A student-centered guest lecturing: A constructivism approach to promote student engagement

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ABSTRACT

Student engagement has become a big challenge in higher education, especially when distance learning is getting more and more popular. Guest lecturing is a popular method to bring relevance to the classroom and engage in students. Ground on the theory of constructivism, this paper introduces a student-centered guest lecturing that allows students to work in team and participate in each step of process, such as preparation, interviewing, and reflection. Our pilot study showed that the proposed approach can effectively engage in students. The research methodology and plan are presented and the implications of the study are discussed.

Keywords: Distance learning, student-centered guest lecturing, constructivism, student engagement.
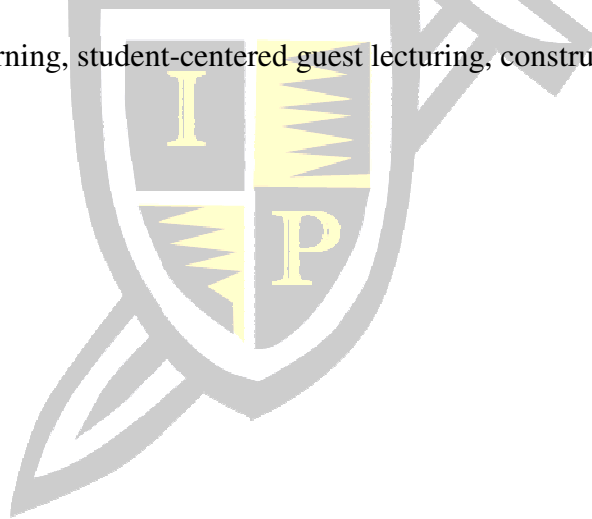
1. INTRODUCTION

Online learning has grown dramatically in recent years in the domain of higher education. While students enjoy flexibility and quality in learning through online education, student engagement is often a challenge even with well-designed-and-taught online classes due to lack of face-to-face interaction (Li & Guo, 2013). Studies (Ambrose et al., 2010 and Bean, 2011) show that students learn better when they are actively involved in the learning process.

One common practice involves instructors bringing in subject matter experts as guest lecturers. Guest lecturers, both in an online learning environment and an on-campus format, can bring relevance to the classroom (Eveleth & Baker-Eveleth, 2009). Jennings et al., (2010) state that guest speakers can be used to enhance the sustainability of quality pedagogical methodologies and provide more real world learning opportunities in terms of time and space, as compared with traditional theoretical learning methods. Academic institutions seeking to embrace new paradigms, such as guest lecturing or speaking, seek to do so as a means of: (a) continuously improving pedagogical efficacy; (b) improving student learning experiences; (c) providing qualitative information to students from industry experts; (d) enabling interactivity and interconnectedness between industry and the institution; and (e) relationship building among faculty and community industry leaders (Jennings et al., 2010). Albrecht (2012) also argues that after the theoretical context of topics has been explained and discussed in previous lectures and assignments, a transitional experience as a constructive approach involving guest lecturing may be employed to reinforce learned material.

Online guest speakers have proven to be a highly effective and credible method aimed at reinforcing course concepts, and add breadth to course learning examples and activities within pedagogical events (Eveleth & Eveleth, 2009). Social constructivist learning theory that suggests collaboration between the student and others that occurs outside the university is essential for efficacious learning (Eveleth & Eveleth, 2009). Uniqueness, perceived credibility, guest speaker excitement, and initiative can be increased when guest speakers are invited by student teams; uniqueness is enhanced each semester as new student teams are made available (Eveleth & Eveleth, 2009).

Prude (2103) states the efficacy of online course delivery can be greatly impacted in positive ways as a result of virtualization combined with guest lecturing (Prude, 2013). Online faculty who effectively teach the student learning objectives in conjunction with online virtual worlds where making use of virtual world fieldtrips, synchronous communications, animations, and guest lecturing can yield tremendous benefit and value-add to the student learning experience and achievement of course competencies (Prude, 2013).

