cycle of observation, reflection, action, and evaluation was affected as I struggled to connect with them. While I remained professional even when some participants in this group became defensive, I had to consider that my frustration may have prevented me from approaching them differently. I admittedly had less patience for this group and at times likely entered their classrooms focusing more on what was wrong rather than what was working. Had I kept our expectations more neutral I might have identified some positive behaviors.

…as their teaching logs continued to be indifferent, condemning, and tangential, and when my second and third observations showed little to no enactment of strategies, I felt deflated as a practitioner.

Obviously, it was difficult not to make assumptions about the participants over the course of this study and resist the temptation to oversimplify the reasons for their pedagogical choices and subsequent categorizations. Even as I carefully reviewed and coded the data, I wondered how and if my beliefs affected the participants and influenced their subsequent behavior. Certainly, my educational, pedagogical, and cultural background shaped my curricular choices as well as my expectations. Other participants, who had highly positive experiences, viewed me as a mentor, but those who had considerable difficulty with the program and those who left did not connect with me as a teacher or mentor; consequently, I cannot help but consider my role in the resisters' outcomes.

At the same time, the students' attitudes and beliefs informed their behaviors. In a five-year study of graduate composition TAs, Ebest (2005) concluded that the "resistant few were unable to overcome their resistance because constructivist pedagogy contradicted their personal constructs and threatened their sense of self-efficacy" (p. 65). The term *personal construct*, developed by psychologist George Kelly (1955a, 1955b), represents a person's worldview. Personal construct is built on one's past experiences, relationships with others, thoughts and actions based on culture and environment. The more firmly rooted one's personal construct, the more difficult it is to change. In this study, personal construct serves as a lens through which the TAs viewed education, teaching, and their roles in the academic environment.

The resister group shared a narrow worldview of teaching. None of them were open to constructive criticism, although that was the primary purpose of the

Practicum. Because of their personal constructs and (apparent) low sense of self-efficacy in the classroom, they demonstrated one or more of the following types of resistance: *rhetorical, pedagogical, epistemological*, or *oppositional*. The *oppositional* participants were the most difficult to work with because they did not take the CUT program seriously, as evidenced by their failure to complete it. CUT rarely has an attrition issue since it is voluntary, so I took their decisions personally. This group also appeared to benefit least from the program, yet from my perspective, they needed CUT the most. Consequently, focusing on this group is one of the most important ways to improve the CUT curriculum. How do we reach them? First, we must recognize our students' academic contexts:

1. Their prior teaching experiences;
2. The teaching models they observed;
3. Their disciplinary areas;
4. Their motivation (e.g., Psychology and Political Science required attendance, while other disciplines ranged in attitude from indifferent to hostile to the CUT program).

Second, it is important to note that the resisters did not learn how to reflect by the end of the Practicum either because they lacked the metacognitive skills, they needed more modeling, or they did not value reflection as part of the teaching process. Because this group displayed various levels and types of resistance, it is most difficult to understand their motivation for completing the CUT program. To address this issue, I suggest the following strategies.

Build in More Opportunities for Reflection

This decision has been addressed by Schon (1995) and Brookfield (1995) and builds on one of the pedagogical competencies proposed by Kalish et al. (2012) that graduate students should "learn to assess and improve their own teaching performance through critical reflection" (para. 10). To teach reflective strategies, a minimum of four reflections are required on the CUT workshops during both fall and spring semesters to be submitted in an electronic research log. More frequent opportunities for face-to-face reflection, including practicing listening and mirroring classroom experiences in dyads, and semi-structured small group dialogue built into workshop time will further prepare teaching assistants for critical thinking and understanding. In addition to preparing TAs for reflective practice during their teaching practicum, written journals with facilitator feedback have a number of benefits:

- Professionalism: they will inculcate in graduate students the habit of reflecting on their teaching and research (Austin & McDaniels, 2006; Ferraro, 2000; Kane, Sandretto & Heath, 2004).
- Accountability: the self-awareness entailed in reflection should draw attention to the value of practicing strategies introduced in the CUT workshops.
- Retention: critical reflection should positively impact TAs' teaching, which in turn may influence undergraduate retention (McAlpine & Weston 2002; Osterman & Kottkamp, 2004).
- Specificity: periodic reflections will provide details for TAs' Teaching Philosophy and map their grasp of pedagogical strategies when developing the reflective introduction to their teaching portfolios.
- Assessment: reflections will provide qualitative data to evaluate and revise the CUT curriculum.

New Directions

Remind ourselves that contextual factors play a significant role in shaping TAs' personal constructs. Contextual factors—including learning style, modeling, personality, motivation, culture, attitude, engagement, workload, and freedom of choice—situate a community of practice and its individuals and give educators a way to unpack these influences in a more nuanced way. Acknowledging the various contributors to graduate students' learning and teaching process will help TA coordinators work with their program participants more effectively. TA coordinators need to practice what we preach: maintaining reflective logs, looking for patterns, and recognizing our own biases models this behavior for our students and allows us to be critically reflective practitioners.

Offer more opportunities to observe good teaching. Many participants in the resister group did not have professors in their own departments who practiced active learning in the classroom, so it is not surprising that they did not embrace CUT strategies. Consequently, my colleague and I have begun to identify professors in each discipline who model active learning strategies for TAs to observe. Moreover, offering opportunities for CUT participants to observe good teaching, especially in their own discipline, builds on the vicarious experience aspect of self-efficacy. Further, experienced TAs can serve as strong pedagogical models as there is less of a differential in status and power between peers (Long, Holberg, & Taylor, 1996).

Expand mentoring opportunities. The CUT program offers a mentoring component in which participants are paired with a professor at an institution of their choice for a day, shadowing the professor in class and at professional activities. While this is certainly a positive experience, the short interaction does not allow for a more developed relationship to form. It is worthwhile to consider an e-mentoring program for CUT participants. This component would be especially beneficial for the resisters, who would have the opportunity to build a strong relationship with a professor in their field and provide an additional positive resource.

Increase lines of communication. One of the strategies faculty use with undergraduate students struggling in our courses is to hold individual conferences to ascertain why they are having difficulty. This time allows us to find ways to help the student with the course, to problem solve when necessary, and perhaps most importantly, to show students that we care about their learning and progress. So in addition to written responses to the teaching logs and post-observation debriefings, it would be beneficial for Practicum participants to meet with me more frequently. In the resister group, each participant was visibly uncomfortable and defensive during their debriefing session. Perhaps if we met before their first observation, these students would have a chance to express their fears and explain their philosophies. More importantly, we might listen more effectively, which could give the resisters a sense of agency and help participants work through and/or overcome their resistance.

Clearly, not every graduate student will embrace constructivist theory if it conflicts with his/her personal constructs. But keeping in mind that the main goal of TA training is to help graduate students become effective educators, TA developers can benefit from reflecting on how they function as teachers and mentors, for this will help them to model best teaching practices.

