Exploring Professors' Engaging Instructional Practices: A Collective Case Study

Vishal ArghodeGannon University

Jia Wang Texas A&M University

Ann LathanGannon University

Abstract: Professors use various strategies to improve learning. To explore what professors perceived as critical aspects of engaging instruction, we conducted a qualitative case study with seven professors in the United States. Data was collected through individual face-to-face interviews. The conversations were audio-taped and transcribed verbatim. The analyses of the transcriptions were conducted using the constant comparative method. Findings from the study varied. Yet, participants agreed that an engaging instructor must focus on learning; consider various aspects of students' personal development including their cognitive, social, and emotional development; and take care of different student learning styles, for example, visual, auditory, and kinesthetic. Participants stressed the importance of student engagement. Body language, verbal and non-verbal cues, and eye contact were the main parameters used by the participants to evaluate student engagement. Participants also emphasized the importance of asking questions and assessing instructional effectiveness by evaluating the questions asked by students.

Keywords: engaging instruction; student engagement; professors; case study, qualitative

Engaging instruction is vital to maintain students' attention (Bransford, Brown, & Cocking, 2000), stimulate learning participation, and impact academic achievement (Rockoff, 2004). To maximize learning, engaging instruction is essential (Agbetsiafa, 2010). However, educational and learning sciences researchers have not reached consensus on what engaging instruction means and entails. This concept has been understood in numerous ways. Some scholars focus on strategies that enhance learning participation (Efstathiou & Bailey, 2012; Lucas, 2009; Rocca, 2010). Others focus on learning outcomes (Anderson, Moore, Anaya, & Bird, 2005; Cotgrave & Kokkarinen, 2011) and conceptual understanding (Mayer, Heiser, & Lonn, 2001). In addition, educators suggest using feedback to enhance instructional effectiveness (Lillie, Liu, & Kang, 2011; McCuddy, 2008). Even reflection and awareness of one's own teaching (Hudson, 2002; Trigwell, Prosser, & Waterhouse, 1999) and engaging instructional designs (Gustafson & Branch, 2002) are accorded high importance in the educational literature. Despite the above variations, the instructional goal,

as commonly agreed upon by educators and researchers, is the improvement of students' understanding and skill development.

Recent History of Pedagogy of Learning

The history of learning from the early part of the twentieth century transformed how learning was viewed. Learning moved from the positivist approach to involving engaged pedagogy, which was largely credited to John Dewey (Fried, 2013). However, beginning in 1938, Lloyd-Jones and Smith argued that we educate the whole student by accounting for an array of learning styles, differences in motivation, and other unique differences that exist from person to person. They challenged the idea of the "transmission" of education against the notion of education as a continual loop of reflecting, developing, and growth, which in turn could be transformed into pedagogy, also now known as pragmatism. John Dewey's belief in experimental and reflective learning interconnected the "thinking, feeling, and action" of the person with their experience and prior knowledge as well as their newly acquired knowledge (Fried, 2013).

Educational pedagogical practices yielding greater student engagement are typically student-centered. These characteristically social constructivist approaches include what has come to be known as POGIL (Project-Oriented Guided Inquiry Learning), Problem-based Learning, and Peer Instruction in order to increase student interest and motivation (Swap & Walter, 2015). These approaches have been adapted by Swap and Walter (2015) in the form of identifying five key elements: "1) use of small-group activities to facilitate student-student and student-instructor interactions in the classroom; 2) consideration of multiple perspectives and knowledge sources through the use of a diversity of instructional media; 3) leveling of the classroom hierarchy to invite broader participation; 4) creation of cognitive dissonance as a platform for engagement; and 5) high instructor availability to create opportunities for face-to-face interaction" (p. 6). The focus within these features is interaction to create greater engagement and participation.

Factors Affecting Student Engagement

Engaging students is challenging (Marks, 2000) because many factors impact student engagement. In general, complex tasks, better social support system and congenial school environment promote student engagement (Marks, 2000; Robinson, & Hullinger, 2008). Further, an institute's mission and culture impacts the level of institutional engagement (Pike & Kuh, 2005). Focusing on student achievement has prompted a deeper look into learning and instructional practices. A movement from the lecture driven instruction to a more student-centered approach has proven to increase student engagement and learning through greater motivation (Fernandes et al., 2014). Additionally, environment plays a major role in student engagement. The more innovative the student environment, the more engaged the student will become. Likewise, an interactive environment is essential in the transfer of knowledge during the learning process. An emphasis on the transfer of learning in an innovative environment supports interactive learning (Fernandes et al., 2014). Environments that promote engagement also need to be smaller or consist of fewer students. As Swap and Walter (2015) indicated, it is practically impossible to achieve relational engagement in a class with large enrollment, which is due to a lack of interaction and interpersonal engagement among professors and students. In addition, larger class sizes limit certain activities and are restricted by varying prior knowledge, which causes a problem with student motivation (Swap & Walter, 2015).

Journal of the Scholarship of Teaching and Learning, Vol. 17, No. 4, October 2017. josotl.indiana.edu

Unfortunately, professors often have limited control over institutional culture and the ensuing academic environment. The chief factor influencing the learning and instruction is what professors want their students to know (Martin, Prosser, Trigwell, Ramsden, & Benjamin, 2000). "The way professors approach their instruction and the strategies they deploy is directly related to what it is professors want their students to know, 'the object of study'" (Martin et al., 2000, p. 411). Since professors' perceptions of the content and their own instruction impact student learning, professors should be cognizant about how to design their curriculum and structure their instruction to positively and effectively impact learning.

There is a consistent and close association between student background and engagement. For example, Pike and Kuh (2005) noticed, "On some key indicators of college success firstgeneration college students do not compare favorably with their peers from families where at least one parent graduated from college" (p. 289). Additionally, girls, individuals with higher socioeconomic status (SES) individuals with academic success, and non-minority students exhibit greater engagement in school activities than boys, individuals with low socioeconomic status (SES), individuals with less academic success, and people of color, respectively (Marks, 2000).

Furthermore, disciplinary differences also contribute to learning engagement on two levels. On the macro level, the discipline determines what is considered important in a specific discipline (Cashin & Downey, 1995) and the environment where knowledge is constructed (Neuman, Edwards, & Raju, 1989). On the micro level, disciplinary differences influence course planning (Stark, 1990), faculty view of instructional goals (Eljamal, Sharp, Stark, Arnold, & Lowther, 1998), the amount of time to spent on instruction (Smeby, 1996), and instructional methods selected to accomplish the goals (Hativa & Birenbaum, 2000; Lueddeke, 2003; Smimou, & Dahl, 2012). In this sense, disciplinary differences ultimately impact learning and outcomes of student achievement.

Role of Professors in Student Engagement

Engagement is positively influenced if professors care about students and try to connect with them (Sutton & Wheatley, 2003). Professors' strong interpersonal skills and ability to create a classroom environment that promotes learning is important for effective instruction (Arghode & Wang, 2016; Minor, Onwuegbuzie, Witcher, & James, 2002). Moreover, if professors better understand the students and maintain a healthy relationship with them, students tend to perform better (Tucker, Sojka, Barone, & McArthy, 2000). Professors' and students' interpersonal skills can impact teacher-student relationship besides creating a supportive class climate.

