A COMPARISON OF TRADITIONAL AND COOPERATIVE LEARNING METHODS IN ONLINE LEARNING

By

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ABSTRACT

The purpose of this study was to examine the effects of the Community of Inquiry framework through an in-depth examination of learning comprised of teaching, social and cognitive presence in traditional versus cooperative online teaching at a community college. A total of 21 students participated in this study, with approximately 45% having taken online courses previously. Repeated Measures ANOVA were completed for all analyses via the SPSS General Linear Model – Repeated Measures with alpha set at $\alpha = .05$ across all tests Cooperative learning (Mean = 72.18, SD = 12.31) was significantly higher than traditional learning (Mean = 70.91, SD = 12.70). The effect size of .22 as measured by Partial Eta Squared was quite large, with 22% of the difference in variance explained by overall learning. CL in teaching presence (Mean = 33.62, SD = 5.17) was significantly higher than traditional in teaching presence (Mean = 32.82, SD = 5.74). The effect size of .46 as measured by Partial Eta Squared was very large, with 46% of the difference in variance explained by teaching presence. Social and cognitive were not statistically significant (p>.05). Future studies should examine different designs of teaching presence, such as allowing students to choose their own groups, which may lead to increased social presence and cognitive presence and in turn increased learning.

Keywords: Online Learning, Cooperative Learning, Teaching.

INTRODUCTION

In response to the current economic climate and the increasing availability of technology, many postsecondary institutions and students alike are turning to distance education or online learning as a practical and economical method of attaining higher educational goals (Xu & Jaggers, 2013 & Ashong & Commander, 2012). However, assumptions concerning the practicality and cost effective nature of online learning are predicated upon distance learning offering results that are comparable to traditional learning (Xu & Jaggers, 2013). The Community of Inquiry framework (CoI) offers a lens for examining the effectiveness of online learning in achieving the higher learning goals of higher education through an in-depth examination of teaching, social and cognitive presence which support collaboration and discourse within the community of learners (Garrison, 2007). Additionally, as distance learning continues to grow in prevalence and is further researched, effective face-to-face teaching techniques, such as cooperative learning (CI), are being incorporated into the virtual classroom in an attempt to minimize the negative aspects of online learning such as disconnectedness (Bliss & Lawrence, 2009; Assinder, 1991; Johnson & Johnson, 1989). These continued efforts to improve the effectiveness and accessibility of online education are especially important in community college populations where attrition is a major issue (Xu & Jaggers, 2013). The incorporation of supportive and motivating techniques in the online classroom may often require the use of features of the virtual classroom such as online discussion board platforms which support CI (Pierce, 2012). Fortunately, the implementation of computer supported CI in online learning is easier than ever before (Bliss & Lawrence, 2009). Ultimately, the incorporation of CI within the online course structure through aspects of teaching presence can support, develop and mediate social presence and levels of cognitive presence in a manner that is beneficial for students and online learning programs.

Theoretical Framework

Community of Inquiry

Any in-depth analysis of the educational issues surrounding asynchronous or distance learning requires a theoretical framework within which the complexities of online learning can be simplified. One such highly researched framework is the Community of Inquiry (CoI) (Garrison, 2007). The CoI stems from the idea that the higher level learning goals of higher education require the collaborative support and discourse offered by a community of learners (Garrison, 2007). Unfortunately, the asynchronous nature of online learning and the types of communication which are facilitated by online learning platforms can lead to feelings of disconnectedness and a lack of community.

The CoI framework developed by Garrison, Anderson and Archer (2000) is a comprehensive tool which combines both social and cognitive dimensions specifically for the purposes of online learning research. Rooted in the constructivist work of John Dewey (1933), the CoI consists of three interconnected dimensions – social presence, teaching presence and cognitive presence as well as categories and indicators to ensure accurate definition and coding of each presence (Garrison, 2007). The structure of the CoI framework has been confirmed through factor analysis and has provided numerous insights and methodological solutions in the area of online learning research (Garrison & Archer, 2003; Garrison, Cleveland-Innes, & Fung, 2004).