Realize that resistance can help empower transformative teaching. While working with this group certainly had its challenges, I was with them for a finite amount of time. Future studies may focus on teaching experiences and styles of former teaching assistants as they begin their first professional and academic positions to examine the possible impact their TA training program had on them. Admittedly, learning to teach effectively is an ongoing process; because I did not

see immediate willingness to engage students from the resisters does not mean they did not learn from the CUT program.

Conversely, at the time of this study, I have revealed that I had some resistance in being open to the varying levels of preparedness of CUT teaching assistants. This experience has taught me that in reflecting on my own resistance in the process I have improved my own teaching and training methods for students. As a result, I am more cognizant of meeting students where they are.

References

Abbott, R. D., Wulff, D. H., & Szego, C. K. (1989). Review of research on TA training. In J. D. Nyquist, R. D. Abbott, & D. H. Wulff (Eds.), *Teaching assistant training in the 1990s* (pp. 111-124). San Francisco, CA: Jossey-Bass.

Austin, A. E., & McDaniels, M. (2006). Preparing the professoriate of the future: Graduate student socialization for faculty roles. In J.C. Smart (Ed.), *Higher education: Handbook of theory and research (*Vol. XXI, pp. 397-456). Netherlands: Springer.

Brookfield, S. (1995). *Becoming a critically reflective teacher*. San Francisco, CA: Jossey-Bass.

Bruner, J. (1991). The narrative construction of reality. *Critical Inquiry*, *18*(1), 1-21. Retrieved from http://criticalinquiry.uchicago.edu/

Davis, S., & Kring, J. (2001). A model for training and evaluating graduate teaching assistants. *College Student Journal*, 45-51. Retrieved from http://www.preparing-faculty.org/model-GTAs.pdf

Ebest, S. B. (2005). *Changing the way we teach: Writing and resistance in the training of teaching assistants*. Carbondale, IL: Southern Illinois University Press.

Ferraro, J. M. (2000). Reflective practice and professional development. Retrieved from ERIC database. (ED449120)

Gaff, J. G., Pruitt-Logan, A. S., Sims, L. B., & Denecke, D. D. (2003). *Preparing future faculty in the humanities and social sciences: A guide for change*. Washington, DC: Council of Graduate Schools and Association of American Colleges and Universities.

Giroux, H. A. (1983). *Theory and resistance in education*. South Hadley, MA: Bergin & Garvey Publishers, Inc.

Glaser, B. G., & Strauss, A. L. (1967). *The discovery of grounded theory: Strategies for qualitative research*. Chicago, IL: Aldine.

Kalish, A., Border, L., Chandler, E., Gilmore, J., Griffith, L., Hansen, S.,... Von Hoene, L. (2012, October 24). *Designing a competency-based approach to graduate and professional student development*. Presentation at the Professional and Organizational Development Network in Higher Education Annual Conference, Seattle, WA.

Kane, R., Sandretto, S., & Heath, C. (2004). An investigation into excellent tertiary teaching: Emphasizing reflective practice. *Higher Education*, *47*, 283-310. Retrieved from http://link.springer.com/journal/10734

Kelly, G. (1955a). *A theory of personality: The psychology of personal constructs*. New York, NY: W.W. Norton.

Kelly, G.A. (1955b). *The psychology of personal constructs, vol. 1: A theory of personality, vol. 2: Clinical diagnosis and psychotherapy*. New York, NY: Norton.

Korpan, C. (2014). From teaching assistant (TA) training to workplace learning. *Collected Essays on Teaching and Learning*, *7*(2), 1-8. Retrieved from http://celt.uwindsor.ca/ojs/leddy/index.php/CELT

Lewis, K. G. (2002). When teaching assistants teach teaching assistants to teach: An historical view of a teacher preparation program. In B. P. Pytlik & S. Liggett (Eds.), *Preparing teachers of college writing: Histories, programs, theories, and practices* (pp. 40-49). New York, NY: Oxford University Press.

Long, M. C., Holberg, J. H., & Taylor, M. M. (1996). Beyond apprenticeship: Graduate students, professional development programs and the future(s) of English studies. *WPA, 20:1/2,* 66-78.

McAlpine, L., & Weston C. (2002). Reflection: Issues related to improving professors' teaching and students' learning. In N. Hativa & P. Goodyear (Eds.), *Teacher thinking, beliefs and knowledge in higher education* (pp. 59-78). Netherlands: Kluwer.

Nyquist, J. D., Abbott, R. D., & Wulff, D. H. (Eds.). (1989). *Teaching Assistant training in the 1990s: New directions for teaching and learning.* San Francisco, CA: Jossey-Bass.

Nyquist, J. D., & Sprague, J. (1998). Thinking developmentally about TAs. In M. Marincovich, J. Prostko, & F. Stout (Eds.), *The professional development of graduate teaching assistants* (pp. 61-88). Bolton, MA: Anker Publishing Company.

Osterman, K. F., & Kottkamp, R. B. (2004). *Reflective practice for educators: Professional development to improve student learning*. Thousand Oaks, CA: Corwin Press.

Park, C. (2004). The graduate teaching assistant (GTA): Lessons from North American experience. *Teaching in Higher Education*, *9*, 349-361. Retrieved from http://www.tandfonline.com/ loi/cthe

Ray, R. E. (1993). *The practice of theory: Teacher research in composition.* Urbana, IL: National Council of Teachers of English.

Schon, D. A. (1995). *The reflective practitioner: How professionals think in action.* Ann Arbor, MI: The University of Michigan.

Shor, I. (1992). *Empowering education.* Chicago, IL: University of Chicago Press.

Speer, N., Gutmann, T., & Murphy, T. J. (2005). Mathematics teaching assistant preparation and development. *College Teaching*, *53*(2), 75-80. Retrieved from http://www.tandfonline.com/ loi/vcol20#.V0TKzqR0zEY

Spring, J. (2006). *The intersection of cultures.* New York, NY: Routledge.

Wulff, D. H., Austin, A., Nyquist, J., & Sprague, J. (2001). The development of graduate students as teaching scholars: A four-year longitudinal study. In D. H. Wulff & A. Austin (Eds.), *Paths to the professoriate: Strategies for enriching the preparation of future faculty* (pp. 46-73). San Francisco, CA: Jossey-Bass.

Carolyn I. Brown, PhD, is the Writing Center and Plagiarism Prevention Coordinator at Webster University in St. Louis. She teaches in the areas of Education and English, including student teaching, instructional methods, and classroom management, as well as writing. Her research interests include faculty development in student engagement, teaching assistant training, and writing across the curriculum.

An Assessment of the Scholarship of Teaching and Learning in Public Administration from 2009-2013

Rebekkah Stuteville, PhD
Associate Professor of Public Administration
Park University

Eric Click, PhD
Associate Professor of Public Administration
Park University

The acceptance of the Scholarship of Teaching and Learning (SoTL) as a legitimate form of scholarly investigation and the shape that it takes in post-secondary education are inherently discipline-specific. This paper examines how the character and heritage of public administration influence the acceptance of SoTL, and the form that it takes. It argues that the applied nature of public administration and its interdisciplinary character have influenced SoTL in the discipline. This study concludes systematic self-reflection by disciplines may be needed to identify potential factors that limit the acceptance and/or direction of SoTL in a discipline.