Traditionally, guest lecturing is speaker-centered: the speaker delivers a presentation and follows with a short question-answer session. Students are often passive learners in the process, while they learn more when they are involved based on the constructivist theory (Klob, 1984). The situation occurs even worse for an online learning environment since the guest lecture is often presented in the format of asynchronous videos due to the difficulty in coordination of time between speaker and students. As a result, students do not benefit from guest speakers even though the lecture takes a lot of time and effort to deliver.

2. THEORETIC BACKGROUND

As a popular instructional theory, constructivism encourages experimental learning, hands-on learning and collaborative learning and is well adopted in the education domain (Glaserfeld 1989, Taber 2011). This form of pedagogy has also been identified as a necessary strategy for learner-centered approach in online environment (Gulati 2008 and Salmon 2000).

This paper proposes to incorporate a constructivist approach into the traditionally guest-speaker centered guest lecturing. The researchers argue that if a new guest lecturing process allows students construct the knowledge themselves through collaborative effort in a well-designed project, students will not only learn better, but also be more engaged in the course.

3. RESEARCH METHODOLOGY

3.1 Research Framework and Research Questions

Grounded on constructivism theory, the researchers introduce a student-centered approach for guest lecturing to promote student engagement. The general research framework is illustrated in figure 1. Guest lecturing can be used to engage in students, but its effectiveness is limited because students usually passively receive information is a traditional setting. This is place where constructivism can play an important role: students initialize the process by coming up with questions; guest lecture is done pure questions-and-answers format; students have chance to reflect their thoughts through discussion boards and essays; students work in teams during the whole process.
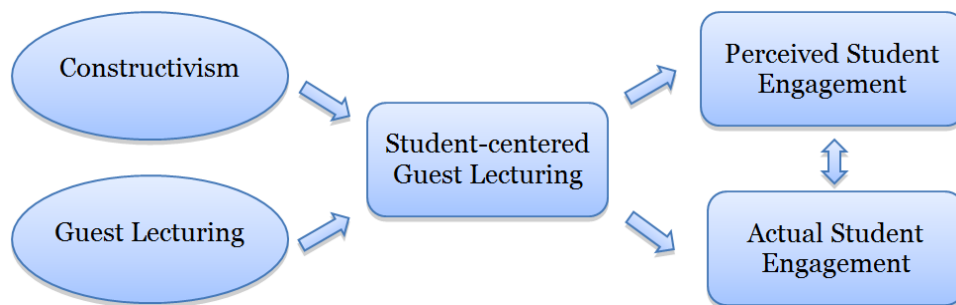

Figure 1. Research Framework

When students are actively involved in the guest lecturing process, they will be more eager to learn thus more engaged in the class. There are two types of engagements: 1) perceived engagement that can be measured using a questionnaire method; 2) actual engagement that be measured by students' activities in course management system such as the frequency they login the site, time they spend on watching the instructional video, etc.

Student engagement is more challenge in an online learning environment than in a traditional one. We argue that student-centered guest lecturing can simulate both perceived and actual student engagement. If a student sense she/he is more engaged, such perception will like turn into actual behavior. The hypothesis of this research is listed as follows.

RQ1. In an online learning environment, student-centered guest lecturing activity can promote more student engagement than traditional guest lecturing can.

RQ2. In an online learning environment, the students who have higher perceptions in term of engagement will present more active engagement behavior.

3.2 Student-Centered Guest Lecturing

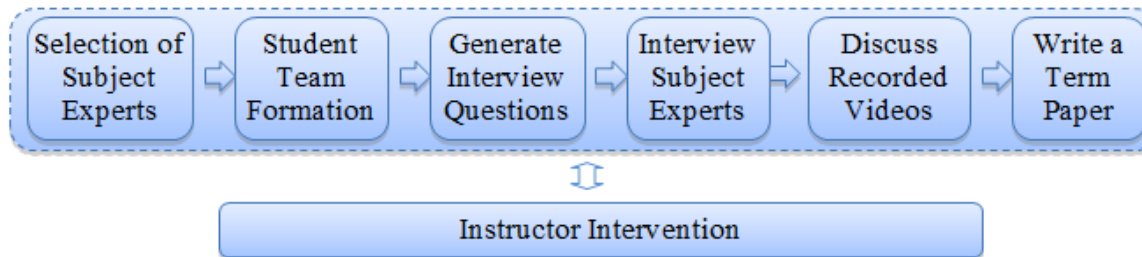Figure 2 outlines the processes in the proposed student-centered guest lecturing.

