

# Increasing Student Engagement in Higher Education

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*Teachers in higher education are faced with the challenge of engaging their students. The role of the teacher is to help students interact with the content, and have them create their own knowledge. Research shows that using effective teaching methods can stimulate student engagement, and that student engagement is associated with positive learning outcomes. Consequently, the purpose of this study is to learn more about student engagement, and what can be done to increase student engagement in higher education. This study offers numerous solutions to increase student engagement including a framework of principles, and effective teaching methods.*

## **INTRODUCTION**

One of the challenges teachers face in higher education is that of engaging their students. Teaching requires not only a command of the subject matter, but just as important, effective teaching methods that are necessary to engage their students. However, some beginning teachers entering higher education are not prepared to teach (Lail, 2009). They use methods based on certain principles from what they have been exposed to, or by how they were taught, influencing the way they teach their own students. These methods are not necessarily effective for teaching and engaging students in higher education. Research has shown that using effective teaching methods can stimulate student engagement, and that engaged students are good learners (Bryson & Hand, 2007; Jang, 2008; Troisi, 2014). Knowing more about student engagement, and what can be done to increase student engagement might be useful to those individuals new to teaching in higher education.

In the spring semester of 2015, focus groups were held among college students to seek their perspective on student engagement. These groups agreed that there is more teachers can do to increase student engagement. Consequently, the purpose of this paper is to understand and learn what teachers can do to influence, and therefore, increase student engagement. First, a comprehensive literature review will be provided on the concept of student engagement including instructional methods and techniques. Second, results from the focus groups will be shared. Last, an action plan for increasing student engagement in higher education will be presented based on analysis of the literature, and results from the focus groups.

## **AREA OF FOCUS STATEMENT**

The purpose of this study is to determine effective teaching methods to increase student engagement in higher education. Student engagement has been defined as involving students in meaningful academic activities (Delialioğlu, 2012). The teacher's role is to help students engage and interact with the course

material so that students can create their own knowledge (Lumpkin, Achen, & Dodd, 2015). Results from the 2008 National Survey of Student Engagement at one university found that high levels of student engagement positively contributed to cumulative GPA and students' perception of their overall academic experience (Webber, Krylow, & Zhang, 2013). Teachers in higher education are faced with the challenge of engaging their students. Therefore, by answering the following research questions, successful teaching methods should be uncovered that would aid in increasing student engagement for teachers in higher education.

### **Research Questions**

1. How is student engagement perceived among college students?
2. What can teachers do to influence student engagement?

### **LITERATURE REVIEW**

Researchers have described student engagement as a multidimensional phenomenon. Most definitions have included at least both behavioral and affective components (Handelsman, Briggs, Sullivan, & Towler, 2005). Others have noted student engagement as an interpersonal component where interactions with teachers, and other students were found to be an important part of the learning experience (Lumpkin et al., 2015). Handelsman et al. found evidence of four dimensions of student engagement: general learning skills, emotional involvement with class material, participation/interaction with faculty and peers, and performance. Ahfeldt, Mehta, and Sellnow (2005) characterized student engagement as being actively involved by asking questions, or working collaboratively with other students.

Wittrock's (1990) generative theory of learning states that students learn better when they are engaged during the learning experience. Answering questions and receiving feedback increases students' attention so they are more likely to encode the presented course material. By answering questions students are better able to gauge their level of understanding. Campbell and Mayer (2009) found that students who were engaged during a lecture performed better in the course compared to those students who were not engaged. Students who were engaged answered questions that were posed by the teacher who in return provided feedback. Based on these results, they suggested that teachers should consider using a questioning procedure during college lectures to promote student engagement in which a few lecture-related questions are asked by the teacher, answered by the students, and then feedback is given from the teacher.