The Scholarship of Teaching and Learning (SoTL) is a form of scholarly inquiry into teaching and learning that is "systematically assessed," evaluated for its "effectiveness on learning," and is subjected to peer review (Hamann, Pollock & Wilson, 2009, p. 730). Thus, SoTL is of potential interest to anyone who is concerned with the effectiveness of teaching and student learning in the classroom. In spite of its broad applicability to a number of disciplines, SoTL is an academic investigation model that must be tailored and integrated into each specific discipline. As explained by Huber and Morreale (2002), "Teaching and learning are, in the end, not the same across the fields" (p. 2). SoTL derives its legitimacy and substance from each academic discipline. SoTL is "context-specific" (McKinney, 2013, p. 2). The degree to which SoTL is accepted varies by academic discipline, and the form that it takes is shaped by each discipline.

This research explores SoTL from the perspective of one discipline—public administration. It seeks to determine whether the character and heritage of public administration influence the acceptance of SoTL and the form that it takes in the discipline. The paper begins with an explanation of the complexities of defining public administration as an academic discipline and how this affects SoTL. Next, the current direction of SoTL in public administration is analyzed through an examination of abstracts published in *The Journal of Public Affairs Education (JPEA)*. The paper includes a discussion of how contemporary trends in SoTL reflect longstanding issues and conflicts in public administration. It concludes with an examination of how this case study may inform other disciplines outside of public administration.

Review of the Literature

There is general agreement that SoTL is grounded in the academic disciplines (Hamman et al., 2009, p. 731). Huber and Morreale (2002) explain that

> Each discipline has its own intellectual history, agreements, and disputes about subject matter and methods that influence what is taught, to whom, when, where, how and why. Each has a set of traditional pedagogies, such as lab instruction and problem sets in the sciences, and its own discourse of reflection and reform. (p. 2)

The academic framework that defines each discipline influences SoTL in a number of ways which include: (a) The acceptance of SoTL by a discipline and (b) The expression of SoTL within the discipline.

Researchers have studied and identified some of the disciplinary variations regarding the acceptance of SoTL. For example, Witman and Richlin (2007) examine the extent to which the humanities, natural sciences, professions, and social sciences have integrated SoTL through conferences and publications. Public administration is not often identified in these discipline-specific discussions of SoTL, and, at best, public administration is considered a subset within political science in these conversations.

In some respects public administration presents a special case for SoTL since the discipline has struggled to define itself, and it is often positioned between political science and the management sciences. Public administration, however, does not fit neatly into the discipline of political science, nor does is fall exclusively into the domain of the management sciences. It defies disciplinary definition due to its interdisciplinary nature, which draws upon areas such as sociology, economics, and social psychology (Waldo, 1984, p. xix) as well as law, economics, anthropology, criminology, social work, medicine, engineering, and logistics (Shafritz, Russell, & Borick, 2013, p. 21). As public administration theorist Dwight Waldo famously explained, public administration is an "'enterprise' [that] contains many facets, perspectives, interests, and methodologies, and it is eclectic, experimental, and open-ended in addressing the problems of an untidy, swiftly changing world" (as cited in Fry & Raadschelders, 2014, p. 421).

The scholarship of teaching and learning within public administration reflects what Rutgers refers to as the discipline's "identity crisis" (Rutgers, 2010, p. 1). Within the field, the acceptance of SoTL is somewhere in between political science and management. The field is more accepting of SoTL than political science, but it has not embraced SoTL as fully as the management sciences.

Political science is on the more conservative end of the continuum of acceptance, and it was relatively slow to adopt SoTL when compared to other social sciences (Hamman et al., 2009, p. 729). According to Reeher, the "professionalism and drive toward professionalism [in political science] have been marked by aspects that suggest some particular tensions for the scholarship of teaching and learning and those who are most concerned about it" (as cited in Clarke et al., 2002, p. 226). Reeher attributes the drive to professionalize to political science's need for legitimacy and funding until the 1950s (as cited in Clarke et al., 2002).

Like political science, public administration struggled with professionalization and legitimacy, which may constrain its acceptance of the scholarship of teaching and learning. Public administration is still wrestling with professionalization, and there is not agreement on whether or not it meets the standards of a profession. On the one hand, scholars argue that public administration meets the core requirements of professionalization, which include a "body of academic and practical knowledge . . . [and] standard of success . . . [concerned with] serving the needs of society" and "a system of control over the professional practice" (Shafritz et al., 2013, p. 22). On the other hand, scholars and practitioners still debate the two "professional touchstones"—acceptance of the same basic methodologies and literature (Goodin & Klingemann, 1996, pp. 14-15)—in public administration. Public administration's quest for legitimacy and acceptance as a profession may make it more reluctant than other disciplines to embrace SoTL.

In contrast to political science, management sciences were early adopters of SoTL. As early as 1975, a newsletter was published on the teaching of organizational behavior (Bilimoria & Fukami, 2002, p. 126). The acceptance of SoTL in management has continued to grow through the Academy of Management's Education and Development Division, multiple management-related journals for the scholarship of teaching and learning, and books on management education (pp. 126-127). Bilimoria and Fukami (2002) argue that one reason why SoTL has thrived in the management sciences is that there is

> a fundamental synergy between the content of our discipline and the substance of the scholarship of teaching and learning. Perhaps more than most disciplines, management is one in which *how* teachers teach and the tools they use closely mirror important aspects of *what* they teach about the nature and functioning of the phenomena. (p. 129)

Like the management sciences, public administration is an applied science, which may lend itself to the same type of "synergy between the content of [the] discipline and the substance of the scholarship of teaching and learning" (Bilimoria & Fukami, 2002, p. 129). The relatively early acceptance by public administration of SoTL as a form of scholarly inquiry, when compared to political science, is evident in the creation of the *Journal of Public Affairs Education* (Witman & Richlin, 2007) in 1994. This journal continues to maintain a solid reputation in the field. However, the *Journal of Public Affairs Education* is still one of the few journals dedicated to the scholarship of teaching and learning in public administration.

The degree to which SoTL has been accepted by the discipline is grounded in public administration's character and heritage.

Public administration appears to have accepted SoTL more readily than political science, but it has not been as aggressive as the management sciences in creating additional forums for disseminating the scholarship of teaching and learning. As with political science, public administration's search for professionalization has restrained its acceptance of SoTL. However, its status as an applied science moves it closer to the management sciences.

The degree to which SoTL has been accepted by the discipline is grounded in public administration's character and heritage. The following analysis of abstracts from the *Journal of Public Affairs Education* (2009-2013) will demonstrate that the discipline's history and debates have also influenced the form that SoTL has taken. The next section will explore how the academic framework of public administration has influenced the expression of SoTL in the discipline.

