

A Review of Literature on the Community of Inquiry Framework

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Abstract- *The purpose of the current study was to critically analyze the learning in community of inquiry (Col) framework. In the year 2000 Garrison, Anderson and Archer introduced Col framework in order to find solutions to reduce the gaps in online learning and the framework that they have introduced has become the most referenced framework of study in online education so far. According to them, a very satisfactory education takes place within a community of inquiry which consists of teachers and students. Further they assume the learning takes place as a result of interaction among social, cognitive and teaching presence (Garrison, Anderson and Archer, 2000). Though the Col framework has shaped many studies of e-learning in higher education, it is highly recommended that much more research work should be done on this framework to clarify the mounting body of disconfirming evidence.*

Keywords - Online learning, Col, Teaching presence, Cognitive presence, Social presence

I. INTRODUCTION

Col model presents for online educators a framework which can be used to organize and teach successfully both in online and blended learning environments. The community which is highlighted in Col model explains that when learners get a secure and encouraging environment to learn without any fear for discouragement and unwanted judgments, they learn with interest which leads for success (Shea, Li and Pickett, 2006). According to many research findings it has already been proven the effectiveness of Col both in asynchronous and synchronous learning environments (Garrison & Arbaugh, 2007; Tekiner Tolu, 2010,2013).

According to Garrison et al (2000) the most significant element in this framework is cognitive presence. That is the major element for critical thinking which is used immensely in higher education. Further they hypothesize social presence along with commitment and participation is also needed for higher-order thinking skills and successful collaborative efforts. Social presence stands as a supporter for cognitive presence, indirectly supporting for critical thinking. Further they state if the use of computers in education can support for

establishing social presence, then it can be considered as an effective method in higher education despite its restrictions for written language.

Online courses need more planning and preparation than face-to-face teaching. Teachers should initially have a face-to-face meeting with the students and make a briefing about the course and should create a stress free learning environment for the learners. In the beginning of the course, teachers can offer an opportunity for learners to get to know each other allowing them to have a live session which can support to create better social presence. Social presence can be further enhanced through collaborative activities, teacher availability, prompt feedback and constant encouragement both in synchronous and asynchronous learning environments. Online collaboration is not an easy task as in face-to-face classrooms (Tekiner Tolu, 2010, 2013). In addition Garrison et al (2000) assume when the social presence is combined with the teaching presence in an appropriate manner it will lead to have a strong cognitive presence which will lead to gain successful intended learning outcomes.

II. LITERATURE REVIEW

With the rapid growth of online education worldwide, researchers are very interested in finding out its impact on learners both academically and socially (Shea et al , 2006). In these efforts Col model has gained a significant attention of those researchers when studying about online learning and the practice of it. On the contrary, Swan, Richardson, Ice, Garrison, Cleveland-Innes and Arbaugh (2008) criticize this model with two challenging issues; the first is the lack of common measures in studying the individual presence which makes it difficult for generalizations and the second is only a few studies have researched on all the three presences and the interaction among them. In their conclusion they suggest that some more research should be done to find out whether social presence is needed before establishing cognitive presence. In addition they suggest expansion and application issues related to this model must also be examined.

Rourke and Kanuka (2009) reviewed 252 reports from 2000-2008 which had used Col framework for their research. Among them 48 reports were used one or more aspects of this framework and only five research had considered to measure the student learning.

According to their review deep and meaningful learning do not occur when researchers use Col framework in their studies just as it is mentioned in the framework. Instead learners are engaged with surface learning not with uninterrupted communication as it is mentioned in Col. Further they suggest more research should be done to find out the effectiveness of this model on e-learning and how “theorists to respond to the mounting body of disconfirming evidence” (p.19). A conceptual framework of social, teaching and cognitive presence without proper empirical evidence on deep and meaningful learning is not considered as a strong framework to support one’s own research. This suggests learners who are engaged and not engaged in deep and meaningful learning on making evidence-based suggestions on types and quantities of teaching, social and cognitive presence which is related to learning also needed to be investigated.

Annand (2011) also mentions Col framework does not strongly support for online learning though the influence of social presence for learning experience has been stated too strongly, it does not do so in reality. Not only that the collaboration in social presence has also been overstated. Further he states that though the Col framework has influenced immensely for online education and makes evident the impact of teacher and learner attribute on cognitive presence, the due acknowledgement has not been given for that. Thus the impact of group efforts on collaborative efforts in the learning processes should be re-evaluated. Sub categories in both teaching and social presence should also be re-evaluated and re-analyzed to find out how they separately support for group vs individual based activities.

Garrison and Arbaugh (2007) discuss about the practical issues in the use of Col framework in research studies. How best to facilitate social presence in online learning environment would be an essential area when analyzing this framework from practical pedagogical perspective. Creating an environment for open communication and collaboration is also very significant for building a productive and better community of inquiry. Therefore exploring the dynamics of online learning, online collaborative learning and how to create productive online groups are essential areas which also need to be addressed. Audio, video and different other new technologies should be introduced into online learning and its effectiveness and the impact of them on community of inquiry learning outcomes should also be measured. Further they recommend more quantitative and cross disciplinary studies should be conducted by using this framework. More research factors should be identified that moderate or extend the relationship

between the elements in Col framework and online learning outcomes.