Social Presence

The purpose of social presence within online education is to create an environment which engenders quality interaction and inquiry so as to collaboratively achieve goals. Social Presence is defined as the ability of an individual to project theirself into the virtual learning environment and thereby establish purposeful and personal relationships (Garrison, 2007). Social presence is supported by three main factors: open communication, effective communication and group cohesion (Garrison, 2007). Research has shown that social presence shifts over time in online course discussions as a clear classroom community is formed (Swan, 2003). However, these shifts are dependent on many factors such as the purpose of the

discussion taking place, especially as discussions with collaborative natures naturally emphasize cohesive comments, student demographics and community development (Arbaugh, 2005; Garrison, 2007). Social presence is most important early on the course timeline to establish relationships and create a sense of community; however, once the focus shifts over time towards more purposeful activities, social presence then supports group cohesion (Vaughan, 2005). Social presence must be defined in educational terms and is inherently interrelated to both cognitive presence and teaching presence.

Cognitive Presence

"Cognitive presence is defined as the exploration, construction, resolution and confirmation of understanding through collaboration and reflection in a community of inquiry" (Garrison, 2007 pg. 65) Cognitive presence is best represented as a cycle of practical inquiry in which the learner first understands the problem and subsequently explores the problem, integrates new information and applies a solution. The research has revealed that inquiry generally does not move beyond the integration phase although, this may be related more to teaching presence than to cognitive presence as integration and application require more time and reflection (Garrison, Anderson & Archer, 2001; Leubeck & Bice, 2005; Mcklin, Harmon, Evans & Jones, 2002). Integration and application are also largely influenced by the type of initiating questions and the purpose of activities (Meyer, 2004). One study, specifically focused on online collaborative problem solving, noted that when learners were given the specific task of formulating and solving a problem, responses ranged throughout all of the steps of the practical inquiry cycle (Murphy, 2004). Additionally, goals which require collaborative solutions are more likely to reveal higher level discussions involving integration and application as individuals tend to independently accept or reject solutions. Therefore, aspects of teaching presence, such as design, facilitation and direction, are necessary for integration and application discussions to become evident (Arnold & Ducate, 2006).

Teaching Presence

Teaching presence encompasses three distinct categories

– design, facilitation and direct instruction – and is a significant determining factor in student satisfaction, perceived learning and sense of community as it supports both cognitive presence and social presence (Garrison, 2007). Teaching presence is necessary for higher level learning as it supports interaction and discourse through design which offers structure, facilitation and direct instruction (Garrison, 2007). The three aspects of teaching presence are highly correlated and the perception of teaching presence greatly influences the perception of both social presence and cognitive presence. Similarly, cognitive presence and social presence have a significant influence on teaching presence and how it is perceived (Garrison, 2007).

Literature Review

Within the current economic climateas both students and educational institutions seek more cost effective methods of achieving education goals, community colleges and online education have moved to the forefront (Xu & Jaggers, 2013). Online education not only offers improved access and decreased costs to students, but is also consistently cheaper for educational institutions to offer while still delivering comparable results to traditional face-to-face instruction. However, community colleges, a major proprietor of online courses, offer unique challenges in course persistence and completion (Xu & Jaggers, 2013). Similarly, online courses also have been noted to have higher attrition rates than traditional format courses (Zydney, J. M., deNoyelles, A., & Kyeong-JuSeo, 2011). Community and engagement, however, can have positive impacts on persistence. Therefore,within the online community college classroom the CoI framework takes on special significance (Zydney, J. M., deNoyelles, A., & Kyeong-JuSeo, 2011).

Similarly, Cooperative learning (CI) can also be used to increase student learning and improve academic performance by creating a motivating and supportive learning environment. The CI model proposed by Johnson and Johnson (1989) is composed of five dimensions: positive interdependence, individual accountability, promotive interaction, social skills, and group processing; these elements play a role in improved student participation, motivation and responsibility (Assinder, 1991). One important feature of CI is small group discussion. Small group discussions have been shown to lead to a richer understanding of course material as they promote peer-to-peer interaction and participation (Bliss & Lawrence, 2009).