Beyond the classroom, the engaging professor is highly accessible to students and encourages them to participate in additional learning opportunities provided by the university. The engaging professor responds to e-mails, and encourages students to stop by for office hours. (Gasiewski, Eagan, Garcia, Hurtado, & Chang., 2012, p. 253)

Professors' ability to create a congenial and supportive environment for academic exchange paves a way for student engagement with the content (Gasiewski et al., 2012; Farag, Park, & Kaupins, 2015). Positive emotions relate to student engagement through the development of a positive environment. According to Meyer and Turner (2006), experiencing positive emotions on a consistent basis is essential in the engagement process of learning for students by creating a foundation of positive teacher-student relationship and increasing student motivation. Social and

Journal of the Scholarship of Teaching and Learning, Vol. 17, No. 4, October 2017. josotl.indiana.edu

128

emotional learning (SEL) advances not only mental health but also academic advancement of students. Undeniably, students encounter learning through a social environment via social interaction. Their learning experience does not occur in a silo, but involves the collaboration of teachers, peers, families, and community who are all influenced by emotions. Therefore, educational institutions should address the important role of emotions in learning success (Zins, Bloodworth, Weissberg, & Walberg, 1997). An instructor who understands students better may gain more knowledge about students' current learning state and learning needs. Professors with improved instructional competence can better understand student needs. If professors connect with students and care about their progress, they will likely earn students' loyalty and faith (Arghode, 2012). If professors genuinely care about students' progress, students will respond more positively to the instruction, which will be demonstrated through students' eagerness to participate and willingness to contribute (Arghode, Yalvac, & Liew, 2013). SEL (Social and Emotional Learning) is created by an environment that is supportive, caring, and non-threatening (Zins et al., 1997). This type of supportive climate creates a "comfort zone" where students are willing to ask for assistance and professors feel safe to set high expectations (Zins et al., 1997). The interaction among students is also an essential element in creating a supportive environment for engaged learning. Peer interaction stimulates excitement about learning and encourages negotiation and conflict resolution (Zins et al., 1997). However, unless students make efforts to actively involve themselves, learning will not take place (Gasiewski et al., 2012).

Faculty perception of instruction influences student engagement (Gasiewski et al., 2012). Identical teacher and student view of engaging instruction is vital because if professors and students differ in their understanding and beliefs of engaging instruction, students may perform poorly in the course (Goldstein & Benassi, 2006). Frederick (2004) demonstrated that school level factors contribute more towards behavioral engagement. In other words, if schools provide a supportive learning environment the students are more likely to attend classes. Similarly, teachers' ability to design engaging instruction is vital to achieve cognitive engagement thereby improving their conceptual understanding (Frederick, 2004).

Frederick (2004) supported that stories engage students better. The findings from a study by Dunlap and Lowental (2010) confirmed that "engaging learning experience is student-centered, contextual, active, social, and supportive" (p. 6). Giving relevant powerful examples enhance learning (Dunlap & Lowenthal, 2010). Similarly, Fink (2007) highlighted the importance of designing courses for enhancing student engagement and learning. Professors should be costudents (Cook-Sather, 2010) and encourage students to actively interact with their peers because cognitive processing of information promotes learning (Gasiewski et al., 2012).

Significance and Purpose

Identifying professors' engaging instructional practices may contribute towards bridging the gap between instruction delivery and students' learning. There is a need to know more about the relationship between how professors construct knowledge and how students understand it (Burke & Rau, 2010; Lecouteur & Delfabbro, 2001). However, this gap in the literature is not well explored. Our study intends to decipher the knowledge as generated and delivered in classrooms by professors, while recognizing that professors' teaching approaches vary both within and across disciplines (Lindblom-Ylanne, Trigwell, Nevgi, & Ashwin, 2006).

The benefits of student engagement are well recognized by researchers. For example, it is generally agreed that engaged students exhibit proficiency (Handelsman, Briggs, Sullivan, & Journal of the Scholarship of Teaching and Learning, Vol. 17, No. 4, October 2017.

josotl.indiana.edu

129

Towler, 2005), demonstrate positive learning experiences (Thalheimer, 2003), and even persist with the program and graduate early (Gasiewski, Eagan, Garcia, Hurtado, & Chang, 2012). Nevertheless, the role of instruction in engaging students is not well explored in the context of higher education (Handelsman et al., 2005) and training (Swanson, 2001; Tucker, Sojka, Barone, & McCarthy, 2000). Previous studies have focused exclusively on only one aspect of engagement such as cognitive engagement (Pintrich & Schunk, 1996). Some studies illuminated how student engagement could be impacted by factors such as the school climate, faculty support, students' backgrounds, and challenging course assignments (Laird, Chen, & Kuh, 2008; Taylor & Parsons, 2011). Our study intends to contribute to bridging the above-mentioned gap that exists because of researchers' narrow focus on cognitive engagement. The purpose of this study was to explore classroom practices of professors in engaging students. Specifically, two questions guided this inquiry.

- 1. How do professors define student engagement?
- 2. What strategies do professors use to engage students?

Methods

To address the two research questions, we adopted the collective qualitative case study design (Creswell, 2007; Stake, 2005). The collective case study approach aims to explore and describe rather than assessing a phenomenon. It is appropriate for this study as our goal was to gain a deep understanding of university professors' perceptions of learning engagement and their practices in this area. In this study, we treated each individual instructor as a case for analysis. Further, the collective case design enables comparison across several similar cases (Yin, 2009). A case design also provides multiple perspectives, therefore, broadening the study dimensions, adding depth, and providing clarity to the phenomenon under investigation (Baxter & Jack, 2008).

Case Selection

Selecting cases for this study occurred at two levels—the research site and individual participants. Regarding the site selection, we purposefully bounded the research setting to a large public university in southern U.S. Such a decision was made based on two considerations: easy access to the institution and established networks. So, to a large degree, the site selection was convenience based.

Regarding the case selection, we identified potential participants through our professional and personal contacts. To gain an in-depth understanding of the phenomenon under study, we aimed to find information-rich cases (Patton, 2002). We targeted professors from the Agriculture, Education, Liberal arts, and Business School because to our knowledge, instructions delivered in these schools were known to have a high level of interactivity. To recruit participants, we used convenience sampling (Creswell, 2007; Patton, 2002) combined with criterion sampling (Creswell, 2007; Patton, 2002) and snowball sampling (Creswell, 2007; Patton, 2002). Three criteria guided our participant recruitment. First, the instructor must have demonstrated effectiveness in engaging students in class. To find the potential participants, we relied on recommendations made by the university's teaching center and writing center because these centers regularly provide workshops to help faculty improve their teaching effectiveness; as a result, they have a fairly good knowledge of faculty who are considered as effective professors. Second, the instructor must have at least five years of teaching experience. This criterion ensures the faculty member has had sufficient time to enhance his or her instructional practice. Finally, the instructor is willing and available to participate in different aspects of the study, including taking part in the interviews and follow-ups if needed, reviewing interview transcripts and checking researchers' interpretations for accuracy. As suggested by Patton (2002), "It is important to select information rich cases for study in depth" (p. 169) since we can learn a great deal from such cases. Guided by this principle, the sample size was not our concern. Eventually, seven professors (cases) were included in this study.

The Seven Cases

In this study, each participant was treated as a case and was given a pseudonym for confidentiality. The participants—Dr. Ponting, Dr. Gooch, Dr. Warner, Dr. Morkel, Dr. Gilchrist, Dr. Steyn, and Dr. Haynes—were all professors teaching undergraduate and graduate level courses at a southern research one university in the US. These professors had an average of 12.6 years teaching experiences ranging from 5 to 18 years. Table 1 below presents a brief profile of the participants and more details on each of them will be provided later.