Method

The purpose of this case study investigation is to examine the acceptance of SoTL in public administration, determine the form of SoTL within the discipline, and assess what the current trends tell us about the field. In order to assess the form and trends of SoTL in public administration, the investigators engaged in a multi-step process.

Case studies are utilized in answering "how" and/or "why" questions, particularly when the researcher has minimal to no control over events and the primary focus is on contemporary phenomenon within a reality context (Yin, 2003). These types of case studies are often explanatory in nature, complemented by exploratory and descriptive research. In general, the how and why require researchers to follow operational links over time, instead of isolated occurrences (Yin, 2003, pp. 1-6).

The investigators began by establishing the possible categories for research in the areas of teaching and learning. The categories were derived by evaluating the definitions of SoTL from the University of Queensland (n.d.), the University of Central Florida (2004), the Carnegie Foundation for the Advancement of Teaching, Indiana University at Bloomington, Western Carolina, and Illinois State University (as cited in University of Central Florida, 2004). The review of definitions yielded six possible SoTL categories: Instructional Approaches/Pedagogy, Learning Processes, Curricula, Learning Materials, Assessments, and Other. The investigators did not establish pre-determined definitions for each category; however, as part of the classification process, the following definitions were created by the authors. One, *Instructional Approaches/Pedagogy* are approaches to delivering curriculum. Examples of subjects included in this category are online education,

simulations, experiential learning, and service learning. Two, *Learning Processes* are research on how people learn. Examples of subjects included in this category are learning values and cognitive skills. Three, *Curricula are* the academic content of courses and programs. Examples of subjects included in this category are discussions of methodology, budgeting, nonprofit, and policy-making in courses or programs. This category also included articles on training programs, core competencies, and undergraduate education. Four, *Learning Materials are* academic learning tools. Examples of subjects included in this category are web tools and tests. Five, *assessments are* direct and indirect measures of assessment. Examples of subjects included in this category are learning outcomes, focus groups, surveys, and student evaluations.

Next, *JPAE* was selected for evaluation since it is the leading public administration publication that is dedicated to the scholarship of teaching and learning. The publisher, the Network of Schools of Public Policy, Affairs, and Administration (NASPAA, 2015), states,

> The *Journal of Public Affairs Education (JPAE)* is dedicated to advancing teaching and learning in public affairs, which includes the fields of public policy analysis, public administration, and public management…The quarterly journal features peer-reviewed scholarly articles on pedagogical, curricular, and accreditation issues pertaining to public affairs education, commentaries and symposia and book reviews. (para. 14)

Abstracts from 2009-2013 were chosen since the emphasis is on current trends. A total of 149 abstracts were published during this time period.

The investigators categorized abstracts from 2009-2013 from *The Journal of Public Affairs Education* into the categories listed above (Instructional Approaches/Pedagogy, Learning Processes, Curricula, Learning Materials, Assessments, and Other). The investigators individually classified the subject matter of the abstracts, and they noted current trends in each area. The investigators then met to reconcile their findings. Their initial rate of agreement was 54%. The low level of initial agreement may be traced to a number of factors. One of the primary reasons is that the definitions for each category were not determined in advance, but evolved during the classification process. Additionally, the categories of learning processes and learning materials are connected to the implementation of instructional approaches/pedagogy. As a result, learning process and learning materials may be classified as subcategories of instructional approaches/pedagogy or collapsed into one instructional approaches/pedagogy category. Likewise, curriculum and assessment are difficult to separate in both definition and practice. Assessment and curriculum often go hand and hand, especially relative to accreditation, both driving, informing, and affecting one another. After discussion and debate, the investigators came to agreement on 100% of the abstracts. The results reflect this agreement.

Finally, in an attempt to overcome the limitation of using one journal for the study, the researchers also reviewed the American Society of Public Administration National Conference Programs (2009-2013) to determine if trends regarding SoTL were evident in the presentation abstracts. These presentation abstracts were searched for the terms “teaching” and “learning.” Each program contained a maximum of two presentation abstracts containing these words. The vast majority of presentations did not have abstracts. Due to the small number of relevant abstracts, the researchers did not classify the articles using the categories listed above and did not include the findings. However, this examination of the conference abstracts does imply that SoTL may still be struggling for acceptance by academics and practitioners in the discipline.

Results

The coding of the 149 journal abstracts resulted in the identification of six categories by the researchers. Description findings for each category are presented in the subsequent paragraphs.

Instructional Approaches/Pedagogy: Thirty percent (*n* = 44) of the abstracts emphasized instructional approaches or pedagogy. The peak years for articles on instructional approaches or pedagogy were 2009 (14 abstracts) and 2012 (16 abstracts). The emerging trends in this area include distance learning (online) and technology strategies, including often overlapping applications, and also experiential/service learning.

Learning Processes: Only one percent (*n* = 2) of the abstracts focused on learning processes. Due to the small number of abstracts, there are no emerging trends.

Curricula: Thirty-four percent (*n* = 51) of the abstracts examined curriculum. Articles on curriculum were at their peak in 2010 and 2011. The emerging trends in this area include enhancing both the public budget/finance and non-profit curriculum, partnerships with local government, and comparative analysis of international programs and institutes.

Learning Materials: Three percent (*n* = 5) of the abstracts discussed learning materials. As with learning processes, emerging trends cannot be reported.

Assessments: Nine percent (*n* = 13) of the abstracts featured assessment. The number of articles was fairly evenly distributed over the five year period with two to four articles published on assessment each year. There are no clear emerging trends in this area, only various forms of evaluation.

Other: Twenty-three percent (*n* = 34) of the articles were on topics not included in the classification system. The "other" topics were fairly evenly distributed with five to eight articles on "other" topics each year. The emerging trends in this area include exploration and impact of culture and social class, both domestically and globally. See Figures 1 and 2 for visual display of these categories across the five conference years.

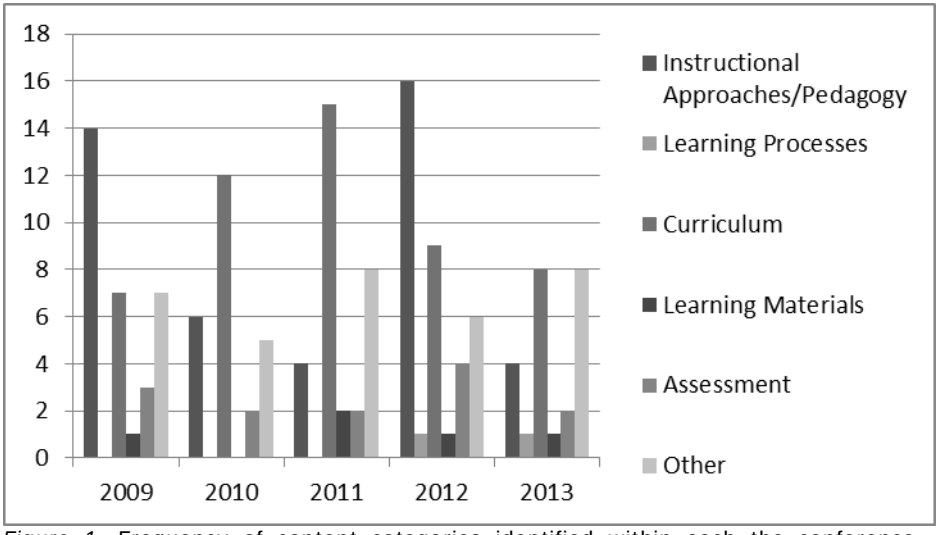


Figure 1. Frequency of content categories identified within each the conference programs from 2009 to 2013.