Recent innovations in technology and distance learning have made CIin online courses and computer-mediated collaboration more accessible thereby leading to increased student performance, interaction and critical thinking (Bliss and Lawrence, 2009). The elements of CI can be integrated into synchronous and asynchronous group discussion structures in order to support and develop both social presence and the various levels of cognitive presence through the design element of teaching presence (Cox and Cox, 2008; Kupczynski, Mundy, Goswami & Meling, 2012). Students who have enrolled in online courses which utilized CI frameworks felt as though they received educational benefits from the course which included those associated with brain-storming, collaboration, communication, engagement, feedback, participation and increased quality of learning (Kupczynski, Mundy, Goswami & Meling, 2012). Similarly, faculty members whom instruct online courses felt that the CI framework leads to higher levels of interactivity amongst students and consequently to higher student engagement (Kupczynski, Mundy & Maxwell, 2013).

Furthermore, the use of different tools within the online environment and the timing of these tools are factors for successful collaboration in online learning as these tools can develop, support and interact with teaching presence, cognitive presence and social presence (Harvard, Du, & Xu, 2008).Discussion boards are an important communication tool that can be used to support and demonstrate teaching presence, social presence and cognitive presence (Pierce, 2012). Discussion boards are also effective in enhancing and supporting CI in the virtual classroom (Cox & Cox, 2008). Asynchronous learning supported by discussion boards offers instructors a platform from which to influence the teaching presence of a course, while still offering flexibility for social presence interactions focused on knowledge and understanding and simultaneously promoting the

reflection necessary for higher level cognitive presence (Paulsen, 2008; Prestera& Moller, 2001; Bliss and Lawrence, 2009). Collaboration and CI are best supported by discussion boards with a threaded discussion function (Prestera& Moller, 2001). Active participation in discussion groups inherent to computer supported CI has positive effects on both test scores and course grades (Schellens, Van Keer, Valcke, & De Wever, 2007).

As represented by the structure of the CoI framework, social presence through discussion alone does not support educational goals, but rather the interconnection between cognitive presence and social presence and supported by teaching presence leads to the attainment of educational goals (Garrison, 2007). Similarly, the positive elements of CI can fade when group discussions focus on useless or counterproductive communications or task. Teaching presence in a CI discussion board supported online classroom,through elements of design and facilitation, should support and encourage relevant postings that initiate in-depth discussions (Ku, Lohr& Cheng, 2004; Bliss and Lawrence, 2009; Prestera& Moller, 2001; Hutchinson, 2007). A lack of teaching presence in CI discussion board supported online courses can lead to significant drawbacks such as off topic posting, low student participation, negative feelings towards the group, and low student motivation (Bliss and Lawrence, 2009; Ciges, 2001). Effective teaching presence in CI discussion boards supports the interconnected space between social presence and cognitive presence.

Results

This study was conducted at a Midwestern community college with a total enrollment in 2007, the most recent year for which complete demographic information is available, of approximately 24, 500. According to available information the studied community college enrolled 26,621 credit students for the fall of 2012 semester. Of the total student population in 2007, 62% of students were female and 38% were male. However, in the fall of 2012, the percentage of female students dropped to 60%. According to the available fall 2012 semester information the average student age is 28. Similarly, in 2007 74% of the total student body was 30 years old or younger with 31%

being 21 years old or younger and 30% being 25years old or younger. Finally, in 2007, 56.5% of enrolled students were White, 29% were African American and 2% were Hispanic. According to the available fall 2012 data, 53% of students were White and 36% were African American. Current information for other ethnicities is unavailable.

A total of 21 students responded from 3 separate classes. Of these, 20 responded to the gender question, equally divided between 10 male and 10 female students. The age groups were spread out from 18-21 to 57-61 (Table 1). Ethnicity was distributed with 10 (48%) African American students, 8 (38%) Caucasian Non-Hispanic students, 2 (10%) Hispanic students, and 11 (5%) other.Of the 21 students, eight had never taken online courses previous to this one, two had taken one course, two had taken 2 courses, and 9 had taken 3 or more online courses. Although 21 students responded to the demographic questions, only 17 responded to the rest of the survey.