Table 1. Profile of study participants

Participant No. and Code	Participant Pseudonym	Degree (Ph.D.)	Area of Instruction	Male /Female	Instructional Experience in Years
DP-B#1	Dr. Ponting	Human Resources Management/Organ izational Behavior	Business	Male	12
DG-AL#2	Dr. Gooch	Agricultural Education and Communication	Agriculture Leadership Education and Communication	Male	5
DW-ME#3	Dr. Warner	Educational Leadership	Multicultural Education	Female	9
DM-PE#4	Dr. Morkel	Health Education	Physical Education	Female	16
DG-IS#5	Dr. Gilchrist	Interdisciplinary engineering	Interdisciplinary Studies	Female	11
DS-EC#6	Dr. Steyn	Elementary Education	Early Childhood\ Elementary Education	Female	18
DH-AL#7	Dr. Haynes	Agricultural Education and Communication	Agriculture Leadership Education and Communication	Female	17

Data Collection

In-depth interviews (Swanson, Watkins, & Marsick, 2005; Wang & Roulston, 2007) were used as the primary means of data collection. To ensure consistency of findings from different participants (Patton, 2002), we developed a semi-structured interview protocol consisting of nine open ended questions. However, based on the conversations with the individual participants, we also asked probing questions. We conducted two rounds of interviews with each participant. The first interview lasted for about 60 minutes. We audio-taped the interviews and transcribed the recordings verbatim within five to ten days of the data collection. We also conducted follow-up interviews with participants. The interviews generated a total of 198 pages of data.

Data Analysis

We used participants' views on engaging instruction strategies as the units of analysis and analyzed the data both during and after data collection (Swanson et al., 2005). After transcribing the interviews, we read the transcriptions verbatim (Oliver, Serovich, & Mason, 2005) a few times to gain a good understanding of the data. We performed both the within-case and cross-case analysis using the open coding and constant comparative analysis techniques (Glaser, 1965). The within-case analysis focused on analyzing each participant's response in order to identify important themes; and the cross-case analysis was performed to compare and contrast the participants' responses to identify commonalities across cases and uniqueness in each case. Through multiple rounds of the data readings and analyses, we were able to identify major themes within and across cases. We then categorized these emerging themes and those that did not belong to any categories were excluded for further analysis.

The Issue of Credibility

We employed two strategies to ensure credibility of the collected data. First, prior to the actual interviewing, we met with the participants to inform them of the study and build rapport. By doing so, we created an environment where the participants felt comfortable to share their feelings and perceptions. Second, we sent the interview transcripts and our interpretation of the transcripts for participants' verification or member checking (Krefting, 1991). The corrections and changes made by the participants were incorporated in our final report. Here are two examples of the member checking feedback. "The write-up looks fine. Sort of feels strange to see my perspective in writing..." (Dr. Gilchrist). "I have taken the time to review the interview transcript and find no concerns with your comments or interpretations. Good luck with this project and please alert me when it is published" (Dr. Warner).

Case Description

As we indicated earlier, each participant was treated as a case for this study. In this section, we provide a brief description of each of the seven cases.

Case 1: Dr. Ponting

Dr. Ponting completed his undergraduate and graduate management degrees from southern US Journal of the Scholarship of Teaching and Learning, Vol. 17, No. 4, October 2017. josotl.indiana.edu 133

universities. Subsequently, he worked for a fortune 500 US company as a human resource manager for three and a half years. Since he was interested in teaching, he joined a Ph.D. program in human resource management (HRM)/organizational behavior (OB) as a student at a northern US university. After graduation, he started a career as an assistant professor at a southern research one university where he taught undergraduate students for about one and a half years, and then moved to graduate level teaching. Currently Dr. Ponting teaches HRM masters students with primary responsibility for teaching students in the MBA (Master of Business Administration) program. Dr. Ponting also teaches leadership to executive MBA students. At the time of the interviews, Dr. Pointing had 12 years of teaching experiences in higher education.

Case 2: Dr. Gooch

Dr. Gooch has bachelor's degree in animal science and Masters in extension education from an Eastern US university. He completed Ph.D. in agricultural education and communication from a southern US university. Upon completion of his doctoral degree, Dr. Gooch joined a southern US university as an assistant professor. Currently, he teaches in agriculture leadership program. Among all the seven participants, Dr. Gooch has the least amount of teaching experience in higher education (five years). Dr. Gooch is the only person in his family that ever went to college and left the county he grew up. His mother always wanted to go to college but never did. Dr. Gooch felt that he was inspired to attend college and get higher education from his parents' backgrounds. Dr. Gooch is a very hands-on or experiential learner.

Case 3: Dr. Warner

Dr. Warner received her undergraduate degree in science from an Eastern US university. Before graduating she spent a year in a European university studying biology and environmental science. She wanted to go to medical school even though her friends encouraged her to be a teacher. Dr. Warner never thought about becoming a teacher until she experienced a significant change due to a critical incident that had occurred in her life. This experience motivated her to become a high school science teacher for about three years. Subsequently, she became the director of the math and science program that prepared high school students for college. Dr. Warner stressed that it was the best job that she had as an instructor. Because of her background, she was able to relate to her students easily. Dr. Warner was also working on her doctorate while working as a director at the math science center. After finishing her doctorate, she joined a southern US university as a teacher educator. She has been working in her current job for about eight years.

Case 4: Dr. Morkel

Dr. Morkel has bachelors in Linguistic and Masters in Philosophy from universities in Brazil. She obtained a Masters in general Theological studies from an Eastern US university. Subsequently, she received her doctorate in health education from a southern US university. Dr. Morkel has around 16 years of instructional experience teaching both graduate and undergraduate students. She is also the recipient of several awards in teaching excellence at the University level. Dr. Morkel has been interested in teaching since her childhood days. As a child, she used to teach her dolls. Early childhood experiences shaped her inclination toward teaching and developed her penchant for learning. She described herself as a passionate, confident, tentative, and successful professor.

Journal of the Scholarship of Teaching and Learning, Vol. 17, No. 4, October 2017. josotl.indiana.edu

Case 5: Dr. Gilchrist

Dr. Gilchrist has a Ph.D. in Interdisciplinary Engineering with a focus in engineering education. She spent two years in one of the Eastern US universities as an instructor in the teaching and learning center where she taught seminar type courses. After that, she joined a southern U. S. university in the teaching and learning center. She has been associated with the center for the past seven years. Dr. Gilchrist is involved in teaching graduate seminar courses as well as graduate college teaching courses. She has extensive experience working with faculty, graduate students, and teaching assistants. Dr. Gilchrist worked with both junior and senior faculty members on all different types of teaching and learning components and topics.

Case 6: Dr. Steyn

At the time of the interview, Dr. Steyn was about to retire from a clinical assistant professor position at a Southern US university. She has about 18 years of experience with university teaching at various levels Before teaching in university she taught at an elementary school for around 20 years. Dr. Steyn received both undergraduate and graduate degrees and doctorate in Elementary Education from an Eastern US university. Her research interests are in the areas of early childhood education, teacher education, and storytelling — oral literacy. Dr. Steyn described herself as an energetic, enthusiastic, involved, and continuous learner with high expectations. She understands that teaching requires a lot of planning, preparation, and concerted effort. "Teaching is not easy it is very laborious meaning something that is never finished" (DS-EC#6.2.9.36). Dr. Steyn's earlier experience as a student helped her tremendously to shape her teaching philosophy.

