

Applying the Scholarship of Teaching and Learning: Pursuing a Deeper Understanding of How Students Learn

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The research discussed within is one example of how to move from scholarly teaching to the scholarship of teaching and learning. This transition began with a desire to better understand the teaching and learning process and evolved into the development of an empirically-based emerging theory called Mutual Engagement (ME). Mutual Engagement reinforces how group formation and a safe learning environment can benefit teaching and learning. Mutual Engagement embraces classroom research with the goal of making teaching and learning more visible for others to critique and to build theory and pedagogy.

It is safe to say that most educators would like to be scholarly teachers. Staying current professionally, updating course material, and examining student understanding are all examples of scholarly teaching. However, scholarly teaching is not synonymous to the scholarship of teaching and learning (SoTL). Huber and Hutchings (2005) define SoTL as an emerging construct with its foundation in pedagogy, assessment, and in classroom and action research. SoTL involves critically questioning practice, collecting and analyzing appropriate data, implementing action(s) based on data analysis, and disseminating results (Huber & Hutchings, 2005). The transformation from scholarly teaching to scholarship of teaching and learning requires a deliberately constructed research context, a lens to view and apply content and pedagogical knowledge in a learning environment focused on student understanding.

Inherent in developing research are the integration of past research from multiple disciplines and the dissemination of findings (Kelley, 2008). A unique aspect of SoTL research is the ease with which this integration can happen because of the diversity of sources at the SoTL researcher's fingertips. Arguably, most SoTL research can integrate content from SoTL, education, assessment, classroom research, and the content domain of the researcher.

Because of their similarities, research from the fields of SoTL, instructional communication, motivation, and counselor education can be effectively integrated to gain a deeper understanding of the intricate interaction among students, teachers, course material, and the learning environment. SoTL, communication, and counselor education research all deal, at least in part, with interactions between two or more individuals. Moreover, motivation theory is linked to these disciplines as it seeks to describe how motivation influences communicating, learning, and changing. Therefore, utilizing research from multiple disciplines to examine SoTL research questions can provide a rich context to view phenomenon under investigation and can yield outcomes potentially beneficial to multiple disciplines.

In counselor education, Sexton (1998) and Guiffreda (2005) have called attention to the need to examine a deeper understanding of the teaching and learning process due to a lack of research focused on counseling pedagogy. The majority of research in counselor education focuses on learning has been centered on specific skill development rather than class design (Granello, 2000; Sexton, 1998). Thus, counselor education has the ability to benefit from other disciplines by examining how those disciplines have framed SoTL-based research questions.

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Instructional communication and the motivational theory of self-determination focus on the learning environment as a means to understand the learning process. One aspect of instructional communication research focuses on the communication patterns of instructors. Specifically, teacher “immediacy” refers to the verbal and nonverbal processes that can increase and decrease a student’s feeling of closeness to the teacher. Examples of positive immediacy behaviors include humor, teacher narratives, eye contact, and smiling; these behaviors have been linked to increases in affective and cognitive learning (Witt, Wheelless, & Allen, 2004). Self-determination examines student motivation in the learning process. Researchers have found that students who express higher levels of self-determination are more likely to be internally motivated and demonstrate more ability to apply course material in other settings (Deci, Vallerand, Pelletier, & Ryan, 1991). From this perspective, it is feasible to believe that counselor education also will benefit from a SoTL-framed research question that incorporates the multi-faceted learning environment to support the need for counseling pedagogy research.

This brief literature review illustrates the opportunity for scholars within the fields involved in counselor education to implement the principles of SoTL to discover not only what effective teaching looks like but also to discover how these students learn (and perhaps why they do not). This article describes how a series of research studies evolved to become an emerging theory to describe the teaching and learning processes of counseling students. The primary objective of the manuscript, following the principles of SoTL research, is to make this emerging theory public and to invite other researchers to apply and critique its usefulness. However, we also offer our experience as a potentially generalizable model for how to utilize SoTL inquiry to improve teaching and learning.