Webber et al. (2013) used Astin's theory of involvement (1993) and Pace's theory on quality of effort (1987) as their theoretical framework in their study on student engagement. Astin's theory of involvement (1993) and Pace's theory on quality of effort (1987) address the issues of student involvement and engagement. The idea is that students will have a greater experience from college based on the time and effort they devote to their college activities. Time refers to how often a student engages, and effort consists of how fully the student devotes into the activity. Webber et al. found that students who reported more frequent engagement in academic and social activities earned higher grades, and reported higher levels of satisfaction with their college experience. They indicated that students may benefit with increased academic knowledge as well as personal and social skills in a collaborative learning environment that is both challenging and supportive.

Schlenker, Schlenker, and Schlenker (2013) viewed student engagement from a psychological perspective. They used the triangle model as their theoretical foundation. The triangle model was developed to deal with the nature and implications of accountability in interpersonal relations. According to the triangle model, student engagement is a direct function of the strengths of three factors: prescription clarity, personal control, and personal obligation. They found that setting clear goals, teaching learning strategies, and encouraging students to believe in themselves, along with stressing the importance of personal obligation contributed to predicting academic engagement. Engagement, in turn, predicted academic success.

Bryson and Hand (2007) proposed that there are different levels of student engagement that lies on a continuum from disengaged to engaged, and that the same student can experience different degrees of engagement. Based on focus group discussions, student engagement was comprised of various levels of active participation in class activities. Enjoyment, enthusiasm, reading for pleasure of learning itself, and reading more than required about a subject were described as elements of student engagement. The disposition of the teacher appeared to influence the disposition of the student. The teacher's enthusiasm about a subject, and teaching process increased student engagement. They concluded that students are more likely to engage if their teachers are engaged with them, and the teaching process.

Troisi (2014) investigated whether student management teams (SMTs) would be effective in increasing student engagement, and academic performance. A student engagement team is comprised of a group of three to five students who serve as liaisons between students in the course, and the teacher. The SMTs regularly meet with the teacher to improve the learning environment within a course. They work collaboratively with the teacher by improving communication, course content, evaluation, and assessment techniques. Students are either selected by the teacher, or they volunteer to be a member of the team. Troisi found that members of the SMTs were more engaged, and performed better in their courses.

According to the identified regulation model, teachers can increase student engagement by providing them with a rationale that they can identify with, and is of use to them. Studies have shown that students will tend to invest more effort, and achieve more when a lesson is perceived to have personal importance to them (Miller & Brickman, 2004; Shell & Husman, 2001). Jang (2008) found that students' engagement, motivation, and overall learning experience was increased by providing a rationale in a supportive way.

Zeeman and Lotriet (2013) described a teaching approach based on the theoretical framework of Heathcote's (Heathcote & Bolton, 1995) 'mantle of the expert.' The 'mantle of the expert' stresses the importance of allowing students to take part in making decisions in order for them to become invested in the learning experience. The learning experience is based on a partnership of generated knowledge and understanding. They demonstrated that by careful reframing of the learning environment, students are not only engaged, but they can achieve a rich learning experience.

Zhang, Shi, Yun, Li, Wang, He, and Miao (2014) investigated the role that self-regulation plays in college students' academic engagement and burnout. Self-regulation was defined as being comprised of two kinds of process-oriented motivation styles: locomotion mode and assessment mode. Locomotion mode was described as being goal-oriented, and assessment mode referred to evaluation of alternatives in order to maximize progress once the activity has begun. When students are making critical evaluations, and assessing where they are at in reaching that goal, they are in the assessment mode. When students are focused on a goal, and making progress, they are in the locomotion mode. Zhang et al. found that locomotion mode was negatively associated with academic burnout, and positively related to academic engagement, while the assessment mode was positively related to academic burnout, and negatively associated with academic engagement. They suggested that teachers might be able to prevent burnout and promote student engagement by encouraging students to apply goal-setting strategies, and have them focus on the learning experience, and not the final grade.