Case 7: Dr. Haynes

Dr. Haynes teaches primarily online and has all three (undergraduate, masters, and doctoral) degrees in from a southern US university. Her undergraduate major is in agriculture development. Her Master's thesis focused on perception of sustainable agriculture. Her dissertation focused on whether computer-based instruction can be created in cost effective ways to make it as effective as face-to-face instruction. Dr. Haynes worked with many different agencies and international centers in different national facilities. Her area of expertise is instructional design. Although Dr. Haynes mostly teaches online courses, she does not think that it is possible to get rid of face-to-face instruction.

Study Findings

This section reports the major findings. They are represented as categories, themes and subthemes (see Table 2). We used the following nomenclature for depicting the codes in the transcripts. For example, the code DP-B # 1.2.6.25 should be interpreted as DP (Dr. Ponting), B (Business), 1 (corresponds to the first participant), 2 (follow-up interview 1-first interview), 6 (page number on which the code can be found), 25 (code number).

Table 2. Themes and sub-themes

Category	Themes		
1. Defining Student Engagement	1.1 Complete involvement		
	1.2 Seamless transition		
2. Strategies for Engagement	 2.1 Adapt instruction to match student background 2.2 Demonstrate caring 2.3 Strive for student development 2.4 Motivate students through improved instruction 2.5 Facilitate and encourage discussions 2.6 Design creative instruction 2.7 Exhibit passion and commitment to teaching 2.8 Incite curiosity, clarify expectations 2.9 Show enthusiasm, empower students 		

Defining Engagement

Complete involvement. Dr. Morkel defined engagement as complete absorption and involvement with the content and the instruction. According to Dr. Morkel, when students are enthusiastically involved in learning, participate freely in the group activities, and take interest in the assigned tasks, engagement takes place. Dr. Morkel stressed that engagement calls for multiple skills and involvement at many levels. Such skills include psychomotor skills, physical abilities, and cognitive capabilities. Engagement is indicated by an ever-growing hunger and penchant for learning more. Dr. Morkel elaborated,

For me, engagement is the connection you establish; whatever you are learning, you can't get enough of it. So, you are eager to take the initiative to learn more, and not just sit in classroom waiting for the instructions. (DM-PE#4. 2.3.8)

Engagement is indicated by students' pro-activeness and desire about knowledge and learning. Dr. Morkel noticed that engaged students are willing to explore and learn more on their own. Engaged students are more involved with the content not only in the classroom but also outside of the classroom; they also enjoy more benefits from the instruction Student engagement also redefines an instructor's role because professors do not have to constantly motivate and encourage students to study. Dr. Morkel emphasized that engagement promotes affinity towards task and makes the tasks easier to handle.

Similarly, Dr. Gooch also emphasized the need for student engagement.

I think it is very necessary because engaging students and increasing student engagement in the learning process not only helps you as an instructor with the flow of the lessons, literature [also] tells us [that] students are more likely to learn and be able to apply the learning to a practical context when they leave the classroom. (DG-AL#2.2.2.3)

Seamless transition. Dr. Warner highlighted that the "flow in instruction" (Wolk, 2008) is essential. By "flow," she meant seamless transitions and natural shifting from one concept to another. She further defined "flow" as a state "where professors and students are so engaged that they are willing to participate in activities at any risk to themselves" (DW-ME# 3.2.2.11). According to Dr. Warner, teaching at a higher cognitive and psychological level not only requires huge effort from the students but it also requires careful planning, extensive preparation, and immaculate precision in implementation by an instructor.

Strategies for Student Engagement

Adapt instruction to match student background. Dr. Steyn emphasized that creating opportunities for students through learning experiences and interactive activities engages students better. She said that an engaging professor must align the student experiences with the learning outcomes and teach in a "developmentally appropriate way." (DS-EC#6.2.3.3) She also emphasized the need for considering students' backgrounds, knowledge, skills, and overall comfort level with the subject.

Assessing the current state of student understanding also paves a way for building a trusting relationship between professors and students. With trust, students feel more confident about contributing to the class discussions.

Dr. Steyn emphasized on selecting the right instructional methods is crucial. She shared an example of teaching how to ride a bike. Merely giving notes, manuals, and instructions to ride a bike will not help the student to ride the bike. Instead, the instructor must provide opportunities to practice. Like teaching someone how to ride a bike, classroom teaching involves providing students with the opportunity to take ownership of their own learning. In this sense, professors assume the role of e facilitator with provision of "guided practice" (DS-EC#6.2.4.7) to their students.

Demonstrate caring. Dr. Gooch arranges for some "meet and greet" time at the beginning of each semester, so that students can visit with him for five to ten minutes. Spending personal time with students helps Dr. Gooch and students to know each other. During these meetings, Dr. Gooch takes notes about each student's interests and uses them to develop relevant examples in the classroom. Understanding students' preferences helps Dr. Gooch build stronger rapport with students and connect better with them.

Dr. Gooch firmly believed that when students realize that the instructor cares about them, they are likely to respond positively by demonstrating engagement and interest in learning. However, Dr. Gooch also acknowledged the difficulty in showing care overtly and the level of care he can show to students given the time constraint.

I want to make difference in students' lives by teaching them certain skills, some aptitude, and knowledge that will make them employable. However, since we have students for only a limited amount of time, say a semester, it is a challenge. (DG-AL#2.2.8.38)

Strive for student development. Dr. Gilchrist stressed the importance of caring for students' progress. She stated, "Research says if students know you care, it makes a huge difference in what they are willing to contribute and participate" (DG#5.2.8.24). Caring about student development and learning is a key to a professors' success in creating engaging learning experiences for students in the class. As an instructor, Dr. Gilchrist exhibits her caring and compassion for students' growth.

Journal of the Scholarship of Teaching and Learning, Vol. 17, No. 4, October 2017. josotl.indiana.edu

137

Caring about students' improvement also helps Dr. Gilchrist to connect well with students. However, besides caring about students' progress, it is equally vital to communicate that you really want students to succeed. Therefore, Dr. Gilchrist explicitly highlights her strong student development orientation in class. She said, "If you don't know by now that the most important thing to me in this class is that you know that I will do whatever I can to help you to get whatever you need, then I have missed something" (DG#5.2.8.25). Dr. Gilchrist believes that if she fails to communicate her willingness to help students in every way she can, she will not be successful in attaining her learning goals for the students. Earning students' confidence and respect is vital to Dr. Gilchrist. During the interview, she indicated that her ultimate goal was to make a significant positive impact on students' lives.

Dr. Steyn stressed that an instructor must keep their cool despite students' inability to follow the instruction. Sometimes students ask questions that clearly indicate that either the students were not paying attention during the instruction, misunderstood the concepts, or completely missed the message. In such situations, an instructor must be patient and devise strategies to simplify the content for the students.