Results of Quantitative Analysis

Repeated Measures ANOVA were completed for all analyses via the SPSS General Linear Model – Repeated Measures. As the alpha was set at $\alpha = .05$ across all tests and Wilks' Lambda for learning was .780 with $p = .05$, the hypothesis that population means on the Dependent Variable were the same across groups was rejected. Cooperative learning (Mean = 72.18, SD = 12.31) was significantly higher than traditional learning (Mean = 70.91, SD = 12.70). The effect size of .22 as measured by Partial Eta Squared was quite large, with 22% of the difference in variance explained by overall learning (Table 2).

Wilks' Lambda for teaching presence was .539 with $p =$

	Frequency	Percent
18-21	3	14.3
22-26	1	4.8
27-31	4	19.0
32-36	4	19.0
37-41	2	9.5
42-46	2	9.5
47-51	4	19.0
57-61	1	4.8
Total	21	100.0

Table 1. Age Groupings

	Wilks' Lambda	F	Sig	Partial Eta Squared	Traditional		Cooperative	
					Mean	SD	Mean	SD
Learning	.780	4.51	.05	.22	70.91	12.70	72.18	12.31
Teaching	.539	13.69	.002	.46	32.82	5.74	33.62	5.17
Social	.968	.53	.48	.03	23.26	4.15	23.50	4.32
Cognitive	.954	.77	.39	.05	14.82	3.97	15.06	4.13

Table 2. General Linear Model – Repeated Measures

.002 and the hypothesis that population means on the Dependent Variable were the same across groups was rejected. CL in teaching presence (Mean = 33.62, SD = 5.17) was significantly higher than traditional in teaching presence (Mean = 32.82, SD = 5.74). The effect size of .46 as measured by Partial Eta Squared was very large, with 46% of the difference in variance explained by teaching presence (Table 2).

Wilks' Lambda for social presence was .968 with $p = .48$ and the hypothesis that population means on the Dependent Variable were the same across groups was not rejected. CL in social presence (Mean = 23.5, SD = 4.32) was significantly higher than traditional in social presence (Mean = 23.26, SD = 4.15). The effect size of .03 as measured by Partial Eta Squared was quite small, with only 3% of the difference in variance explained by social presence (Table 2).

Wilks' Lambda for cognitive presence was .954 with $p = .48$ and the hypothesis that population means on the Dependent Variable were the same across groups was not rejected. CL in cognitive presence (Mean = 15.06, SD = 4.13) was significantly higher than traditional in cognitive presence (Mean = 14.82, SD = 3.97). The effect size of .05 as measured by Partial Eta Squared was quite small, with only 5% of the difference in variance explained by cognitive presence. (Table 2).

It should be noted that although only learning and teaching demonstrated significant differences, a pattern did evolve as all the CL groups had higher scores than the corresponding TL groups, even though social presence and cognitive presence were not significantly different.

Results of Qualitative Analysis

In addition to the quantitative survey for the students, a qualitative survey was completed by faculty members. Two faculty members responded to the questionnaire; one African-American female faculty in the 52-56 age category and one Caucasian non-Hispanic male faculty in the 47-51 age category. Both had experience having taught 3 or more on-line courses. When asked about their impressions of student social interaction in both the cooperative and traditional learning discussions, the female faculty member perceived they were engaged in both types of discussions. The male faculty member had mixed impressions on social interaction in the cooperative learning discussions. He stated, "I had complaints about having to do it . . . to students who went out of their way to tell me how much they enjoyed it. 2 out of 5 groups eventually stopped doing the assignments." However, in the traditional learning discussions he perceived that the social interactions were good as the students seemed to freely discuss topics. Moreover, more students were willing to participate here as compared to the cooperative learning although they did not always choose to participate in their own groups. This suggests that maybe students need to be able to choose their own groups. The female faculty member believed that the cooperative learning discussion method was more successful for both student comprehension of content and offered more opportunity for student to instructor interaction. She believed that students were both more engaged and more accountable in the cooperative learning situation resulting in a better command of the topic. CL also allowed for more discussion and varying viewpoints, ensuring that everyone in the group participated. This also resulted in greater student to instructor interaction. On the other hand the male faculty member found little difference in test scores and therefore perceived little difference in student comprehension of content. He had mixed feelings on which strategy offered more opportunity for student to instructor interaction. "Pedagogically, traditional methods were more useful because more students interacted." However, course management interaction was high in CL because complaints required interactions. Changes in group memberships had to be made to squelch dissension. Based on what the faculty member stated, it appears that attention needs to be placed on how groups are chosen at the beginning of the course.