According to Doyle (2008) creating learner-centered environments can sustain, and promote student engagement. In learner-centered environments, students become active in their learning experience, and are now responsible for their own learning. Through an active research project, Lumpkin et al. (2015) assessed how students perceived active learning strategies that included working in pairs, writing a variety of exploratory assignments, and having small group discussions. Quantitative and qualitative data revealed that students valued participating in engaged learning activities. These students believed that working in pairs and having small group discussions positively impacted their learning. These students indicated that in-class writing, and small group discussions facilitated their willingness to answer questions in class. Lumpkin et al. suggested that teachers should incorporate a variety of more active learning strategies, and approaches to meet the academic needs of their students. Furthermore, they believed that soliciting anonymous student perceptions provided valuable insight for ways to improve course design and instructional approaches.

Hourigan (2013) developed a simple, and flexible model of active learning that promotes student engagement, known as ARC (application, response, collaboration). ARC encourages students to be present and engaged, and allows teachers to experiment with pedagogy. The key principles behind ARC were to have students make connections, respond and reflect, and collaborate with their peers. Activities, planned and unplanned, are weaved into the course that allow students to apply concepts or theories. Individually students would think through a theory, then collaborate in small groups, and discuss in class. Students would also apply the theory with real-world examples. Using a multitude of stimuli, such as an audio clip, or simply art, the teacher would ask students to react, and reflect. This method had a positive impact on student engagement. Furthermore, syllabus are designed to recognize, and reward active student engagement. Students would receive small amounts of credit for active engagement, but in total would account for a substantial portion of each student's grade.

Chickering and Gamson (1987) presented a framework that could be used to increase student engagement. According to this framework, students are more engaged when the instruction (1) increases student-teacher interaction, (2) stimulates cooperation among students, (3) encourages active learning, (4) provides timely feedback, (5) requires students to invest time in their assignments, (6) establishes high expectations, and (7) respects diverse talents and ways of learning.

Blended learning has incorporated these seven principles. Based on the literature, the most popular definition of blended learning is the combination of face-to-face, and online learning environments (Delialioğlu, 2012). These mixed modes of learning environments have potential to increase student engagement. For instance, Neumann, Neumann, and Hood (2011) examined the integration of technology during lectures in statistics from within a blended learning framework. They incorporated the use of technology that was comprised of online access to lecture notes, multimedia presentations, computer based simulations of statistical concepts, animations, and the use of SPSS statistical software package during the lectures. The results showed three global effects on student learning and engagement: practical application, understanding, and positive attitudes.

Junco, Heiberger, and Loken (2011) also used Chickering and Gamson's (1987) framework in promoting student engagement. Their study examined the effect of using Twitter as part of an educational intervention on student engagement. They found that Twitter improved contact between instructor and students, encouraged collaboration, promoted active learning, provided prompt feedback, aided in completing tasks on time, communicated high expectations, and showed respect for diversity. Students and instructors were active participants and highly engaged in the learning process.

An additional promising method that has been effective in increasing student engagement is active learning. With active learning, students become actively involved searching for information to increase their comprehension of the course material. Delialioğlu (2012) found that students were more engaged with active learning strategies when they were working in a problem-based learning environment in comparison to the lecture-based learning.

Schrand (2008) encouraged educators to use technologies for active forms of student learning, and not as "shovels" of passive learning in presenting course content (p.78). He created interactive multimedia exercises that promoted active learning. Previous in-class exercises required students to take slips of paper with different phrases, and assign them into one of two categories: U.S. cultural value and non-U.S. cultural value. He used animation software in creating exercises, in which all moving parts were digitalized, and programmed to be dragged, and dropped on the computer screen. These exercises contributed to lively classroom participation, sense of student ownership, element of play, and public display of student performance. Student engagement was viewed as active collaborative participation in which students practice, build, and create.