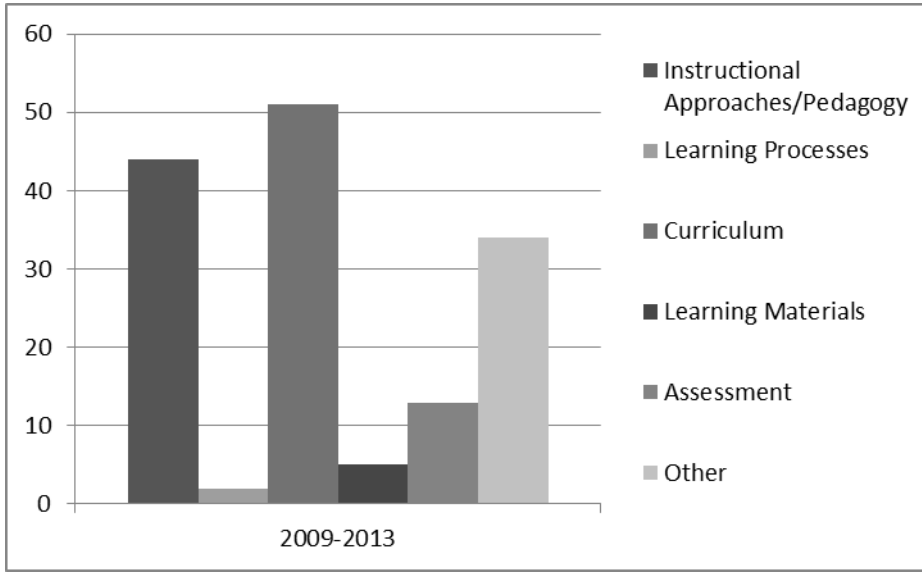


Figure 2. Five-year frequency aggregate of journal articles across each of the classification categories.

Discussion

Limitations

There are a number of limitations to this study. One significant limitation is that only one journal was used for evaluation, and there is the possibility of editorial bias. During this time period, articles in *JPAE* ranged from only two to over ten per issue, which could indicate a lack of submissions and/or theming of articles at times. Further, for this research, the classification of the abstracts into each of the identified categories is considered to reflect the intent of the author(s). This intent may or may not match the actual article. Abstracts were the sole basis for debate and classification. Finally, as a case study, the findings are not intended to be generalizable, but simply provide lessons learned. However, researchers could attempt to utilize similar methodology in examining other disciplines, including the possible academic-professional dichotomy, through individual discipline specific SoTL journals. The University of Central Florida's Faculty Center for Teaching and Learning (FCTL) currently provides a comprehensive list of discipline SoTL journals.

Conclusions

The data demonstrate that the focus of SoTL in public administration from 2009-2013 was on instructional approaches/pedagogy, curricula, and "other" topics. Attention was given to learning processes, learning materials, and assessments, but these areas were not as significantly represented. The findings reveal that the applied nature and interdisciplinary aspects of public administration influenced SoTL in the field.

In the area of instructional approaches, the data show an emphasis on service learning and various forms of experiential learning, including community partnerships, case studies, role playing and simulations. These findings are not surprising. The discipline of public administration embraces both theory and practice, and the instructional approaches reflect the desire to connect the two. For example, as explained by Dicke, Dowden, and Torres (2004), the goals of service learning complement the mission of many graduate public administration programs

since both promote civic engagement, political activism, and a commitment to the public interest. The emphasis on applied learning in the abstracts indicates that public administration faculty are concerned with "the promotion of democracy and the solving of real-world problems" (Bryer, 2011, p. 91), and they want to integrate these objectives into the curriculum.

In the area of curricula, curriculum is increasingly informed by the primary accrediting body in the field, NASPAA, which also publishes *JPAE*. *JPAE* is also the journal of the ASPA's Section on Public Administration Education. ASPA (2015) "is the largest and most prominent professional association for public administration. It is dedicated to advancing the art, science, teaching and practice of public and non-profit administration" (para. 1). Thus, Public Administration programs are analyzing, debating, and changing curriculum. Further, the curricula trends of public budget/finance and non-profit curriculum indicate that the discipline is still trying to define itself, both academically and professionally.

In the category of "other", the trends demonstrate an emphasis on the impact of culture and social class, both domestically and globally. As programs become more global in nature, their curriculum, workforce development, and student population will all become more diverse. This diversity will influence the program missions, learning outcomes, and goals.

As this analysis demonstrates, public administration's interdisciplinary character causes it to struggle to become recognized as a profession. The discipline's applied nature has also influenced the degree to which it has accepted SoTL and the form that SoTL has taken within the discipline. SoTL within public administration truly reflects the discipline's debates, heritage, struggles, and characteristics. An interdisciplinary character, a drive for professionalism, and the desire to connect theory to practice, however, are not unique to public administration. These characteristics are shared by other disciplines such as criminal justice and social work, and these features may arguably provide insight into the possible directions that SoTL may take in these fields.

Rather than generalizing and assuming patterns, however, value exists to discipline-specific examinations of how distinctive disciplinary features may influence the acceptance and type of SoTL in a field. Quinnell, Russell, Thompson, Marshall, and Cowley (2010) argue that academics should explore how their home disciplines constrain the manner in which they interface with the SoTL. They suggest that the "intrinsic natures" (p. 24) of some disciplines as well as their views on what is accepted as "valid evidence" (Quinnell et al., 2010, p. 23) in scholarship may influence their SoTL.

Because of disciplinary peculiarities, it is feasible that a general characteristic that is shared by two different disciplines may actually have different effects on SoTL in an area. For example, it is argued in this paper that the interdisciplinary character of public administration contributed to its search for identity and legitimacy. This disciplinary ambiguity may have constrained the acceptance of SoTL and may have influenced the form SoTL has taken in the discipline of Public Administration. At least one communications scholar, however, believes that communications' interdisciplinary nature is a strength that may help its scholars "be major players in the SoTL movement" (Pope-Ruark, 2012, p. 362). In other words, the same characteristic-interdisciplinarity may be viewed as an obstacle to SoTL or an opportunity for SoTL, depending upon the discipline.

