VALIDATING COMMUNITY OF INQUIRY FRAMEWORK in ADULT LEARNING FINDINGS from an EMPIRICAL INVESTIGATION in a UNIVERSITY ORGANIZED LITERACY PROGRAMME in Nigeria

Kester Osegha Ojokheta
University of Ibadan

Follow this and additional works at: http://newprairiepress.org/aerc

Part of the Adult and Continuing Education Administration Commons

This work is licensed under a Creative Commons Attribution-Noncommercial 4.0 License

Recommended Citation


This is brought to you for free and open access by the Conferences at New Prairie Press. It has been accepted for inclusion in Adult Education Research Conference by an authorized administrator of New Prairie Press. For more information, please contact cads@k-state.edu.
VALIDATING COMMUNITY OF INQUIRY FRAMEWORK in ADULT LEARNING: FINDINGS from an EMPIRICAL INVESTIGATION in a UNIVERSITY ORGANIZED LITERACY PROGRAMME in Nigeria

Kester Osegha Ojokheta
Department of Adult Education
University of Ibadan, Ibadan, Nigeria

Keywords: validating, community-of-inquiry-framework, adult learning, university-literacy programme

Abstract: Community of Inquiry (CoI) Framework is one of the leading models guiding online teaching and learning. There is the general consensus that the framework enhances learning outcomes and provides meaningful support among learners. This study was conducted to ascertain the validity of the CoI in adult literacy programme in Nigeria.

Introduction

In Nigeria, one of the major areas through which adult learning is concretized is in basic literacy delivery and implementation. Basic literacy delivery pattern, in the country, has persistently been attacked and criticized for relying heavily on the traditional pedagogical framework where the facilitator, most times, determine, design, and impose learning content on the literacy participants. The implication of this delivery pattern has often resulted in what has been termed “facilitators talking to the learners rather than facilitators talking with the learners”. This content facilitating model, rather than the learners’-centred model, has accounted for the well-documented attrition rates, the difficulty in the production of sustainable neo-literate, and the verdict of “no progress” gave by the Multiple Indicator Cluster Survey data (MICS, 1999), on Nigeria’s effort in reducing either male or female non-literate. The search for how knowledge ought to be constructed in basic literacy programme has continued to constitute a major discourse among literacy experts and practitioners in the country. Some have recommended the andragogical approach (Bello, 1998; Aderinoye, 2002; Biao, 2005; & Ojokheta, 2010) while others have suggested capacity building programmes for literacy facilitators (UNESCO/NMEC, 2014). Yet, the applicability of these recommendations in basic literacy programmes in Nigeria has not recorded an appreciable significant impact in knowledge creation and generation.

The need to find empirically backed evidence on how knowledge can be generated through creative construction in which the individual learner is an actor or active participant or subject rather than a passive object, on how Knowledge can be derived through individual’s interaction with social processes and contexts, and on how learners can make or construe meaning on the basis of prevailing experiences in basic literacy programmes in Nigeria necessitated this study.

The study is based on the assumption that the basic support for construction, acquisition, and utilisation of knowledge in basic literacy (which is similar to the assumption of another variant of adult learning: online teaching and learning) can best be facilitated through the establishment of community of learning among the learners. To validate this assumption, it
became imperative for the study to rely on an already established leading model that has guided research into online teaching and learning in higher education. The model is called Community of Inquiry (CoI) framework.

**Purpose of the Study**

The purpose of the study is aimed at investigating the appropriateness and applicability of the three principal elements of CoI Framework (often considered a social constructivist model grounded in John Dewey’s notion of practical inquiry) in defining, describing, and measuring elements of success in knowledge construction in basic literacy programmes. The elements are: Social presence, Cognitive presence, and Teaching presence. Social presence is defined as the degree to which participants feel affectively connected to one another; cognitive presence is conceptualized as the extent to which learners are able to construct and confirm meaning through sustained reflection and discourse; and teaching presence as the design, facilitation, and direction of cognitive and social processes to support learning (Swan, Garrison, & Richardson, 2009).