Teachers who use technology as a tool appeared to experience success in promoting student engagement. Chen, Lambert, and Guidry (2010) investigated the impact of Web-based learning technology on student engagement, and self-reported learning outcomes in face-to-face, and online learning environments. Data for this study came from the 2008 National Survey of Student Engagement (NSSE). Based on 17,819 respondents, they found that there is a positive relationship between students who engaged in course-related technology, and learning outcomes, and that the use of technology has a

stronger impact earlier in the college experience. Williams and Chinn (2009) also found that online assignments using Web 2.0 technologies increased student engagement, and contributed to the level of connectivity.

Based on the review of literature, student engagement appears to have many meanings, and it is clear there are a variety of methods that teachers can use to increase student engagement. Research has shown that student engagement is positively associated with learning outcomes (Delialioğlu, 2012; Schlenker et al., 2013; Troisi, 2014; Webber et al., 2013). In order to obtain a deeper understanding of student engagement in higher education, college students were asked to provide their personal accounts of student engagement, and what teachers can do to promote student engagement.

## **DATA COLLECTION**

In the spring semester of 2015, two focus groups were held among college students to seek their perspective on student engagement. A convenience sample of undergraduate students was selected from a private university in the western United States. The participants were told that any information that is obtained with this study, including their identities, will remain anonymous, and that their participation was voluntary. They were willing, and interested to provide their viewpoints. No harm was done to these participants.

A total of 10 participants participated in the focus groups. There were two freshmen, one sophomore and seven graduating seniors. The two focus groups were conducted at different times and locations. The author conducted the first focus group with six of the participants, and her teaching assistant conducted the second focus group comprised of the remaining four participants. Each of the sessions lasted approximately 30 minutes. Participants in the first focus group were asked the two research questions: what is student engagement, and what can teachers do to influence student engagement. Participants in the second group were only asked the second research question. Data from the focus groups were taken directly from notes that each of the facilitators recorded at the time of the sessions. The researcher then reviewed the transcriptions, and generated the results based on the participants' responses to the research questions. Summary of these findings were given to the participants to validate. The participants agreed with the findings.

## **Data Analysis and Interpretation**

The definition of student engagement among these participants was not that different from the literature review. These participants characterized student engagement in terms of behavioral, interpersonal, and affective components. From the behavioral perspective, student engagement was described as being present and attentive. Students who are pre-occupied on their computer, or phone are definitely not engaged. These students are not present or attentive. They indicated that eye contact was a telling indicator whether students are engaged, or not. From the interpersonal perspective, both focus groups mentioned that the relationship and interaction among the teachers and their peers have a positive impact on student engagement. These same participants indicated that students who participated and contributed to the classroom discussion were definitely engaged in the learning experience. From the affective perspective, enjoyment was added to the definition. In their words, student engagement is "liking what you are doing." As one participant indicated, student engagement is "what you make it to be."

When the participants were asked what teachers can do to influence student engagement, the responses were similar to the suggestions made by contemporary scholars. These participants indicated that teachers need to get students involved. Teachers should not rely on just one teaching method. They should use a variety of teaching methods. In addition to lectures, teachers should incorporate interactive, and fun activities that are related to the course material. For example, one participant mentioned the use of multimedia that has students using "clickers" to answer questions relating to the topic. A few participants indicated that teachers should teach from their hearts, and not the textbook. The textbook should be used as a resource. Teachers should create group, and project-based activities that promote

active and collaborative learning. Another participant indicated that setting up the classroom in a u-shape structure can promote student engagement. Teachers can also make student participation a part of the student's grade.

Both groups agreed that there is more teachers can do to increase student engagement. They stated that teachers need to involve, motivate, and challenge their students. They also need to create a safe environment for learning. Teachers need to remain stern, but positive. For example, participants from the first focus group referred to one particular teacher who "expects" involvement from her students. She promotes participation among her students by asking a lot of questions. She is clear about the assignments, and her students know that all of the readings need to be completed prior to class. She provides feedback, and makes learning fun, and interactive. As Bryson and Hand (2007) indicated, students are most likely to engage if their teachers are engaged with them, and the teaching process.