Motivate students through improved instruction. Student motivation is impacted by multiple factors. Professors cannot control every factor. Especially, intrinsic factors are beyond an instructor's control since students' preferences are myriad and unique. According to Dr. Haynes,

Motivation in general is complicated and the reason it is complicated is it is very individual. Some people are very motivated by external forces. While for others, external forces can shut them down. And then there are internal motivators you can link into internal motivations; you can really make a difference. But you can't always influence what motivate someone. (DH-AL#7.1.4. 14)

Students are motivated by prompt, elaborated feedback and challenging assignments. Professors should not allow students to be complacent. According to Dr. Haynes, students do not put in a maximized effort if they realize that earning a higher grade in a course is easy. Therefore, Dr. Haynes does not give high grades at the beginning of the semester to motivate students to make effort in learning and understanding the content. Dr. Haynes highlighted that unless students are self-motivated, professors must find ways to encourage students to attend class sessions.

Unless they [students] are motivated to spend time on my course, I have to give them reasons. I use things to give people reasons to come to my course so that is why there are quizzes and everything. I believe if I do not have a reason for them to come to the class, since I am not going to check roll, they won't come. (DH-AL#7.1.4.15)

Having regular class quizzes, assignments, feedback, and other activities all can promote student engagement. If students realize that going to class is a waste of their time, they will refrain from attending the sessions. Therefore, Dr. Haynes designs instruction in a manner that promotes student engagement with the content by always providing opportunities to the students to work on different assignments.

Facilitate and encourage discussions. According to Dr. Gilchrist, an instructor's role is not only to provide information but also to facilitate class discussions and engage students in dialogic conversations. Professors should immerse themselves in the instruction and guide students in the

knowledge acquisition. Professors should not merely be a knowledge transmitter, rather become a co-creator of knowledge with the students. For example, Dr. Warner shared,

One of the things that I do, during my class session, is to stroll and talk. It's important to move around in a classroom so the students know that there are no safe zones in the classroom where they can sit in the back and the instructor would never come. (DW-ME# 3.1.3.53)

Dr. Warner strives to involve everyone in class discussions. She spares no effort to maximize class participation. She actively seeks opportunities to break through the safe zones in class to ensure that students do not feel left out or escape attention. Nevertheless, Dr. Warner acknowledged that in bigger classes complete involvement is nearly impossible; thus, her goal is to enhance class participation.

Design creative instruction. Dr. Gooch wants to make the best possible use of time in developing his students. His teaching philosophy is to engage students through various educational activities. He decides the type of activity to be employed according to the available time and students. Dr. Gooch mentioned that in a 50-minute session, time is precious so there is not a lot of time to do what he wants to do. Therefore, professors have to be creative in engaging students. During the interview, Dr. Gooch constantly emphasized the importance of learning about the effective teaching practices.

Exhibit passion and commitment to teaching. Teaching requires a lot of preparation and planning, which makes teaching a laborious and difficult activity. Dr. Steyn considers insightful and engaging teaching as a rewarding experience. She feels enthralled when students share the impact and usefulness of her class in their own teaching.

Dr. Ponting asserted, "I believe engaging teaching doesn't naturally come to people. To be a good instructor you got to develop your skills of understanding the students better" (DP-B#1.2.7.25). Dr. Ponting stressed that in addition to delivering the content, professors should develop their ability to engage students. Although it may be argued that good professors are born, Dr. Ponting believed the art of designing engaging instruction can be learned and developed. He noted that every instructor could grow by learning from their mistakes and past teaching experiences.

Incite curiosity and clarify expectations. Dr. Gilchrist focuses on developing her students' critical thinking skills and ability to generate innovative solutions. She wants to contribute significantly in a manner that helps students retain their individuality. She does not advocate forcing all students to think alike just to comply with standards. Rather, she expressed the need to foster creativity among students.

Dr. Ponting believes that he succeeds as an instructor only when he is able to incite curiosity and hunger for learning among students. If his students leave the course thinking more critically about the subject, Dr. Ponting felt that he succeeded in engaging the students. He shared,

My goal is to make my students more critical thinkers at the end of the day. That's what makes me happy. How information allows them [students] to think about different issues in different ways that they [students] haven't thought about before. I want them to be able to approach problems, so I predominantly use case method. (DP-B#1.2.2.8)

But before developing students' critical thinking skills, an instructor must clearly communicate the expectations to the students. Dr. Ponting said, "I learned overtime, the earlier you communicate your expectations to students, the better. Students rise to your expectations if you have high expectations. If you do not have high expectations, students will meet that too" (DP-B#1.2.3.13). Articulating the expectations to students is important because students act according to professors' expectations. Too low expectations can result in lower performance, dissatisfaction, and impeded learning, whereas too high expectations can result in undue student stress. Failure to meet the professors' expectations may give rise to anxiety, fear of failure and even loss of interest in the course. Therefore, setting appropriate expectations helps both professors and students to stay on track and promotes engagement (Umbach & Wawrzynski, 2005).

Show enthusiasm and empower students. Dr. Steyn believes that enthusiasm, energy, and passion are the three cornerstones of excellence in teaching. She always feels enthusiastic about what students do; and therefore, she feels as if she would not ever retire from teaching, even though she was about to retire from her current position as a clinical assistant instructor at the time of the interview.

Dr. Gilchrist makes students responsible for their own learning. She empowers students to take ownership of their learning by acting as a guiding force to appropriately channel student thinking and energy. Dr. Gilchrist explained,

Because this [teaching] isn't about being perfect, this [teaching] isn't about me telling you [students] exactly who you need to be. This is about being you as an individual and what you need, and I'm gonna do whatever I can to help that...that's really important. (DG#5.2.8.26)

Discussion

The participants concurred that it is difficult to come up with one comprehensive definition of an engaging instruction; however, they agreed that student learning should be the top priority for an effective instructor. Professors should be interested in and devoted to what they do, both culturally and cognitively. Professors should also enjoy teaching and be empathetic to their students. If professors design their teaching around enhancing student learning, they are likely to be successful in their practice. The study participants stressed the importance of cultural competency, acknowledging the differences between the students' learning styles and attuning their teaching practices to the needs of diverse students.

Our study participants mentioned the importance of flexibility and readiness to use various teaching strategies, as using only one strategy limits the number of students who can be engaged in a class. This idea is in consonance with the thoughts expressed by Ranson, Martin, Nixon, and McKeown (1996) who stressed the need to recognize different talents in individual students and the role of agency in learning, (mostly an instructor). Thus, an instructor should understand the differences between the learning styles of different students and make adjustments accordingly in their teaching.

Highlighting the basic premise in education that everyone wants to learn, the participants of this study agreed that while an instructor's role is challenging, once an instructor is able to find strategies that work with students, those techniques can be implemented to augment learning. Dr. Haynes mentioned that even when class exercises are exciting, engaging or motivating, they do not always motivate students to the same degree. The participants expressed differing views on Journal of the Scholarship of Teaching and Learning, Vol. 17, No. 4, October 2017.

josotl.indiana.edu 140

how to interactively engage students. Despite their varied strategies, they all agreed that it is important to involve and engage students to enhance participation. If the instructor makes extra efforts to reach out to the students and make them feel comfortable, the students are likely to respond accordingly.

All our study participants unanimously agreed that respecting students' values and creating an atmosphere in class that breeds trust, support, and healthy interaction is valuable to improve student learning. Sometimes it is necessary to change the physical setting of the class to promote student interaction. Probing students in an encouraging manner is also helpful in promoting student learning. If the class atmosphere is supportive and safe, students are more willing to participate in class discussions. This helps professors learn more about students' strengths and weaknesses.