Conclusion

Overall, the male faculty member had mixed feelings on any differences between CL and TL although the female faculty member found the CL superior both in student to student and student to faculty interactions. However, these feelings may be a result of differences in teaching presence which when not applied appropriately has been demonstrated to lead to some of the negative issues mentioned.

Based on student perceptions, both CL learning and teaching presence were significantly higher than TL learning and teaching presence with high effect size, 22% and 46% respectively. Although not significant, a pattern emerged in that all the CL groups had higher mean scores than the corresponding TL groups, even though social presence and cognitive presence were not significantly different. This suggests that the incorporation of CI within the online course structure does support teaching and overall learning and also appears to strengthen social and cognitive presence in a manner that is beneficial for students and online learning programs.

As seen in the literature, the most important aspects for CI success within the online classroom are those related to teaching presence and more specifically those related to the design element of teaching presence. As such there may be some correlation between the high effect sizes seen in learning and teaching presence. Similarly, due to the interrelated nature of the three presences, it follows that where learning and teaching presence are increased, cognitive and social presence are increased as well, although not necessarily significantly. Ultimately, the study should examine different designs of teaching presence, such as allowing students to choose their own groups, which may lead to increased social presence and cognitive presence and in turn increased learning.

References

[1]. Arbaugh, J. B. (2005). Is there an optimal design for on-line MBA courses? *Academy of Management Learning & Education* 4(2): 135–149.

[2]. Arnold, N. & Ducate, L. (2006). Future foreign language teachers' social and cognitive collaboration in an online environment. *Language Learning & Technology* 10(1): 42–66. Retrieved April 19, 2013 from http://llt.msu.edu/vol 10num1/pdf/arnoldducate.pdf.

[3]. Ashong, C. Y., & Commander, N. E. (2012). Ethnicity, gender and perceptions of online learning in higher education. *Journal of Online Learning and Teaching, 8*(2): 98-110.

[4]. Assinder, W. (1991). Peer teaching, peer learning: One model. *ELT Journal*, 45: 218-229.

[5]. Bliss, C., & Lawrence, B. (2009). Is the whole greater than the sum of its parts? A comparison of small group and whole class discussion board activity in online courses. *Journal of Asynchronous Learning Networks*, 13: 25-39.

[6]. Ciges, A. (2001). Online learning: New educational environments in order to respect cultural diversity through cooperative strategies. *Intercultural Education*, 12: 135-147.

[7]. Cox, B. & Cox, B. (2008). Developing interpersonal and group dynamics through asynchronous threaded discussions: The use of discussion board in collaborative learning. *Education*, 4: 553-565.

[8]. Dewey, J. (1933). *How we think* (Rev. Ed.). Boston: D.C. Heath.

[9]. Garrison, D. R. (2007). Online community of inquiry review: Social, cognitive, and teaching presence issues. *Journal of Asynchronous Learning Networks*, *11*(1): 61-72.

[10]. Garrison, D. R., Anderson, T. and Archer, W. (2000). Critical inquiry in a text-based environment: Computer conferencing in higher education. *The Internet and Higher Education,* 2(2–3): 87–105.

[11]. Garrison, D. R., Anderson, T. and Archer, W. (2001). Critical thinking and computer conferencing: A model and tool to assess cognitive presence. *American Journal of Distance Education,* 15(1): 7–23.

[12]. Garrison, D. R. and Archer, W. (2003). A Community of Inquiry Framework for Online Learning. In: M. Moore (Ed.), *Handbook of distance education.* New York: Erlbaum.