## **ACTION PLAN**

The findings from this study suggest that in order to increase student engagement in higher education, teachers need to get students actively involved in their learning experience by incorporating relevant, and enjoyable activities that promote student-teacher interaction, and student teamwork. Teachers need to create a safe learner-centered environment that respects diverse talents, and ways of learning. They need to set clear goals, establish high expectations, and provide timely feedback. These recommendations are based on the review of literature, and results from the focus groups.

Teachers should also recognize that there are different components of student engagement, and that there are a variety of teaching methods that can increase student engagement. Behaviorally, teachers can provide a rationale behind the lesson that is being taught to engage students (Jang, 2008). Hourigan (2013) suggested that student engagement could account for a portion of each student's grade. According to Campbell and Mayer (2009), incorporating a questioning procedure during lectures, and providing immediate feedback would also aid in increasing student engagement. From the interpersonal perspective, there were quite a few recommendations. Troisi (2014) suggested creating student management teams. Zeeman and Lotriet (2013) recommended allowing students to become stakeholders in the learning experience. Finally, Junco et al. (2011) introduced Twitter as a tool that teachers can use to promote collaborative learning, and increase student engagement. Addressing student engagement from the affective perspective, Schrand (2008) recommended incorporating interactive multimedia that is not only fun, but promotes collaborative learning.

Engaging students in higher education does not need to be challenging. Chickering and Gamson (1987) proposed seven principles for good practice in higher education, all of which are related to student engagement. A framework of principles, and suggested teaching methods have been presented in this paper. Research has shown that student engagement is associated with positive learning outcomes, and there are effective teaching methods available to those individuals new to teaching in higher education (Handelsman et al., 2005; Zeeman & Lotriet, 2013; Webber et al., 2013). These teaching methods are based on certain principles that are effective in increasing student engagement.

This study is only a beginning. Some teaching methods may be less effective than others depending on the learning environment and course content. Additional research should be done to explore the degree of effectiveness of these proposed methods. The selection limitation of focus group participants may pose some constraints for students' perceptions, values, attitudes, and personal account of student engagement. Including participants with varying degrees of motivation may reveal additional findings. Future researchers should continue to explore additional teaching methods that not only increase student engagement, but has a positive influence on the students' overall academic experience. Teaching is an art, and requires an inventive mind (Berliner, 1993).