Figure 2. Framework for Student-Centered Guest Lecturing

First, the selection of a subject matter expert should be carefully aligned with the course content. The guest lecturing is completed in a pure question-and-answer format to facilitate student involvement. To simulate student interactions, students are asked to work in groups. In an online environment, student teams are formed using a discussion forum in the course management tool. Additional discussion forums are set up for each team to facilitate group activities.

Students first study the course content and then work in groups to determine questions for the guest speaker. The speaker is then interviewed in front of the class by an on-site course representative or instructor. The interview also can be accomplished remotely. The interview is recorded and made available to all students. Students then revisit the video and discuss their reflections in discussion forums. Ideally, a few more guest speakers get involved and the process is repeated. At the end, students review the series of videos, reflect, and write a term paper to summarize lessons learned. Students play a very active role during the whole process either working individually or working in groups. Activities such as discussions and a term paper are required to encourage student participation.

The instructor plays a critical role in this student-centered approach. The instructor needs to identify appropriate guest speakers for the class, set up clear expectations of students on each step of the approach, and closely monitor students' behavior and activities. On the other hand, the instructor should avoid getting into a dominant role in each stage except selection of subject matter experts. In another words, the instructor should act as a facilitator to create an environment where students can freely build their deep understanding of the subject matter through their close involvement in the guest lecturing process.

4. Research Design and Plan

The researchers plan to implement student-centered guest lecturing in an online graduate-level course in a medium-size public university from southeastern United States.

This research will last two academic semesters and we called study period one and two. In study period one, we implement the proposed approach in the participating course and use it as

the treatment group. In study period two, the guest lecturing will be done in traditionally manner and the participating class is used as the control group.

At the end of the each study period, a Web-based questionnaire will be administrated to the participants to measure their perceptions engagement. Qualitative data regarding this approach will also be collected in the form of open-ended questions. The student activities relate to the engagement will also collected using a course management website analytical tool. To minimize the potential mediating factors, we will use the same course throughout the study periods and course will be taught by the same instructor and use the same structure.

5. PILOT STUDY

The researchers conducted a pilot study by implementing study period 1. The student engagement activities on course management site weren't collected because the analytical tool wasn't available at that time. A web-based survey was designed to collect the following information: demographic information of the participants, their satisfactions with the approach, and their perceptions of engagement. Open-ended questions were used in the survey to catch issues with implementation process.

27 subjects were invited to participate in the survey and 19 of them completed it. Around 80% of participants are male and 55% are between 25 and 34 years old. 76% have a full time job. The demographic distribution of the subjects is consistent with graduate student population of the participating school.

The survey result is presented in table 1. In generally, the student-centered approach seemed to be very well received by the participants. Over 80% of them enjoyed the recorded interview sessions with guest speakers and learned a lot from them. More than 70% of the participants think student-centered approach is very useful: it made them interested in the course; helped them understand course material, made them engaged in the course.

Category	Statement	Percentage of Positive Perception
Satisfaction	The recorded interviews are relevant to the content of the course.	89.47%
	I enjoyed watching the recorded interviews	84.21%
	I learned a lot from the recorded interviews	84.21%
Engagement	The student-centered approach made me interested in this course.	73.68%
	The student-centered approach helped me understand the content of this course	78.94%
	The student-centered approach made me engaged in this class	73.68%

Table 1. Pilot Study Results

Note: For each statement, subject needs to indicate their perception in a 5-point scale: strong disagree, disagree, neutral, agree, and strongly agree. The percentage of positive

perception = number of participants indicated either agree or strongly agree on the statement/ total number of participants.