Generic elements of SoTL may cross disciplinary boundaries, and institutional cultures may have significant influence over departmental perceptions of research (Lee, 2007), but this paper argues that academic disciplines have a role to play in determining the degree to which SoTL is accepted and the form it takes. This case study indicates that a discipline's history and character may provide insight into its level of acceptance of SoTL. It also suggests that disciplines may be well served by examining the scholarship of teaching and learning that is currently being produced to assess if it reflects historical biases. Historical biases may limit their exploration of other relevant areas of SoTL inquiry.

References

American Society of Public Administration. (2015). *About ASPA*. Retrieved from http://www.aspanet.org/public/ASPA/About_ASPA/ASPA/About_ASPA/About_ASPA.aspx?hkey=1cda369e-a070-48a6-a661-965c2cd3d2d0

American Society of Public Administration National Conference Programs. (2009-2013). *Presentation abstracts*.

Bilimoria, D., & Fukami, C. (2002). The scholarship of teaching and learning in the management sciences: Disciplinary style and content. In M. T. Huber & S. P. Morreale (Eds.), *Disciplinary styles in the scholarship of teaching and learning: Exploring common ground* (pp. 125-142). Washington, DC: American Association for Higher Education and the Carnegie Foundation for the Advancement of Teaching.

Bryer, T. A. (2011). Linking students with community in collaborative governance: A report on a service-learning class. *Journal of Public Affairs Educatio*n, *17*(1), 89-114. Retrieved from http://www.naspaa.org/JPAEMessenger/Article/VOL17-1/08_17n01_Bryer.pdf

Clarke, S. E., Hutchings, P., Keeter, S., Reeher, G., Alex-Assensoh, Y., & Boyd, F. (2002). Transcript: Roundtable on the scholarship of teaching and learning in political science. *PS: Political Science and Politics*, *35*(2), 223-228. Retrieved from http://www.jstor.org/stable/1554723

Dicke, L., Dowden, S., & Torres, J. (2004). Successful service learning: A matter of ideology. *Journal of Public Affairs Education*, *10*(3), 199-208. Retrieved from http://www.naspaa.org/JPAEMessenger/BackIssues.asp

Fry, B. R., & Raadschelders, J. (2014). Mastering public administration from Max Weber to Dwight Waldo (3rd ed.). Los Angeles, CA: Sage.

Goodin, R. E., & Klingemann, H. D. (1996). Political science: The discipline. In R. E. Goodin & Hans-Dieter Klingemann (Eds.), *The new handbook of political science* (pp. 3-49). New York, NY: Oxford University Press.

Hamann, K., Pollock, P. H., & Wilson, B. M. (2009). Who SoTLs where? Publishing the scholarship of teaching and learning in political science. *PS: Political Science and Politics*, *42*(4), 729-735. Retrieved from http://www.jstor.org/stable/40646679

Huber, M. T., & Morreale, S. P. (2002). Situating the scholarship of teaching and learning: A cross-disciplinary conversation. In M. T. Huber & S. P. Morreale (Eds.), *Disciplinary styles in the scholarship of teaching and learning: Exploring common ground* (pp. 1-24). Washington, DC: American Association for Higher Education and the Carnegie Foundation for the Advancement of Teaching.

Journal of Public Affairs Education. (2009-2013). Abstracts. Retrieved from http://www.naspaa.org/JPAEMessenger/BackIssues.asp

Lee, J. J. (2007). The shaping of departmental culture: Measuring the relative influences of the institution and discipline. *Journal of Higher Education Policy and Management*, *29*(1), 41-55. doi: 10.1080/13600800601175771

McKinney, K. (2013). Introduction of SOTL in and cross the disciplines. In K. McKinney (Ed.), *The scholarship of teaching and learning in and across the disciplines* (pp. 1-11). Bloomington, IN: Indiana University Press.

Network of schools of public policy, affairs, and administration. (2015). *Journal of Public Affairs Education-NASPAA*. The Global Standard in Public Service Education. Retrieved from http://www.naspaa.org/initiatives/jpae/jpae.asp

Pope-Ruark, R. (2012). Back to our roots: An invitation to strengthen disciplinary arguments via the scholarship of teaching and learning. *Business Communication Quarterly*, *75*(4), 357-376. doi: 10.1177/1080569912461051

Quinnell, R., Russell, C., Thompson, R., Marshall, N., & Cowley, J. (2010). Evidence-based narratives to reconcile teaching practices in academic disciplines with the scholarship of teaching and learning. *Journal of the Scholarship of Teaching and Learning*, *10*(3), 20-30. Retrieved from http://josotl.indiana.edu/

Rutgers, M. R. (2010). *Theory and scope of public administration: An introduction to the study's epistemology*. Retrieved from http://www.aspanet.org/public/aspadocs/ par/fpa/fpa-theory-article.pdf

Shafritz, J. M., Russell, E. W., & Borick, C. P. (2013). *Introducing public administration* (8th ed.). Upper Saddle River, NJ: Pearson.

University of Central Florida. (2004). *The definition of SoTL*. Retrieved from http://www.fctl.ucf.edu/ResearchAndScholarship/SoTL/whatIsSOTL/content/Definitions.pdf

University of Queensland. (n.d.). *Scholarship of teaching and learning. Defining the scholarship of teaching at UQ*. Retrieved from http://www.tedi.uq.edu.au/sotl

Waldo, D. (1984). *The administrative state* (2nd ed.). New York, NY: Holmes and Meier Publishers.

Witman, P. D., & Richlin, L. (2007). The status of the scholarship of teaching and learning in the discipline. *International Journal for the Scholarship of Teaching and Learning*, *1*(1). Retrieved from http://digitalcommons.georgiasouthern.edu/ij-sotl/vol1/iss1/14

Yin, R. K. (2003). *Case study research: Designs and methods* (3rd ed.). *Applied Social Research Methods Series: Vol. 5*. Thousand Oaks, CA: Sage.

Rebekkah Stuteville is an associate professor of public administration and associate vice president for academic affairs at Park University. She earned her PhD from the University of Missouri—Kansas City. She has published in the International Journal of Organizational Analysis and the Journal of Public Affairs Education.

Eric Click is an associate professor of public administration and program coordinator of public administration at Park University. He earned his PhD from the University of Texas—Dallas. He has published in Public Integrity and the Missouri Policy Journal.

Call for Papers

Volume 12: *Scholarly Teaching and Learning*

InSight: A Journal of Scholarly Teaching is a scholarly publication designed to highlight the work of postsecondary faculty at colleges and universities across the United States. It is a refereed scholarly journal published annually by the Center for Excellence in Teaching and Learning (CETL) at Park University that features theoretical and empirically-based research articles, critical reflection pieces, case studies, and classroom innovations relevant to teaching, learning, and assessment.

InSight articles focus broadly on Scholarly Teaching. Faculty are encouraged to submit original manuscripts that showcase scholarly teaching processes or critically discuss the scholarship of teaching and learning (SoTL) as a scholarship paradigm. While reports of scholarly teaching projects are welcome, InSight is also committed to continuing broader conversations about SoTL's value as a tool for advancing student learning and demonstrating faculty commitment to teaching.