[13]. Garrison, D. R., Cleveland-Innes, M. and Fung T. (2004). Student role adjustment in online communities of inquiry: Model and instrument validation. *Journal of Asynchronous Learning Networks,* 8(2): 61– 74. Retrieved April 19, 2013 from http://www.sloan-c.org/publications/

jaln/v8n2 /pdf/v8n2_garrison.pdf.

[14]. Havard, B., Du, J., &Xu, J. (2008). Online collaborative learning and communication media. *Journal of Interactive Learning Research*, 19: 37-50.

[15]. Hutchinson, D. (2007). Teaching practices for effective cooperative learning in an online learning environment (OLE). *Journal of Information Systems Education*, 18: 357-367.

[16]. Johnson, D. W., & Johnson, R. T. (1989). *Leading the cooperative school.* Edina, MN: Interaction.

[17]. Ku, H., Lohr, L., & Cheng, Y. (2004). Collaborative learning experiences in online instructional design courses. *Association for Educational Communications and Technology*.

[18]. Kupczynski, L., Mundy, M. A., Goswami, J., & Meling, V. (2012). Cooperative learning in distance learning : A mixed methods study. *International Journal of Instruction*, 5(2): 81–90.

[19]. Kupczynski, L.Mundy, M. A. & Maxwell, G. (2012). Faculty perceptions of cooperative learning and traditional discussion strategies in online courses. *Turkish Online Journal of Distance Education, 13*(2), 95-106. Retrieved from https://tojde.anadolu.edu.tr

[20]. Luebeck, J. L. &Bice, L.R. (2005). Online discussion as a mechanism of conceptual change among mathematics and science teachers.*Journal of Distance Education* 20(2): 21–39.

[21]. McKlin, T., Harmon, S.W., Evans, W. & Jones, M.G. (2002). *Cognitive presence in web-based learning: A content analysis of students' online discussions.* ITForum Paper #60. Retrieved April 19, 2013 from http://it.coe.uga. Edu/itforum/paper60/paper60.htm.

[22]. Meyer, K. A. (2004). Evaluating online discussions: Four different frames of analysis. *Journal of Asynchronous Learning Networks* 8(2): 101–114.

[23]. Murphy, E. (2004). Identifying and measuring ill-structured problem formulation and resolution in online asynchronous discussions. *Canadian Journal of Learning and Technology* 30(1): 5–20.

[24]. Paulsen, M. (2008). Cooperative online education. Seminar.Net: Media, *Technology & Life-Long Learning*, 4: 1-20. Retrieved from Education Research Complete database.

[25]. Pierce, R. (2012). Transforming Interaction and Social Presence through Course Design: Authentic Implementation of Threaded Discussion Tools. *In Society for Information Technology & Teacher Education International Conference* (Vol. 2012, No. 1, pp. 770-778).

[26]. Prestera, G.E. & Moller, L. (2001). Exploiting opportunities for knowledge building in asynchronous distance learning environments. *The Quarterly Review of Distance Education*, 2: 93-104.

[27]. Schellens, T., Van Keer, H., Valcke, M., & De Wever, B. (2007). Learning in asynchronous discussion groups: A multilevel approach to study the influence of student, group and task characteristics. *Behaviour & Technology, 26*(1): 55-71.

[28]. Swan, K. (2003). Developing social presence in online discussions. In: S. Naidu (Ed.), *Learning and teaching with technology: Principles and practices,* 147–164. London: Kogan Page.

[29]. Vaughan, N. D. (2005). *Investigating how a blended learning approach can support an inquiry process within a faculty learning community.*(Doctoral dissertation). Retrieved from ProQuest Dissertations and Theses. (Nr03893).

[30]. Xu, D., & Jaggars, S. S. (2013). *Examining the Effectiveness of Online Learning Within a Community College System: An Instrumental Variable Approach.* Community College Research Center. Working Paper 56, 1-30.

[31]. Zydney, J. M., deNoyelles, A., &Kyeong-JuSeo, K. (2011). Creating a community of inquiry in online environments: An exploratory study on the effect of a protocol on interactions within asynchronous discussions. *Computers & Education,* 58(1): 77–87. Doi:10.1016/j. Compedu. 2011.07.009

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