All the participants highlighted the keen awareness of students' body language, facial expressions, and eye contact to understand student engagement with the content and the instruction. Dr. Gooch, Dr. Steyn, Dr. Gilchrist, and Dr. Ponting mentioned that merely noticing students' body language does not give an accurate idea about students' extent of engagement with the content. They proposed that asking questions and judging student responses is a more accurate and reliable way of evaluating students' learning engagement.

Involving students is crucial in advancing the teaching field. It is equally important to consider the conceptual, theoretical, and practical knowledge of students because the knowledge gained from the interactions with the students can inform instructional strategies effective to maximize engagement. Lecouteur and Delfabbro (2001) explained, "professors' conceptions affect the teaching strategies and activities adopted, their expectations and relationships with students, and their attitudes towards participation in teaching development programs" (p. 206). Based on the findings from this study, it is evident that the professors applied different methods to attain a common goal of student engagement.

Our study findings also revealed that to become a better instructor, professors must reflect on their own teaching practices. The professors in the current study all constantly modified their teaching practices based on their own experiences as students. Clearly, their self-awareness and student orientation contributed to the increased level of student engagement in learning. The important role in enhancing student learning was articulated by Driver, Asoko, Leach, Mortimer, and Scott (1994):

Knowledge and understandings, including scientific understandings, are constructed when individuals engage socially in talk and activity about shared problems or tasks. Making meaning is thus a dialogic process involving persons-in conversation, and learning is seen as the process by which individuals are introduced to a culture by more skilled members. (p.7)

Similarly, constructivists believe that knowledge construction involves both an individual mental effort and social interaction (Merriam, Caffarella, & Baumgartner, 2012). From the constructivist perspective, an instruction should be designed to encourage students to construct meaning of the taught concepts, which will eventually result in enhanced learning. The above views are also shared by other researchers such as Ertmer and Newby (1993): "Clearly the focus of constructivism is on creating cognitive tools which reflect the wisdom of the culture in which they are used as well as the insights and experiences of individuals" (p. 64). Furthermore, it is important to note while effective instruction and content presentation skill are important, successful learning cannot take place without students' efforts as well as their willingness to learn and apply the concepts (Arghode & Wang, 2016). These perspectives were shared by all of our study participants

Journal of the Scholarship of Teaching and Learning, Vol. 17, No. 4, October 2017. josotl.indiana.edu

141

who stressed professors can learn from their experiences and make conscious efforts in improving their instruction by incorporating the practices that work the best for them.

In this study, the participants distinguished instructing to receive high student evaluation from instructing to address students' needs and wants. Some professors who teach to receive high teaching evaluations may not be able to go beyond superficial learning. Findings from this study also indicated that an encouraging and non-threatening learning environment promotes learning. An emotionally and socially intelligent instructor is therefore more competent in creating an optimal learning environment and is in a better position to understand diverse opinions/needs of different students, thereby enhancing student learning. The ability to connect with students and care about their progress signifies emotional adeptness of the professors. This ability, also referred to as emotional and social intelligence competence (ESIC), is an evolving concept derived from psychology and organizational behavior. Although ESIC has taken a center stage in different studies, the concept warrants further exploration in instruction (Arghode, 2013).

Practice Recommendations

Student engagement is fast growing as a critical area of focus in higher education (Kuh, 2007). Findings from the current study illuminated some specific engagement strategies for engagement. One of the most significant findings from the current study was the commitment and effort required for student engagement. Although our participants expressed enthusiasm and willingness to enhances student engagement, they also recognized that it is not an easy task. As the study participants reminded us, to actively engage student students in learning requires constant, consistent, and concerted effort; it is an ongoing process. Therefore, unless an instructor is passionate, enthusiastic, and interested in engaging students, student engagement will not happen. Thus, our first suggestions for professors is to cultivate love for the subject, teaching, and students. This is a self-development process requiring professors to consciously and continuingly reflect in action and on action. In addition, engaging students effectively requires professors' genuine care student development.

Our second suggestion for enhancing engagement is to create a non-threatening, encouraging, and inclusive learning environment. Students are likely to be more engaged with the content and the learning process if they feel supported and their contribution is valued. Our third suggestion is to improve instruction. To do so requires professors to be constantly on the lookout for new methods so that they can innovate their teaching practices. Our study participants pointed out one way to do so, that is, to integrate technology into teaching. Tools such as videos, blogs, learning management systems, and social media can be helpful in improving student engagement.

Our final suggestion is to embrace the student-centered mindset. With such orientation, an instructor will be willing to invest time in learning about students' backgrounds, understanding their unique perspectives, and seeking their authentic feedback. They are also more likely to be inspired to seek means to enhance student engagement to achieve optimal learning outcomes.

Research Recommendations

Based on the current study findings, the impact of emotion, care, and passion on instruction warrants further study. Therefore, we recommend additional research to explore how professors' ESIC affects students' engagement and learning outcomes. Further empirical research on the students' understanding and perceptions about professors' ESIC is also needed.

Researchers may also want to further examine the student engagement concept using different research methodologies other than the case study approach adopted in this study, for example, the phenomenological approach. Different dimensions of student engagement such as behavioral, emotional, and cognitive engagement can each be considered as a separate phenomenon and explored in-depth for a sound understanding of what influences student engagement in learning.

Participants in the current study consistently stressed the importance of understanding student backgrounds and ability to connect with students. Further research is needed around empathizing with students to achieve the learning outcomes. Professors' ability to relate to their students and understand their perspectives also connotes to empathizing with the students. Therefore, we encourage researchers to explore the empathy construct using a grounded theory approach.

Since the case study is qualitative in nature, the sample size is very small (seven cases). Although each case provided us with a wealth of information and deep insights into student engagement, the findings are highly contextualized, thus cannot be generalized without caution. To this end, we recommend more case studies and quantitative studies to be conducted with a larger instructor population across universities. Focusing on the breath of information allows generalization of empirical evidence and assists with the identification of patterns of behaviors.

Conclusions

The participants in this study unanimously agreed that maximizing learning is the primary goal of an instructor. Effective professors in the 21st century must have knowledge and skills along with the social disposition and empathy for students. They must constantly and critically reflect on their own practice and search relentlessly for knowledge and strategies to become effective professors. As the findings from this study revealed, making learning fun, interesting, and entertaining does not necessarily warrant desired learning outcomes. However, learning will become effective when connections are made to the experiences of the students. By examining seven cases, this study provided additional insights into a critical area of concern in education—student engagement.

Findings from this study shed light on student motivation, personal attributes of professors, and strategies effective in enhancing learning participation. It is hoped that this study will stimulate more research efforts in this direction to expand our knowledge base and offer further evidencebased insights into ways to improve instructional effectiveness. Engaged students are less resistant to learning so there are fewer class management issues. Professors face less student disciplinary problems if they achieve student engagement. Student engagement improves student performance because it creates a stimulus and response cycle where students can associate the taught concepts with the engaging learning environment. In an engaging learning environment, students exceed an instructor's expectations. Based on the findings from this study, professors should also become more aware of their own emotional and mental abilities. This self-awareness can help professors in many ways. First, the ability to control emotions and effectively utilize emotional energy will help professors improve their instruction. Classroom discussions are also prone to subjective disagreement and conflicts. In handling such sensitive situations, professors' emotional competence will play a more pivotal role than the instructor's subject knowledge. If professors know how to effectively leverage their emotions, they will be in a better position to encourage students to participate in learning. As stressed earlier, emotions form a backbone of the learning;

therefore, professors can use this invaluable knowledge about Emotional and Social Intelligence Competence to make learning not only effective but also memorable for their students.