Research Origins

The genesis of these projects originated out of a desire to become a better teacher, specifically to better understand how students learn beginning counseling skills (Kiener, 2007a). The initial research questions were posed as part of a collaborative action research project which collected and analyzed data using grounded theory. Strauss and Corbin (1998) defined grounded theory as “theory that was derived from data, systematically gathered and analyzed through the research process. In this method, data collection, analysis, and eventual theory stand in close relationship to one another” (p. 12). Out of this first investigation, additional studies were conducted to further understand the teaching and learning process (Kiener, 2008a; Kiener, 2008b; Kiener, 2007b). In general, this research focused on the conditions and context in which learning occurred—the learning environment. The culminating effort of the research was an emerging theory termed Mutual Engagement.

Framing the Research Questions: Methodology

Due to the nature of the research questions, specifically the focus on the context influencing teaching and learning processes, a qualitative methodology was employed. Grounded theory was chosen due to the researcher’s desire to hear from students directly about what they learned and what impacted their understanding. Thus, the research viewed questioning, data collection, and analysis as emanating from the students and instructor (Strauss & Corbin, 1998). Moreover, the meta-methodology of action research was used to frame and guide the research.

Participants, Data, and Procedures

All four of the classroom-based research studies were conducted at a small private mid-western university. All of the participants (n=48) were graduate

students enrolled in a rehabilitation counseling program. The research was carried out in introductory, culminating, and clinical courses employing a variety of teaching methods to engage student learning.

Stringer's (2007) action research method of systematic ongoing investigation was used to frame the data collection and analysis. Strauss and Corbin's (1998) grounded theory approach of coding, constant comparison, and theoretical sampling were used to develop all themes and core categories. In general, data collection and analysis were conducted simultaneously to answer the research questions. The data was continually analyzed to better understand the emerging categories and to gain a deeper understanding of the research questions.

The primary data consisted of classroom observations made by the instructor, individual class planning notes, formal and informal class assignments, and student evaluations. To help increase credibility of the data, preliminary findings were discussed with other qualitative and action researchers; ongoing analysis was discussed with the participants; and all the studies were conducted over the entire semester. Approximately 500 pieces of data were collected and analyzed. Examining the four original research studies provided greater understanding of the creation of the core categories and how the data were utilized (Kiener, 2008a; Kiener, 2008b; Kiener, 2007a; Kiener, 2007b).

The findings of the four studies found "mutual engagement" and a comfortable learning environment as core categories; revealed that the teaching process emerged as an ongoing cyclical pattern of investigation; studied how student learning matched course outcomes; and examined how students experienced their understanding through service-learning. The following section provides an in-depth discussion of the teaching and learning theory, Mutual Engagement, that emerged from this application of SoTL research.

Mutual Engagement

Mutual engagement (ME) is an emerging theory that guides teaching and student learning. ME is not a specific set of rules about learning but rather offers guiding principles that embrace the formation of group dynamics as the basis of learning, applicable to all disciplines. Simply put, ME is the process in which students and their instructor co-construct a safe environment in which to give and receive feedback for the betterment of learning. A "safe" environment can be defined as one in which individuals are comfortable to voice their opinion and are respected inside and outside of class. As expressed by students on their course evaluations, a safe environment "encourages participation and facilitates the learning process" and the professor's "teaching style lends itself to everyone feeling safe enough to have and voice an opinion."

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An essential component of ME involves viewing each course as a group. Many of the techniques group leaders employ to encourage group formation are also used by instructors. For example, discussing the syllabus and class expectations is a key way to form the norms or behaviors of a group. Group leaders and teachers function as guides as a means to engage all participants in discussion or content. The importance of feedback in teaching and group dynamics is also central to group formation; whether it is in the form of direct or peer feedback, the group leader or instructor models appropriate feedback with the goal of improvement for students or group members.