Faculty are encouraged to submit manuscripts related to:

- Challenges/Responses to the SoTL paradigm
- Developing institution or discipline-specific understandings/definitions of SoTL
- Status reports of SoTL's role in a particular discipline
- Guidance to faculty new to SoTL (on developing inquiry questions, determining methodologies, making SoTL work public, etc.)
- Examples of SoTL projects at the course or discipline-level
- Intersections of SoTL and service-learning, eLearning, learning communities, and other learning initiatives
- Future directions in SoTL
- Cross-disciplinary and cross-institutional collaborations for promoting SoTL

Submission Requirements

- STYLE - All manuscripts must be formatted in APA style.
- LENGTH - Manuscripts may range from 2,000 - 5,000 words (not including abstract, references or appendices). Authors are encouraged to include appendices that promote application and integration of materials (i.e., assignments, rubrics, examples, etc.).
- ABSTRACT - Each manuscript must be summarized in an abstract of 50 to 100 words.
- AUTHOR - Each author should provide his/her full name, title and departmental affiliation, campus address, telephone number, and email address. Each author must also include a brief biography (no more than 100 words per author).
- FORMAT - All manuscripts must be submitted via email as attachments in Microsoft Word or Rich Text Format. Do not include personal identifiers within the manuscript. Include contact information only on a separate cover sheet. Each manuscript will be assigned a unique identifier for blind review processes. Send submissions to cetl@park.edu.
- DEADLINE - All submissions must be received by **4:00pm on March 1, 2017 (CST)** to be considered for inclusion in Volume 12. However, **submissions are accepted on a rolling basis**.

Review Procedures

Submissions will be subject to a double blind peer-review. A manuscript is evaluated based on relevance, practical utility, originality, generalizability, clarity, significance and the extent to which the subject matter contributes to the ongoing development of the scholarship of teaching and learning. Review process and publication decisions will require approximately 12 weeks. Referees' feedback and editorial comments will be provided to the author when revisions are requested. CETL retains the final authority to accept or reject all submitted manuscripts. The publication will be distributed both in print and online in fall 2017.

Copyright

Manuscript submissions are accepted with the assumption that they neither have been nor will be published elsewhere. Authors and CETL will hold joint copyright to all published manuscripts.

Contact

Please address your inquiries to: cetl@park.edu.

Please visit our website at: http://insightjournal.net.

QUICK TIPS: PREPARING MANUSCRIPTS FOR *INSIGHT*

The following "Quick Tips" provide suggestions and guidance for preparing manuscripts for potential publication in *InSight: A Journal of Scholarly Teaching. InSight* is a peer-reviewed publication highlighting the scholarly contributions of postsecondary faculty. As is the nature of refereed journals, acceptance and publication of original manuscripts is a competitive process. The goal of the following information is to assist faculty in preparing manuscripts in a manner that maximizes the chances of publication.

Preparing the Manuscript

The organization and style your manuscript will be largely dictated by the type of submission (e.g., theoretical, empirical, critical reflection, case study, classroom innovation, etc.). Thus, while guidelines will follow to assist you in preparing your manuscript, the key to successful submission is clear, effective communication that highlights the significance and implications of your work to post-secondary teaching and learning in relation to the target topic. To prepare and effectively communicate your scholarly work, the American Psychological Association (2010) provides the following general guidelines:

- Present the problem, question or issue early in the manuscript.
- Show how the issue is grounded, shaped, and directed by theory.
- Connect the issue to previous work in a literature review that is pertinent and informative but not exhaustive.
- State explicitly the hypotheses under investigation or the target of the theoretical review.
- Keep the conclusions within the boundaries of the findings and/or scope of the theory.
- Demonstrate how the study or scholarly approach has helped to address the original issue.
- Identify and discuss what theoretical or practical implications can be drawn from this work.

There is no mandatory format for *InSight* articles; rather authors should organize and present information in a manner that promotes communication and understanding of key points. As you write your manuscript, keep the following points in mind:

- Title - Generally speaking, titles should not exceed 15 words and should provide a clear introduction to your article. While it is okay to incorporate "catchy" titles to pique interest, be sure that your title effectively captures the point of your manuscript.
- Abstract - Do not underestimate the importance of your abstract. While the abstract is simply a short summary (50-100 words) of your work, it is often the only aspect of your article that individuals read. The abstract provides the basis from which individuals will decide whether or not to read your article, so be certain that your abstract is "accurate, self-contained, nonevaluative, coherent, and readable" (Calfee & Valencia, 2001).
- Body - Within the body of a manuscript, information should be organized and sub-headed in a structure that facilitates understanding of key issues. There is not a mandatory format for *InSight* articles; rather authors should use professional guidelines within their discipline to present information in a manner that is easily communicated to readers. For example:

- *Empirical investigations* should be organized according to the traditional format that includes introduction (purpose, literature review, hypothesis), method (participants, materials, procedures), results, and discussion (implications). The following links provide general examples of this type of article:
  - http://www.thejeo.com/MandernachFinal.pdf
  - http://www.athleticInSight.com/Vol7Iss4/Selfesteem.htm
- *Theoretical articles and literature reviews* should include an introduction (purpose), subheadings for the relevant perspectives and themes, and a detailed section(s) on conclusions (applications, recommendations, implications, etc.). The following links provide general examples of this type of article:
  - http://www.westga.edu/%7Edistance/ojdla/winter84/royal84.htm
  - http://www.westga.edu/%7Edistance/ojdla/winter84/mclean84.htm
- *Classroom innovation and critical reflections* should be organized via an introduction (purpose, problem, or challenge), relevant background literature, project description, evaluation of effectiveness (may include student feedback, self-reflections, peer-insights, etc.), and conclusions (applications, implications, recommendations, etc.). If describing classroom-based work, please include copies of relevant assignments, handouts, rubrics, etc. as appendices. The following link provides a general example of a critical reflections article:
  - http://www.compositionstudies.tcu.edu/coursedesigns/online/33-2/ritter.htmlv

The limited length of *InSight* articles (manuscript should be no more than 5000 words, not including abstract, references or appendices) requires authors to focus on the most significant, relevant factors and implications.

- References - Select your references carefully to ensure that your citations include the most current and relevant sources. As you select your references, give preference to published sources that have proven pertinent and valuable to the relevant investigations. The goal is not to incorporate ALL relevant references, but rather to include the most important ones.
- Tables, Figures, Appendices & Graphics - Authors are encouraged to include supporting documents to illustrate the findings, relevance or utilization of materials. Particularly relevant are documents that promote easy, efficient integration of suggestions, findings or techniques into the classroom (such as rubrics, assignments, etc.). Supplemental information should enhance, rather than duplicate, information in the text.