## REFERENCES

- Ahlfeldt, S., Mehta, S., & Sellnow, T. (2005). Measurement and analysis of student engagement in university class where varying levels of PBL methods of instruction were in use. *Higher Education Research and Development, 24*(1), 5-20.
- Berliner, D. C. (1993). The 100-year journey of educational psychology from interest, to disdain, to respect for practice. In T.K. Fagan & G.R. VandenBos (Eds.), *Exploring applied psychology: Origins and critical analyses* (pp. 41-78). Washington, D.C.: American Psychological Association.
- Bryson, C., & Hand, L. (2007). The role of engagement in inspiring teaching and learning. *Innovations in Education and Teaching International, 44*(4), 349-362. doi: 10.1080/14703290701602748
- Campbell, J., & Mayer, R. E. (2009). Questioning as an instructional method: Does it affect learning from lectures? *Applied Cognitive Psychology, 23*(6), 747-759. doi:10.1002/acp.1513
- Chen, P. D., Lambert, A. D., & Guidry, K. R. (2010). Engaging online learners: The impact of web-based learning technology on college student engagement. *Computers & Education, 54*(4), 1222-1232. doi:10.1016/j.compedu.2009.11.008
- Chickering, A. W., & Gamson, Z. F. (1987). Seven principles for good practice in undergraduate education. *AAHE Bulletin, 39*(7), 3-7.
- Delialioğlu, Ö. (2012). Student engagement in blended learning environments with lecture-based and problem-based instructional approaches. *Educational Technology & Society, 15*(3), 310-322.
- Doyle, T. (2008). *Helping students learn in a learner-centered environment: A guide to facilitating learning in higher education*. Sterling, VA: Stylus Publishing.
- 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), 184-191.
- Heathcote, D., & G.M. Bolton. (1995). *Drama for learning: Dorothy Heathcote's mantle of the expert approach to education*. Portsmouth, UK: Heinemann
- Hourigan, K. L. (2013). Increasing student engagement in large classes: The ARC model of application, response, and collaboration. *Teaching Sociology, 41*(4), 353-359. doi: 10.1177/0092055X13491580
- Jang, H. (2008). Supporting students' motivation, engagement, and learning during an uninteresting activity. *Journal of Educational Psychology, 100*(4), 798-811. doi: 10.1037/a0012841
- Junco, R., Heiberger, G., & Loken, E. (2011). The effect of Twitter on college student engagement and grades. *Journal of Computer Assisted Learning, 27*(2), 119-132. doi: 10.1111/j.1365-2729.2010.00387.x
- Kiili, K. (2005). Participatory multimedia learning: Engaging learners. *Australasian Journal of Educational Technology, 21*(3), 303-322. Retrieved from <http://www.ascilite.org.au/ajet/ajet21/kiili.html>
- Lail, A. A. (2009). Are new faculty prepared to teach diverse learners? *Inquiry, 14* (1), 29-40.
- Lumpkin, A., Achen, R. M., & Dodd, R. K. (2015). Student perceptions of active learning. *College Student Journal, 49*(1), 121-133.
- Miller, R. B., & Brickman, S. J. (2004). A model of future-oriented motivation and self-regulation. *Educational Psychology Review, 16*, 9-33.
- Neumann, D. L., Neumann, M. M., & Hood, M. (2011). Evaluating computer-based simulations, multimedia and animations that help integrate blended learning with lectures in first year statistics. *Australasian Journal of Educational Technology, 27*(2), 274-289.
- Schlenker, B. R., Schlenker, P. A., & Schlenker, K. A. (2013). Antecedents of academic engagement and the implications for college grades. *Learning and Individual Differences, 27*, 75-81. doi:10.1016/j.lindif.2013.06.014
- Schrand, T. (2008). Tapping into active learning and multiple intelligences with interactive multimedia: A low-threshold classroom approach. *College Teaching, 56*(2), 78-84.

- Shell, D. F., & Husman, J. (2001). The multivariate dimensionality of personal control and future time perspective in achievement and studying. *Contemporary Educational Psychology, 26*, 481-506.
- Troisi, J.D. (2014). Making the grade and staying engaged: The influence of student management teams on student classroom outcomes. *Teaching of Psychology, 41*(2), 99-103. doi:10.1177/0098628314530337
- Webber, K. L., Krylow, R. B., & Zhang, Q. (2013). Does involvement really matter? Indicators of college student success and satisfaction. *Journal of College Student Development, 54*(6), 591-611. doi: 10.1353/csd.2013.0090
- Williams, J., & Chinn, S. J. (2009). Using Web 2.0 to support the active learning experience. *Journal of Information Systems Education, 20*(2), 165-174.
- Wittrock, M. C. (1990). Generative processes of comprehension. *Educational Psychologist, 24*, 354-376.
- Zeeman, E., & Lotriet, M. (2013). Beyond the expected: an enriched learning experience through learner engagement and participation. *Teaching in Higher Education, 18*(2), 179-191. doi: 10.1080/13562517.2012.696540
- Zhang, S., Shi, R., Yun, L., Li, X., Wang, Y., He, H., & Miao, D. (2014). Self-regulation and study-related health outcomes: A structural equation model of regulatory mode orientations, academic burnout and engagement among university students. *Social Indicators Research*, doi: 10:1007/s11205-014-0742-3