**Research Questions**

The study was designed to answer the following questions:
1. Which of the two groups will manifest higher perpetual value in the three indicators of social presence (open communication, affective expression, and group cohesion)?
2. Will the application of the cognitive presence enhance learners’ ability to engage in inquisitive construction of learning and knowledge?
3. Will the structure, organization, and leadership associated with teaching presence creates significant learners satisfaction, a sense of community among the learners, and an environment of effective learning?
4. Which of the two groups (experimental and control) will record higher and significant percentage scores on the following: learner satisfaction, increased interaction, engagement, reflective inquiry ability, structured thinking, incisive discourse, and transferability of skills?

**Theoretical Framework**

The CoI framework posits that knowledge construction in learning environments occurs through the development of a community of inquiry (Pierce, 1955; Lipman, 2003) characterized by optimal levels of teaching, social, and cognitive presence. The model assumes that learning participants must strive to recreate the social and knowledge building processes that occur through moment by moment negotiation of meaning found in the classroom typified by the concepts of presence. Palloff and Pratt (2007) believe that the single most important element of successful in learning is “the formation of a learning community through which knowledge is imparted and meaning is co-created”. Garrison and Arbaugh (2007) contend that community is essential for the occurrence of higher order learning and that this kind of pursuit can be experienced most effectively within a community of inquiry where teachers and learners are engaged as real people who are thinking critically about intellectual issues. The theoretical framework of this study is based on the premise that CoI provides explicit strategies to use in the design, development, and assessment of online courses by ensuring the presence of three interdependent and overlapping elements - social, cognitive and teaching presences (Garrison &
Methodology

This study adopted a quasi-experimental design. It was considered appropriate in order to find out which of the randomized groups will exhibit the features associated with the criteria of CoI. Participants of a University organised Literacy programme in the Department of Adult Education, University of Ibadan, Nigeria were used. 22 participants were each assigned to experimental and control group by simple random sampling technique. Two treatments were administered: the experimental group was taught through the criteria specified by CoI and the control group was taught through the direct instruction method. Four research questions were postulated to guide the study At the end of the experiment, a self-constructed questionnaire tagged Measuring Elements of Community of Inquiry (CoI) Framework Questionnaire r=81 was used to answer the research questions and ascertain which of the elements of CoI (Social presence, Cognitive presence, and Teaching presence) became predominant between the two groups. Data collection process was facilitated through statistical tool of simple percentage scores.

Social presence was established among the learners in the experimental group through the following: free and intermittently-mediated discussion among the learners, collaborative assignment writing and presentations, constant reward pattern, open communication, and positive feedback. Cognitive presence was established through the following: identification of the learning problem by the learners, exploration and discussion of the problem based on learners wealth of experience, initiation and development of related ideas, and role performances. The process was facilitated through activities and questions which provoked wisdom-based thinking, experience-based contributions, and skills transferability opportunities. Teaching presence was established through: guided discovery learning method, self evaluation and motivation before instructor's intervention, clear direction and guidance on discussion, activities, questions, and assignment completion.

The control group learners were taught through the traditional pedagogical approach where learners rely heavily on the instructor for knowledge creation, curriculum design and development of learning procedures, the means and methods through which the learners engage in interaction and discuss, learning motivation, and assessment and evaluation of learning.

Findings

Research Question 1: Research question one was designed to find out which of the two groups, (experimental and control) will manifest higher perpetual value in the three indicators of social presence (open communication, affective expression, and group cohesion). Result obtained showed that of the three domains of social presence among the experimental group, open communication recorded the highest value (+12) than affective expression (+7) and group cohesion (+3) while the three domains recorded negative values: open communication (-14), affective expression (-7), and group cohesion (+1). This simply shows that indicators of social presence are higher among the experimental group than the control group. However, the result
revealed that social presence may not enhance group cohesion. The implication of this is that in an attempt to allow for open communication and affective expression among literacy participants, facilitators must think of the consequences on group cohesion as open communication may create factional groups rather than group cohesion.