The importance of clear, effective communication cannot be highlighted enough. Many manuscripts with relevant, original, applicable ideas will be rejected because authors do not communicate the information in a manner that facilitates easy understanding and application of key points. The value of a manuscript is lost if readers are unable to overcome written communication barriers that prevent use of the knowledge. With this in mind, authors are strongly advised to seek informal feedback from peers and colleagues on manuscripts prior to submission to *InSight*. Requesting informal reviews from relevant professionals can highlight and correct many concerns prior to formal submission, thus improving chances of publication.

References

American Psychological Association. (2010). *Publication manual of the American Psychological Association* (6th ed.). Washington, DC: Author.

Calfee, R. & Valencia, R. (2001). *APA Guide to preparing manuscripts for journal publication*. Washington, DC: APA.

QUICK TIPS: SUBMISSION GUIDELINES FOR *INSIGHT*

The following "Quick Tips" provide suggestions and guidance for submitting manuscripts to *InSight: A Journal of Scholarly Teaching*. *InSight* is a peer-reviewed publication highlighting the scholarly contributions of postsecondary faculty. The following information provides an overview of the purpose; scope and functioning of InSight so that faculty may better understand the *InSight* publication process.

Scope & Focus

InSight features theoretical and empirically-based research articles, critical reflection pieces, case studies, and classroom innovations relevant to teaching, learning and assessment. While there are a broad range of acceptable topics, all manuscripts should be supported with theoretical justification, evidence, and/or research (all methods and approaches relevant to qualitative and quantitative research are welcome); all manuscripts should be appropriately grounded in a review of existing literature.

Audience

InSight emphasizes the enhancement of post-secondary education through the professional exchange of scholarly approaches and perspectives applicable to the enrichment of teaching and learning. Relevant to this mission, manuscripts should be geared toward post-secondary faculty and administrators; included in this audience are full-time and adjunct faculty; face-to-face, hybrid and online faculty; tenure and non-tenure track instructors; trainers in corporate, military, and professional fields; adult educators; researchers; and other specialists in education, training, and communications. Recognizing the cross-disciplinary readership of *InSight*, manuscripts should present material generalizable enough to have relevance to post-secondary instructors from a range of disciplines.

Review Process

All submissions are evaluated by a double-blind, peer-review process. The masked nature of the reviews helps ensure impartial evaluation, feedback and decisions concerning your manuscript.

This review process utilized by *InSight* mandates that you should keep the following points in mind when preparing your manuscript:

- Your name and other identifying information should only appear on the title page; the remainder of the manuscript should be written in a more generalized fashion that does not directly divulge authorship.
- All information needs to be explained and supported to the extent that an individual not familiar with a particular institution's mission, vision or structure can still clearly understand the relevance, significance and implications of the article.

Focus of the Review

Prior to dissemination to the reviewers, the *InSight* Managing Editor will conduct a preliminary appraisal for content, substance, and appropriateness to the journal. If the manuscript is clearly inappropriate, the author will be informed and the manuscript returned. Appropriate manuscripts will be electronically sent to two reviewers for blind evaluation. Although there is an attempt to match manuscripts and reviewers according to content, interests, and topical relevance, the broad focus

of the journal dictates that papers be written for applicability to a wide audience. As such, reviewers may not be content experts in a relevant, matching academic discipline.

The manuscript will be reviewed and evaluated according to the following dimensions:

- Relevance - The most important feature of your manuscript is its relevance; the decision to accept or reject a manuscript is typically based on the substantive core of the paper. As such, manuscripts should introduce the substance of the theoretical or research question as quickly as possible and follow the main theme throughout the article in a coherent and explicit manner.
- Significance - Related to relevance, significance refers to the value of your manuscript for substantially impacting the enhancement of post-secondary education relevant to the target topic. Significant manuscripts will clearly highlight the value, importance and worth of a relevant topic within a meaningful context.
- Practical Utility - As highlighted previously, the goal of *InSight* is to enhance teaching and learning through the exchange of scholarly ideas. With this purpose in mind, all manuscripts should emphasize the practical value, relevance or applicability of information. Manuscripts should go beyond the simple reporting of information to provide InSight into the implications of findings and the application of information into meaningful contexts.
- Originality - The most effective articles are those that inspire other faculty through innovative practices, approaches and techniques or via the thoughtful self-reflection of the purpose, value and function of educational strategies. Thus, manuscripts that highlight original approaches or perspectives will be given priority. Per the nature of published work, all contributions must be the original work of the author or provide explicit credit for citations.
- Scholarship of Teaching - Contributions to the enrichment of teaching and learning should be grounded in relevant theoretical concepts and empirical evidence. As such, articles should be free from flaws in research substance/methodology and theoretical interpretation. All conclusions and recommendations must be substantiated with theoretical or empirical support; personal classroom experiences and critical reflections should be framed within a structure of existing literature.
- Generalizability - The broad goals and varied audience of *InSight* mandate that manuscripts be written for consumption across a range of disciplines that allows generalizability of findings and implications. Thus, while classroom techniques may be developed, tested and reported for a specific discipline or student population, the manuscript should go on to highlight the implications for other populations.
- Clarity - All manuscripts must be written in a clear, professional manner free from grammatical flaws and errors in writing style. The purpose of the manuscript should be clearly defined, relevant and supported by the evidence provided. All manuscripts should be structured in a manner that promotes a clear, cohesive understanding of the information presented. Be sure that your manuscript is free from organizational, stylistic or “sloppiness” barriers that would prevent effective communication of your work.

Review Outcomes

Based upon the feedback and recommendations of the two anonymous reviewers, the Editor will make a final publication decision. Decisions fall into the following categories:

- Reject - Rejected manuscripts will not be published and authors will not have the opportunity to resubmit a revised version of the manuscript to *InSight*. All rejections will be handled in a courteous manner that includes specific reasons for rejection.
- Revise and Resubmit – A manuscript receiving a revise-and-resubmit recommendation shows potential for publication, but needs significant attention and revisions. Those electing to resubmit will be subjected to a novel round of blind review.
- Accept Pending Revisions - A manuscript accepted-pending-revisions meets all the major requirements for publication but may need improvements in substantive, mechanical or methodological issues. Once these issues are adjusted for, the manuscript will receive a "quick review" by the Editor prior to publication. Very rarely is an article accepted with no changes required; as such, most manuscripts are accepted in this category.
- Accept - Accepted manuscripts will be published "as-is" with no further modifications required.

References

American Psychological Association. (2010). *Publication manual of the American Psychological Association* (6th ed.). Washington, DC: Author.

Calfee, R. & Valencia, R. (2001). *APA guide to preparing manuscripts for journal publication*. Washington, DC: APA.

"If faculty members across the disciplines want students to read critically, they need to do something about it."

~Karen Manarin and Miriam Carey, *Critical Reading in Higher Education: Academic Goals and Social Engagement*

"The history of American colleges and universities is inextricably bound to the intellectual and cultural heritage of the nation itself."

~Charles E. Glassick, Mary Taylor Huber, and Gene I. Maeroff, *Scholarship Assessed: Evaluation of the Professoriate*