In addition to the similarities between groups and courses, there are other aspects of group dynamics that can be utilized to promote teaching. In most groups, the leader's role diminishes as the group progresses and leadership shifts to members. ME embraces this process and encourages students to direct class activities to better meet their needs as learners. In essence the students and

instructor become partners, mutually engaged in the teaching and learning process. The following student feedback provided on a course evaluation speaks to group formation and learning. The instructor “gave us the opportunity to develop the class based on our learning styles and needs. This created a bond in the class and a comfortability (sic) level between all of us that encouraged class participation and learning,” “[the p]rofessor welcomed participation and guided us as a group,” and the instructor “[facilitated] my learning about all aspects of rehabilitation counseling and encourage[d] our class to direct our own learning.”

A pedagogical technique that can be used to facilitate group formation is pre-quizzes (Kiener, 2008c). Pre-quizzes are non-graded questions given at the beginning of class that can serve as an ice-breaker, review of material, and or an anticipatory set. Pre-quizzes are interwoven in ME as a means to keep students engaged in class material throughout the semester. Pre-quiz questions can be posted weekly on a course management tool (e.g., WebCT, Blackboard, Desire 2 Learn) or anywhere students have access to them. Pre-quiz questions are used to assess students’ prior knowledge, misconceptions, and as a means to facilitate participation from all students. Examples of pre-quiz questions used in this study included: (1) What does strengths-based counseling mean to you? (instructor-developed) and (2) What could threaten construct validity? (student-developed).

Students can also develop pre-quiz questions as a method to assert their voice in their learning. Examining student pre-quiz questions can allow the instructor to “see” what the students view as important and can thus indicate student understanding. Student pre-quiz questions that address analysis or synthesis may indicate a deeper understanding of course material. Here is one comment from a student evaluation regarding pre-quizzes and student understanding. “I believe the pre-quiz questions and the journal/portfolio really helped to increase our awareness of other perspectives as well as our own perspectives on disability. I have gained a lot of insight into myself and others.”

Emphasizing ongoing assessment throughout the course is another pedagogical technique promoted by ME to develop group formation. In addition to ongoing assessment, multiple forms of assessment (formative, summative, peer, graded, ungraded) facilitates assessment as a norm. This norm can establish a developmental approach to learning as opposed to learning being seen as a relatively constant trait. Thus, time to practice, manipulate, and master course content is paramount in ME. To effectively capitalize on multiple forms of ongoing assessment, an “intellectually safe atmosphere” (Schrader, 2004) has to be created. Students can more effectively benefit from assessment when they feel supported by their instructor and classmates. As observed throughout the study, when this atmosphere is established, students have a better opportunity to experience the difference between being *evaluated* and having their learning *assessed*.

A goal of mutual engagement is for students to increase their sense of ownership in their learning and to gain a greater sense of their affective learning.

Instructor flexibility is crucial in ME for supporting emerging student curriculum, encouraging creativity in learning performances, and letting students experience ambiguity in assignments and content. A goal of ME is for students to increase their sense of ownership in their learning and to gain a greater sense of their affective learning. ME increases the ability to create an environment for students to see a connection between class content and its utility in their profession. It is feasible to believe that when students take a greater responsibility for their learning and how content is presented, discussed, and integrated in class, they will see its connection not only to other courses but to their profession. The following quote from a student evaluation illustrates this point:

[The] professor creates a learning environment by integrating lectures, group work, class participation, critiques, case studies and videos for understanding. Asks questions for critical thinking.

Allows class to have input on the agenda for each class and respects comments and adjusts accordingly.

One way to capitalize on student creativity is by developing classes that are inductively organized. Instead of stating a theory, giving specific examples, and then inquiring with students on their understanding, start by asking students their thoughts on a topic, create additional examples as a class, and then finish with the theory. Inductive teaching emphasizes students as active participants instead of passive recipients.

Utilizing case studies can also highlight flexibility in class structure and allow students to deal with ambiguity in course content. Case studies can break up the normal routine of classes. Case studies can also be employed to connect multiple classes and assess student application. Allowing time in class for students to work with case studies provides experiential learning and allows the instructor to immediately give feedback on student understanding. Employing multiple pedagogical techniques can increase students' ability to handle ambiguity by preventing a routine class structure.