According to Dewey (1959) the use and the effectiveness of collaborative constructivist approach in online learning environments should be further explored. Earlier the effective establishment of social presence in online learning environments was considered very significant but after it has been proven that it is possible to develop social presence and online learning communities, now the focus has been given for researching on the effectiveness of collaborative efforts in developing online learning communities of inquiry. To this they have added it is definitely a challenge to construct knowledge collaboratively but more than that, it is challenging to manage the responsibilities of a teacher in such an environment. In designing, facilitating and giving instructions, it is very important to build a community of inquiry. In conclusion according to Dewey’s collaborative constructivism and practical inquiry, Col is a promising model for online learning both theoretically and practicality. Therefore it is important to study more on the components of the Col framework and how this framework can be used for developing online courses (Swan, Garrison and Richardson, 2009).

According to the research work of Lambert and Fisher (2013), they provide some further support in designing online courses by using the three elements in this framework. Some sub categories in this framework offer a new insight into how to design the online courses more effectively. At the same time the individual items of each sub category offer weaknesses and strengths which should be addressed to offer more supportive online learning environments for education.

Collaboration and communication skills are very essential for the 21st century and these skills can be best achieved through online environments. By using this framework Lambert and Fisher have designed and organized a course and used proper strategies while creating collaboration among class mates that helped them to motivate and make the learners engage into their activities enthusiastically. In their conclusion they propose to investigate the perception of the students towards the presence of a teacher depending on the existence of cognitive and social presence. The ability or the skills of the learners to use the tools in the newer technology should also be an area to conduct more research, mainly because this directly influences for learning the course content, collaboration and to have communication and to develop a sense of community in online learning environments. Apart from discussion forums, some other newer tools which can be used to create better communities of inquiry in online learning environments

should also be found through more research work (Lmbert and Fisher, 2013).

III. DISCUSSION & CONCLUSION

Col framework has been supporting a considerable number of studies in online learning. Research findings on learners who are engaged and not engaged in deep and meaningful learning support on making evidence-based suggestions on types and quantities of teaching, social and cognitive presence which are related to learning are some required areas for more research.

How best to facilitate social presence in online learning environments would be an essential area that more research should be done, when analyzing this framework from practical pedagogical perspective. As Swan, et al. (2008) mention, it is also needed to find out whether social presence is needed before establishing cognitive presence. Since only a few studies have researched on the Col framework, it is essential to research more on all the three presences and interaction among them in online learning. As Swan, et al (2008) recommend expansion and application issues related to this model must also be examined.

Exploring the dynamics of online collaborative learning and how to create productive online groups are essential areas which also need to be addressed through more research work. Audio, video and different other new technologies should also be introduced into online learning and its effectiveness and the impact of them on community of inquiry learning outcomes should also be measured by conducting more research work. More quantitative and cross disciplinary studies should also be conducted by using this framework. More research factors should be identified that moderate or extend the relationship between the elements in Col framework and online learning outcomes.

It is also needed to investigate the perception of the students towards the presence of a teacher depending on the existence of cognitive and social presence. As Tekiner Tolu (2010, 2013) mention when teachers use Col model for their online teaching, it is in the hands of the teacher to construct and design a proper syllabus to achieve course objectives and learner satisfaction. They should design the study content in a well-structured and organized manner to promote critical and reflective thinking.

The ability or the skills of the learners to use the tools in the newer technology should also be an area to conduct more research, mainly because this directly influences for learning the course content, collaboration and to

have communication and to develop a sense of community in online learning environments. In conclusion, though the Col framework has shaped many studies of e-learning in higher education, it is highly recommended to conduct more substantial studies on learning in Col.

IV. REFERENCES

- Annand, D. (2011). Social Presence within the Community of Framework. *International Review of Research in Open and Distance Learning*, 12(5), 38-54.
- Dewey, J. (1959). My pedagogic creed. In J. Dewey, *Dewey on education*. New York: Teachers College, Columbia University. (Original work published 1897).
- Garrison, D. R., Anderson, T., & Archer, W. (2000). Critical inquiry in a text-based environment: Computer conferencing in higher education. *The Internet and Higher Education*, 87-105.
- Garrison, D.R., & Arbaugh, J.B. (2007). Researching the community of inquiry framework: Review, issues, and future directions/ *Internet and Higher Education* 10, 157-172.
- Lambert., J. L., & Fisher, J. L. (2013). Community of Inquiry Framework: Establishing Community in an Online Course, *Journal of Interactive Online Learning*, 12 (1).
- Rourke, L., & Kanuka, H. (2009). Learning in communities of inquiry: A review of the literature. *Journal of Distance Education*, 23(1), 19-48.
- Shea, P. J., Li. C., S., & Pickett, A. (2006). A study of teaching presence and student sense of learning community in fully online and web-enhanced college courses. *The Internet and Higher Education*, 175-190.
- Swan, K., Garrison, D. R., & Richardson, J. C. (2009). A constructivist approach to online learning: the Community of Inquiry framework. In Payne, C. R. (Ed.) *Information Technology and Constructivism in Higher Education: Progressive Learning Frameworks*. Hershey, PA: IGI Global, 43-57.
- Tekiner Tolu, A. (2010). *An Exploration of Synchronous Communication in an Online Preservice ESOL Course: Community of Inquiry Perspective*.
- Tekiner Tolu, A. T. (2013). Creating Effective Communities of Inquiry in online courses, *Procedia - Social and Behavioral Sciences* 70 (2013), 1049 – 1055