References

Agbetsiafa, D. (2010). Evaluating effective teaching in college level economics using student ratings of instruction: A factor analytic approach. *Journal of College Teaching and Learning*, 7(5), 57-66.

Anderson, H. M., Moore, D. L., Anaya, G., & Bird, E. (2005). Student learning outcomes assessment: A component of program assessment. *American Journal of Pharmaceutical Education*, 69(1-5), 256-268. doi.org/10.5688/aj690239

Arghode (2012). Role of empathy in instruction. *Global Education Journal*, 2012(3), 128-143.

Arghode (2013). Emotional and social intelligence competence: Implications for instruction. *International Journal of Pedagogies and Learning*, 8(2), 66-77. doi.org/10.5172/ijpl.2013.8.2.66.

Arghode, Yalvac, B., & Liew, J. (2013). Teacher empathy and science education: A collective case study. *Eurasia Journal of Mathematics*, *Science & Technology Education*, 9(2), 89-99. doi.org/10.12973/eurasia.2013.921a

Arghode, V., & Wang, J. (2016). Exploring trainers' engaging instructional practices: A collective Case study. *European Journal of Training and Development*, 40(2), 111 – 127. doi.org/10.1108/EJTD-04-2015-0033

Baxter, P., & Jack, S. (2008). Qualitative case study methodology: Study design and implementation for novice researchers. *The Qualitative Report*, 13(4), 544-559.

Bransford, J., Brown, A. L., & Cocking, R. R. (2000). *How people learn: Brain, mind, experience, and school* (2nd ed.). Washington, DC: National Academy Press.

Burke, L. A., & Rau, B. (2010). The research-teaching gap in management. *Academy of Management Learning & Education*, 9(1), 132-143. doi.org/10.5465/AMLE.2010.48661196

Cashin, W. E., & Downey, R. G. (1995). 'Disciplinary differences in what is taught and in student's perceptions of what they learn and of how they are taught. In M. Theall & J. Franklin (Eds.), *New Directions for Teaching and Learning*, (no. 64). San Francisco. Jossey-Bass.

Cook-Sather, A. (2010). Making spaces to learn. *Curriculum Inquiry*, 40(2), 281-294. doi.org/10.1111/j.1467-873X.2010.00482.x

Cotgrave, A. J., & Kokkarinen, N. (2011). Promoting sustainability literacy in construction students. *Structural Survey*, 29(3), 197-212. doi.org/10.1108/02630801111148185

- Creswell, J. W. (2007). *Qualitative inquiry & research design: Choosing among five approaches* (2nd ed.). Thousand Oaks, CA: Sage.
- Driver, R., Asoko, H., Leach, J., Scott, P., & Mortimer, E. (1994). Constructing scientific knowledge in the classroom. *Educational Researcher*, 23(7), 5-12. doi.org/10.3102/0013189X023007005
- Dunlap, J. C., & Lowental, P. R. (2010). What's your best learning experience? What students' stories tell us about engaging teaching and learning. *American Educational Research Association*, Denver, CO.
- Efstathiou, N., & Bailey, C. (2012). Promoting active learning using audience response system in large bioscience classes. *Nurse Education Today*, *32*(1), 91-95. doi.org/10.1016/j.nedt.2011.01.017
- Eljamal, M. B., Sharp, S., Stark, J. S., Arnold, G. L., & Lowther, M. A. (1998). Listening for disciplinary differences in faculty goals for effective thinking. *Journal of General Education*, 47(2), 117-148.
- Ertmer, P. A., & Newby, T. J. (1993). Behaviorism, cognitivism, constructivism: Comparing critical features from an instructional design perspective. *Performance Improvement Quarterly*, 6(4), 50-72. doi.org/10.1111/j.1937-8327.1993.tb00605.x
- Farag, D. M., Park, S., & Kaupins, G. (2015). Faculty perceptions of the adoption and use of clickers in the legal studies in business classroom. *Journal of Education for Business*, 90(4), 208-216. doi:10.1080/08832323.2015.1014459
- Fernandes, S., Mesquita, D., Flores, M. A., & Lima, R. M. (2014). Engaging students in learning: Findings from a study of project-led education. *European Journal of Engineering Education*, 39(1), 55–67. doi.org/10.1080/03043797.2013.833170
- Fink, L. D. (2007). The power of course design to increase student engagement and learning. *Peer Review*, 9(1), 13-17.
- Frederick, P. (2004). The power of student stories: Connections that enhance learning. *Teaching Excellence: Toward the Best in the Academy, 16*(2), 1-2.
- Fried, J. (2013). Engaged learning: Why feelings matter. *About Campus*, 18(1), 2–8. doi.org/10.1002/abc.21105
- Gasiewski, J. A., Eagan, M. K., Garcia, G. A., Hurtado, S., & Chang, M. J. (2012). From gatekeeping to engagement: A multicontextual, mixed method study of student academic engagement in introductory STEM courses. *Research in Higher Education*, *53*(12), 1-33. doi.org/10.1007/s11162-011-9247-y
- Glaser, B. G. (1965). The constant comparative method of qualitative analysis. *Social Problems*, 12(4), 436-445. doi.org/10.2307/798843

Journal of the Scholarship of Teaching and Learning, Vol. 17, No. 4, October 2017. josotl.indiana.edu

Goldstein, G. S., & Benassi, V. A. (2006). Students' and professors' beliefs about excellent lecturers and discussion leaders. *Research in Higher Education*, 47(6), 685-707. doi.org/10.1007/s11162-006-9011-x

Gustafson, K. L., & Branch, R. M. (2002). What is instructional design? In R. A. Reiser, & J. V. Dempsey (Eds.), *Trends and issues in instructional design and technology* (pp. 17-25). Upper Saddle River, NJ: Pearson Education.

Handelsman, M. M., Briggs, W. L., Sullivan, N., & Towler, A. (2005). A measure of college student course engagement. *The Journal of Educational Research*, *98*(3), 184-192. doi.org/10.3200/JOER.98.3.184-192

Hativa, N., & Birenbaum, M. (2000). Who prefers what? Disciplinary differences in students' preferred approaches to teaching and learning styles. *Research in Higher Education*, 41(2), 209-236. doi.org/10.1023/A:1007095205308

Hudson, B. (2002). Holding complexity and searching for meaning: Teaching as reflective practice. *Journal of Curriculum Studies*, *34*(1), 43-57. doi.org/10.1080/00220270110086975

Krefting, L. (1991). Rigor in qualitative research: The assessment of trustworthiness. *The American Journal of Occupational Therapy*, 45(3), 214-222. doi.org/10.5014/ajot.45.3.214

Kuh, G. D. (2007). What student engagement data tell us about college readiness. *Peer Review*, 9(1), 4-8.