A final component of ME is action research. Utilizing ME as a framework to monitor and assess student understanding requires a rigorous ongoing pattern of inquiry, action based on class inquiry, and reflecting on actions taken (instructor planning notes). The collaborative environment of ME fits well with participatory principles of action research and allows instructors and students to engage in ongoing assessment on the teaching and learning process. Overtly introducing the principles of action research into curriculum and modeling an ongoing pattern of inquiry to students can provide a valuable tool for developing critical thinking skills and thus the potential for becoming a reflective practitioner (Kiener & Koch, in press).

Utilizing mutual engagement as a framework to monitor and assess student understanding requires a rigorous ongoing pattern of inquiry, action based on class inquiry, and reflecting on actions taken.

"Moving from an outsider perspective to an apprentice" captures how students were thinking about course material throughout the action research studies. This phenomenon is similar to the transition from novice to expert. However, students at this level have an understanding at a pre-novice stage and progress towards a novice stage. This conceptualization may be beneficial to other professional programs as a means to identify pre-novice misconceptions in students and to develop strategies for developing desired understanding.

For example, in rehabilitation counseling, students with an outsider perspective may not have a complete knowledge of what it means to be a rehabilitation counselor in terms of employment and/or scope of practice. Limited awareness and misconceptions are common to this perspective. As students progress through the curriculum and interact with the material, they develop experiences that expand their awareness and dismantle or reinforce misconceptions. As students progressed towards becoming apprentices, students develop the ability to better handle ambiguity in their learning and realize there are multiple ways to solve problems. While apprentice rehabilitation counselors may be able to define the profession in terms of their personal career interests, they may still have limited knowledge of career opportunities outside of those interests. In other words, individuals who have an outsider perspective do not know what they do not know, whereas the apprentice can begin to ask questions of his or her skill and seek avenues to build his or her practice.

Application of Mutual Engagement to other Disciplines

Conceivably the greatest benefit ME has to counselor education and to other disciplines is its ability to frame the contextual aspect of instructor and student learning. In addition to employing pedagogical techniques to facilitate group formation, ME emphasizes mutual collaboration between students and instructors to

create a safe learning environment, as a safe environment is a prerequisite to establishing group formation. Therefore, instructors can consider the communication and motivation patterns of their students and themselves, in addition to content-driven pedagogical techniques, as means for enhancing and increasing student learning.

Perhaps the first step for other disciplines looking to utilize ME is to think about the communication patterns of their profession. For example, health professions advocate therapeutic communication—empathetic and nonjudgmental. Modeling and employing therapeutic communication in the classroom is one method for students to learn the technique and, equally important, can serve as the foundation for establishing a safe environment for asking questions and receiving feedback. Thus, the creation of a safe learning environment can provide a greater potential for a class to form as a group. Additionally, once a class has formed, pedagogical techniques like the pre- and post-quizzing can be used to increase student understanding. More challenging content can be taught with the possibility of student feedback being perceived as beneficial and not unjust or unwarranted.

Conclusion

Mutual engagement (ME) emerged out of a need to better understand teaching and learning processes in a particular discipline. At its core is a generalizable view of the teaching and learning process as parallel to group formation, and the importance of creating learning environments as safe places to risk for the betterment of learning. It can be usefully applied to understand how rehabilitation counselors learn content and develop as professionals, and similar applications could be discovered for other disciplines.

Although there is a foundation of research establishing the principles of ME, more research is required to establish its utility as an example of or model for SoTL inquiry. Future research to expand ME could examine students' ability to retain and apply course work throughout the curriculum and as a beginning professional. Research could also focus on other pedagogical techniques to facilitate group formation. Additionally, in order to assess its effectiveness in broader content areas, ME could be utilized in other disciplines.

Mutual engagement is one example of moving scholarly teaching to the scholarship of teaching and learning. What started with a desire to better understand the teaching and learning process evolved into an empirically-based emerging theory illustrating how group formation and a safe learning environment can be beneficial to teaching and learning. A process for viewing student learning and professional identity formation emerged out of ME, and this process has provided means for the continued development of counseling pedagogy. In keeping with the goals of SoTL inquiry, ME is an example of making teaching and learning more visible for others to critique so as to build theory and pedagogy.

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