

A REVIEW OF THE LITERATURE ON COMMUNITY OF INQUIRY MODEL

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ABSTRACT: *The use of computers in education is growing fast day by day in the whole world but the quality and its outcomes are not given the proper and needed consideration. In the year 2000 Garrison, Anderson and Archer introduced a conceptual framework in order to find a remedy to reduce these gaps and their work has become the most referenced framework of study in online education so far. According to them, very satisfactory education takes place within a community of inquiry which is consisted with teachers and students and they assume the education takes place as a result of interaction among social, cognitive and teaching presence (Garrison, Anderson and Archher, 2000). There are both pros and cons of this particular model. The purpose of the current study is to critically analyze the learning in community of inquiry. It is highly recommended that much more research should be done on this framework to clarify the mounting body of disconfirming evidence.*

KEYWORDS: Online learning, CoI, Teaching presence, Cognitive presence, Social presence

INTRODUCTION

The community which is highlighted in community of inquiry (CoI) model explains that when learners get a secure, 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 CoI both in asynchronous and synchronous learning environments (Garrison & Arbaugh, 2007; Tekiner Tolu, 2010).

According to Garrison, Anderson and Archer (2000) the most significant element in this framework is cognitive presence. That is the major element for critical thinking and used immensely in higher education. Further they hypothesize social presence along with commitment and participation are also needed for higher-order thinking skills and 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 restriction for written language. According to their view collaborative environments enhance social presence. And when the social presence is combined with the teaching presence in an appropriate manner it leads to have a strong cognitive presence leading to gain successful intended learning outcomes.

LITERATURE REVIEW

CoI model presents online educators a framework which can be used to organize and teach successfully both in online and blended learning environments. 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 get to know about each other allowing them to have live sessions which can create to have better social presence. Social presence can be further enhanced through collaborative activities, teacher availability, prompt feedback and constant encouragement both in synchronous and asynchronous environments. Online collaboration is not an easy task just like in face-to-face classrooms. The instructors should take needed steps to assign different roles to each and every group member, evaluation forms both for self and group members as well as how to form groups and work collaboratively to get the maximum benefits out of group efforts should be properly organized and assessed. Teachers should design the content in a well-structured and organized manner to promote critical and reflective thinking. Just as each individual learner is unique so the online courses as well, so it is in the hands of the teacher to construct and design proper syllabus to achieve course objectives and learner satisfaction. The teachers can use CoI model when implementing the mentioned suggestions into their online classrooms (Tekiner Tolu, 2010, 2013).

With the rapid growth of online education worldwide, researchers are very interested in finding out its impact on learners' both academically and socially (Shea, Li and Pickett, 2006). In these efforts CoI model has gained a significant attention of those researchers when studying about online learning and the practice of online learning. 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 interactions 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 as well as 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 CoI framework in their research. Among them 48 reports were used one or more aspects of this framework, only five were included a measure for student learning. According to their review they conclude that deep and meaningful learning do not occur when researchers use CoI 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 the CoI. 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). Conceptual frameworks of social, teaching and cognitive presence without proper empirical evidence on deep and meaningful learning are not considered as strong frameworks to support one's own research. This also supports for the idea of much more research findings on 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 are related to learning are needed.

Annand (2011) also mentions CoI framework does not strongly support for online learning and 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 which makes to interpret the impact of social presence on cognitive presence. Further he states that though the CoI 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. And some more research should be done to re-evaluate the impact of group efforts on collaborative efforts in the learning processes. Sub categories in both teaching and social presence should be re-evaluated and re-analyzed to find out how they separately support for group based vs individual based activities.

Garrison and Arbaugh (2007) discuss about the practical issues in the use of CoI framework in research studies. How best to facilitate social presence in online learning environment would be an essential area that more research should be done when analyzing this framework from practical pedagogical perspective. Creating an environment for open communication and collaboration are very significant for building a productive and better community of inquiry. So exploring the dynamics of online collaborative, online 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 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. Further they recommend 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 CoI framework and online learning outcomes.

According to John Dewey the use of and effectiveness of collaborative constructivist approach in online environment should be further explored. Earlier the effective establishment of social presence in online environment 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 add 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 environment. In designing, facilitating and giving instructions, it is very important to build a community of inquiry. In conclusion according to John Dewey's collaborative constructivism and practical inquiry CoI is a promising model for online learning both theoretically and practicality. So much more studies are needed to study more on the components of the model and how this model 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 for using CoI framework 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 environment 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 in their research, the researchers designed and organized the course and used proper strategies while creating collaboration among class members that helped them to motivate and engage into their activities enthusiastically. For further research 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 on, mainly because this directly influences for learning the course content, for collaboration and to have communication and to develop a sense of community in online environment. 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 out through more research work.

CONCLUSION

CoI framework has been supporting many studies in online learning. More research is needed to find out whether social presence is needed before establishing cognitive presence as well as expansion and application issues related to this model must also be examined. 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 also some required areas for more research.

How best to facilitate social presence in online learning environment would be an essential area that more research should be done when analyzing this framework from practical pedagogical perspective. Exploring the dynamics of online collaborative online 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 CoI 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. 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 on, mainly because this directly influences for learning the course content, for collaboration and to have communication and to develop a sense of community in the online environment.

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