We also learned a lot from the pilot study: 1) there were issues with team collaboration. While this is common in team settings, we will search and apply best practices team collaboration to alleviate its impact. 2) We need to conduct more research on the student engagement measurement to make it more theoretical grounded.

6. DISCUSSION

Student engagement is becoming increasingly important in higher education especially, especially for a distance learning setting. Guest lecture is common approach to bring relevance to the class and it has the potential make student more interested and more involved in a class. Built on constructivism philosophy, this paper proposes an innovative student-centered approach to maximize the guest lecturing' impact on student engagement. The pilot study showed promising result. The proposed approach will be beneficial to our colleagues in higher education who are interested in increased student engagement and as a result, student active learning.

There are a few limitations to the student-centered approach. First, the success of the approach depends on the available resources. For example, it may not easy to identify guest speakers whose expertise closely align with content of the course. The institution may not have the man power or technology to record and produce the guest lecture videos. Secondly, the proposed approach may significantly increase instructor's workload. Even the approach is "student-center", instructor may have to large amount of time designing, coordinating, and executing the approach.

7. REFERENCES

[1]   Albrecht, J. N. 2012. Authentic Learning and Communities of Practice in Tourism Higher Education *Journal of Teaching in Travel & Tourism* , 12 (3), 260-276.

[2]   Ambrose, S. A., Bridges, M. W., DiPietro, M., Lovett, M. C., Norman, M. K., Mayer, R. E. 2010. How Learning Works: Seven Research-Based Principles for Smart Teaching. Jossey-Bass.

[3]   Bean, J. C. 2011. Engaging ideas: The professor's guide to integrating writing, critical thinking, and active learning in the classroom. John Wiley & Sons.

[4]   Eveleth, D. M., & Baker-Eveleth, L. J. 2009. Student Dialogue with Online Guest Speakers. Decision Sciences *Journal of Innovative Education*, 7 (2), 417-421.

[5]   Glaserfeld, E. 1989. Constructivism in education. Oxford, England: Pergamon Press.

[6]   Goodboy, A. K., & Myers, S. A. 2009. The Relationship between Perceived Instructor Immediacy and Student Challenge Behavior. *Journal of Instructional Psychology* , 36 (2), 108-112.

[7]   Gulati, S. 2008. Compulsory participation in online discussions: is this constructivism or normalisation of learning . *Innovations in Education and Teaching International*, 45 (2), 183–192.

[8]   Jennings, G., Kensbock, S., & Kachel, U. 2010. Enhancing 'Education About and For Sustainability' in a Tourism Studies Enterprise Management Course: An Action Research Approach. *Journal of Teaching in Travel & Tourism*. 10 (2), 163-191.

[9]   Kolb, D. 1984. Experiential Learning: Experience as the Source of Learning and
        Development. Englewood Cliffs, NJ: Prentice Hall.
[10]   Larrabee, T. G., & Morehead, P. 2010. Broadening Views of Social Justice and Teacher
        Leadership: Addressing LGB Issues in Teacher Education. *Issues in Teacher Education*,
        19 (2), 37-52.
[11]   Li, L., Guo, R., 2013, Can You Hear Me Now? – An Empirical Study on Using Social
        Media to Improve Student-Instructor Communication. *SIGITE Conference*, Orlando, FL
[12]   Prude, M. A. 2013. A Classroom of Bunnies, Blimps, and Werewolves: Teaching Asian
        Religions Online in Second Life. *ASIA Network Exchange* , 20 (2), 1-12.
[13]   Salmon, Gilly. 2000. E-moderating: The key to teaching and learning online. London:
        Kogan Page.
[14]   Taber, K. S. 2011. Constructivism as educational theory: Contingency in learning, and
        optimally guided instruction. in J. Hassaskhah (Ed.), Educational Theory (pp. 39-61).
        New York: Nova. Available from
        https://camtools.cam.ac.uk/wiki/eclipse/Constructivism.html.