**Research Question 2:** This research question was formulated to know if the application of cognitive presence will enhance learners’ ability to engage in inquisitive construction of learning and knowledge. Result obtained showed that of the four domains of cognitive presence the exploration of the problem through reflection and discussion recorded the highest value (+13) followed by Integration (learners construction of meaning from the ideas developed through exploration, (+8) while Resolution (learners application of their new knowledge in other settings or contexts, (+1) recorded the lowest value. It is instructive to state that Triggering event (Identification of learning problem) was not considered an important indicator of cognitive presence. In the control group, the four indicators recorded negative values of (-10 for exploration, (-6) for Integration, (-4) for Resolution, and (-2) for Triggering event. The result equally showed that cognitive presence was higher in the experimental group than the control group. The implication of the finding is the triggering event should not be exclusively left for participants to determine. Why it is agreed that facilitator should not impose the triggering event on the learners, it must, however, be jointly determined by both the facilitators and the learners.

**Research Questions 3:** The research question was structured to investigate if the structure, organization, and leadership associated with teaching presence will create significant learners satisfaction, a sense of community among the learners, and an environment of effective learning. Result showed that +11 participants among the experimental group agreed that the structure, organization, and leadership of instructors will lead to sense of community among the learners +8 agreed that these will lead to learners’ satisfaction while +2 agreed that it may lead to environment of effective learning. The implication of this finding is that every facilitator must first seek to establish community among the learners which will eventually lead to learners’ satisfaction. However, the applicability of the indicators of teaching presence cannot generally lead to effective learning environment. Therefore, teaching variable can probably serve as a mediating variable of effective learning environment.

**Research Question 4:** Which of the two groups (experimental and control) will record higher and significant values on the following: learner satisfaction, increased interaction, engagement, reflective inquiry ability, structured thinking, incisive discourse, and transferability of skills? From the analysis of findings presented above, it can easily been seen that learners in experimental group recorded significant values in learner satisfaction, increased interaction, engagement, reflective inquiry ability, structured thinking, incisive discourse, and transferability of skills than those in the control group. In this sense, therefore, the premise can be established that cognitive presence can be better enhanced through the teaching presence while social presence serves as a mediating variable in basic literacy programmes. Based on these findings, it is concluded that Community of Inquiry (CoI) Framework is applicable not only in online educational experience and environment but also in literacy education programme predominantly facilitated through the face-to-face method in Nigeria.

**Recommendations**
Arising from the findings of this study, the following recommendations are made:

1. Literacy providers, both government and non-governmental organizations, are advised to build their philosophy of literacy delivery on Community of Inquiry (CoI) Framework. This framework helps in building and promoting community of learners in basic literacy delivery. Therefore, knowledge construction in basic literacy programmes in Nigeria can be better facilitated through the development of a community of learners.

2. The capacity of literacy instructors or facilitators in the application of the three elements of CoI framework (Social presence, Cognitive presence, and Teaching presence) should be developed through constant and continuous capacity building programmes since instructor/facilitator plays a major role not only in the successful application of the framework but also in helping the learners to achieve positive learning outcomes.

3. The instructor/facilitator must also be trained in the cautious application of the framework because over-indulgence of learners in one element of the framework may serve as detriment to the other elements. For example, learners’ excessive participation in social presence may not only negatively affect teaching presence and cognitive presence but may also affect group cohesion.

**Conclusion and Implications for Adult Education theory and Practice**

This study has been able add to the growing knowledge on Community of Inquiry Framework (CoI) as a viable means for experiencing meaningful learning and building community of learners not only in online learning but also in basic literacy programmes. Though the elements and indicators of Community of Inquiry (CoI) Framework have some similarities with the key assumptions and principles of andragogy, it is worthy to state that andragogy represents a generalised theory of adult learning while Community of Inquiry Framework represents a specific referenced and applicable model of adult learning. This is symbolized through the findings of this study.

**References**