Laird, T. F. N., Chen, D., & Kuh, G. D. (2008). Classroom practices at institutions with higher-than-expected persistence rates: What student engagement data tell us. *New Directions for Teaching and Learning*, 2008(115), 85-99. doi.org/10.1002/tl.327

LeCouteur, A., & Delfabbro, P. H. (2001). Repertoires of teaching and learning: A comparison of university teachers and students using Q methodology. *Higher Education*, 42(2), 205-235. doi.org/10.1023/A:1017583516646

Lillie, R. E., Ed D., Liu, X., & Kang, G. (2011). Creating and maintaining Instructor/Student connection between class meetings: The use of eyejot-A video messaging technology. *American Journal of Business Education*, 4(10), 11-16. doi.org/10.19030/ajbe.v4i10.6058

Lindblom-Ylanne, S., Trigwell, K., Nevgi, A., & Ashwin, P. (2006). How approaches to teaching are affected by discipline and teaching context. *Studies in Higher Education*, *31*(3), 285-298. doi.org/10.1080/03075070600680539

Lucas, A. (2009). Using peer instruction and I-clickers to enhance student participation in calculus. *Primus: Problems, Resources, and Issues in Mathematics Undergraduate Studies, 19*(3), 219-231. doi.org/10.1080/10511970701643970

- Lueddeke, G. R. (2003). Professionalizing teaching practice in higher education: A study of disciplinary variation and 'teaching-scholarship'. *Studies in Higher Education*, 28(2), 213-228. doi.org/10.1080/0307507032000058082
- Marks, H. M. (2000). Student engagement in instructional activity: Patterns in the elementary, middle, and high school years. *American Educational Research Journal*, *37*(1), 153-184. doi.org/10.3102/00028312037001153
- Martin, E., Prosser, M., Trigwell, K., Ramsden, P., & Benjamin, J. (2000). What university teachers teach and how they teach it. *Instructional Science*, 28(5), 387-412. doi.org/10.1023/A:1026559912774
- Mayer, R. E., Heiser, J., & Lonn, S. (2001). Cognitive constraints on multimedia learning: When presenting more material results in less understanding. *Journal of Educational Psychology*, *93*(1), 187-198. doi.org/10.1037/0022-0663.93.1.187
- McCuddy, M. K. (2008). Using student feedback in designing student-focused curricula. *The International Journal of Educational Management*, 22(7), 611-637. doi.org/10.1108/09513540810908548
- Merriam, S. B. (2002). *Qualitative research in practice: Examples for discussion and analysis*. San Francisco, CA: Jossey-Bass.
- Merriam, S. B., Caffarella, R. S., & Baumgartner, L. M. (2012). *Learning in adulthood: A comprehensive guide*. San Francisco, CA: Jossey-Bass.
- Meyer, D. K., & Turner, J. C. (2006). Re-conceptualizing emotion and motivation to learn in classroom contexts. *Educational Psychology Review*, 18(4), 377–390. doi.org/10.1007/s10648-006-9032-1
- Minor, L. C., Onwuegbuzie, A. J., Witcher, A. E., & James, T. L. (2002). Preservice teachers' educational beliefs and their perceptions of characteristics of effective teachers. *The Journal of Educational Research*, 96(2), 116-127. doi.org/10.1080/00220670209598798
- Neuman, G. A., Edwards, J. E., & Raju, N. S. (1989). Organizational development interventions: A Meta-Analysis of their effects on satisfaction and other attitudes. *Personnel Psychology*, 42(3), 461-489. doi.org/10.1111/j.1744-6570.1989.tb00665.x
- Patton, M. Q. (2002). *Qualitative research and evaluation methods*. Thousand Oaks: CA: Sage Publications, Inc.
- Pike, G. R., & Kuh, G. D. (2005). A typology of student engagement for American colleges and universities. *Research in Higher Education*, 46(2), 185-209. doi.org/10.1007/s11162-004-1599-0
- Pintrich, P. R., & Schunk, D. H. (1996). *Motivation in education: Theory, research, and applications*. Englewood Cliffs, NJ: Merrill Prentice Hall.

Journal of the Scholarship of Teaching and Learning, Vol. 17, No. 4, October 2017. josotl.indiana.edu

- Ranson, S., Martin, J., Nixon, J., & McKeown, P. (1996). Towards a theory of learning. *British Journal of Educational Studies*, 44(1), 9-26. doi.org/10.1080/00071005.1996.9974055
- Robinson, C. C., & Hullinger, H. (2008). New benchmarks in higher education: Student engagement in online learning. *Journal of Education for Business*, 84(2), 101-109. doi.org/10.3200/JOEB.84.2.101-109
- Rocca, K. A. (2010). Student participation in the college classroom: An extended multidisciplinary literature review. *Communication Education*, *59*(2), 185-213. doi.org/10.1080/03634520903505936
- Rockoff, J. E. (2004). The impact of individual teachers on student achievement: Evidence from panel data. *The American Economic Review*, 94(2), 247-252. doi.org/10.1257/0002828041302244
- Smeby, J. (1996). Disciplinary differences in university teaching. *Studies in Higher Education*, 21(1), 69-79. doi.org/10.1080/03075079612331381467
- Smimou, K., & Dahl, D. W. (2012). On the relationship between students' perceptions of teaching quality, methods of assessment, and satisfaction. *Journal of Education for Business*, 87(1), 22-35. doi.org/10.1080/08832323.2010.550339
- Stake, R. E. (2005). Qualitative case studies. In N. K. Denzin, & Y. S. Lincoln (Eds.), *Handbook of qualitative research* (pp. 443-467). Thousand Oaks: CA: Sage.
- Stark, J. S. (1990). Disciplinary differences in course planning. *Review of Higher Education*, *13*(2), 141-165. doi.org/10.1353/rhe.1990.0025
- Sutton, R. E., & Wheatley, K. F. (2003). Teachers' emotions and teaching: A review of the literature and directions for future research. *Educational Psychology Review*, 15(4), 327-358. doi.org/10.1023/A:1026131715856
- Swanson, B. L., Watkins, K. E., & Marsick, V. J. (2005). Qualitative research methods. *Doing action research in your own organization* (2nd ed., pp. 88-113). London: Sage.
- Swanson, R. A. (2001). In Giley J. W. (Ed.), *Assessing the financial benefits of human resource development* [New perspectives in organizational learning, performance, and change]. Cambridge, MA: Perseus Publishing.
- Swap, R. J., & Walter, J. A. (2015). An approach to engaging students in a large-enrollment, introductory STEM college course. *Journal of the Scholarship of Teaching and Learning*, *15*(5), 1–21. doi.org/10.14434/josotl.v15i5.18910
- Thalheimer, W. (2003). *The learning benefits of questions*. Somerville, MA: Work Learning Research.
- Trigwell, K., Prosser, M., & Waterhouse, F. (1999). Relations between teachers' approaches to Journal of the Scholarship of Teaching and Learning, Vol. 17, No. 4, October 2017. josotl.indiana.edu 148

teaching and students' approaches to learning. *Higher Education*, *37*(1), 57-70. doi.org/10.1023/A:1003548313194

Umbach, P. D., & Wawrzynski, M. R. (2005). Faculty do matter: The role of college faculty in student learning and engagement. *Research in Higher Education*, 46(2), 153-184. doi.org/10.1007/s11162-004-1598-1

Wang, J. & Roulston, K. J. (2007). An alternative approach to conceptualizing interviews in HRD research. *Human Resource Development Quarterly*, 18(2), 179-210. doi.org/10.1002/hrdq.1199

Wolk, S. (2008). Joy in school. Educational Leadership, 66(1), 8-15.

Yin, R. K. (2009). Case study research: Design and methods (3rd ed.). Thousand Oaks, CA: Sage.

Zins, J. E., Bloodworth, M. R., Weissberg, R. P., & Walberg, H. J. (1997). The scientific base linking social and emotional learning to school success. *Journal of Educational and Psychological Consultation*, 17(508), 191-210.