



## Using a community of inquiry framework to teach a nursing and midwifery research subject: An evaluative study



Jane Mills<sup>b</sup>, Karen Yates<sup>a</sup>, Helena Harrison<sup>a</sup>, Cindy Woods<sup>a</sup>, Jennifer Chamberlain-Salaun<sup>a</sup>, Scott Trueman<sup>a</sup>, Marnie Hitchins<sup>a</sup>

<sup>a</sup> Centre for Nursing and Midwifery Research, James Cook University, P.O. Box 6811, Cairns, Queensland 4870, Australia

<sup>b</sup> Professor of Clinical Sciences (Nursing), School of Health and Biomedical Sciences, College of Science, Engineering and Health, Bundoora, VIC, 3083, Australia

### ARTICLE INFO

#### Article history:

Received 10 April 2015

Received in revised form 22 March 2016

Accepted 20 April 2016

#### Keywords:

Communities of Inquiry  
Nurse research education  
Student satisfaction

### ABSTRACT

**Background:** Postgraduate nursing students' negative perceptions about a core research subject at an Australian university led to a revision and restructure of the subject using a Communities of Inquiry framework. Negative views are often expressed by nursing and midwifery students about the research process. The success of evidence-based practice is dependent on changing these views. A Community of Inquiry is an online teaching, learning, thinking, and sharing space created through the combination of three domains—teacher presence (related largely to pedagogy), social presence, and cognitive presence (critical thinking).

**Objectives:** Evaluate student satisfaction with a postgraduate core nursing and midwifery subject in research design, theory, and methodology, which was delivered using a Communities of Inquiry framework.

**Setting, Participants, and Methods:** This evaluative study incorporated a validated Communities of Inquiry survey ( $n = 29$ ) and interviews ( $n = 10$ ) and was conducted at an Australian university. Study participants were a convenience sample drawn from 56 postgraduate students enrolled in a core research subject. Survey data were analysed descriptively and interviews were coded thematically.

**Results:** Five main themes were identified: subject design and delivery; cultivating community through social interaction; application—knowledge, practice, research; student recommendations; and technology and technicalities. Student satisfaction was generally high, particularly in the areas of cognitive presence (critical thinking) and teacher presence (largely pedagogy related). Students' views about the creation of a “social presence” were varied but overall, the framework was effective in stimulating both inquiry and a sense of community.

**Conclusions:** The process of research is, in itself, the creation of a “community of inquiry.” This framework showed strong potential for use in the teaching of nurse research subjects; satisfaction was high as students reported learning, not simply the theory and the methods of research, but also how to engage in “doing” research by forging professional and intellectual communities.

© 2016 Elsevier Ltd. All rights reserved.

### 1. Introduction

Rapid growth in technology has generated opportunities to broaden the scope and delivery of innovative education. Opportunities include the integration of eLearning, defined as “electronic mediated learning in a digital format (using computers and the internet) to enhance or facilitate teaching and learning” (Doherty and McKimm, 2010, p. 123). eLearning can be contextualised within a theoretical framework to provide a constructive platform for the design of meaningful learning experiences (Akyol and Garrison, 2011). One such

framework is Communities of Inquiry [CoI]. The central premise of CoI is the promotion of inquiry and deep learning through well-directed and planned teaching, guided student dialogue, analysis and reflection within a connected, collaborative online community. CoI is a framework that integrates three online presences—social, cognitive, and teaching (Swan and Ice, 2010) to achieve this learning and teaching experience. Social presence relates to feelings of connection (Garrison and Arbaugh, 2007). Cognitive presence refers to the construction and application of knowledge, meaning, and curiosity (Garrison and Arbaugh, 2007). Teaching presence encompasses all that the teacher does, from course design and organisation to facilitation, guiding discussion, and instruction (Swan et al., 2009). Although the use of computers and the internet is mainstream within higher education, there is limited literature reporting the use of the CoI framework in nursing and midwifery programs (Pecka et al., 2014; Phillips et al., 2013; Stephens and Hennefer, 2013) and no evidence

E-mail addresses: [jane.mills@jcu.edu.au](mailto:jane.mills@jcu.edu.au), [jane.mills@rmit.edu.au](mailto:jane.mills@rmit.edu.au) (J. Mills), [karen.yates@jcu.edu.au](mailto:karen.yates@jcu.edu.au) (K. Yates), [helena.harrison@jcu.edu.au](mailto:helena.harrison@jcu.edu.au) (H. Harrison), [cindy.woods@jcu.edu.au](mailto:cindy.woods@jcu.edu.au) (C. Woods), [jennifer.chamberlainsalaun@jcu.edu.au](mailto:jennifer.chamberlainsalaun@jcu.edu.au) (J. Chamberlain-Salaun), [scott.trueman@jcu.edu.au](mailto:scott.trueman@jcu.edu.au) (S. Trueman), [marnie.turner@jcu.edu.au](mailto:marnie.turner@jcu.edu.au) (M. Hitchins).

to suggest it is being used in the online delivery of nursing and midwifery research education.

## 2. Study Background

The authors present findings from an evaluative study that investigated nursing and midwifery students' experiences of and satisfaction with the online delivery, using CoI, of a Master's level research subject. Previous student feedback that is gathered routinely in line with the university's monitoring and evaluation of quality teaching and learning indicated a lack of student engagement, which is not uncommon in nursing research subjects (Warkentin et al., 2014). Within nursing education, research is frequently disliked (Mattila and Eriksson, 2007) and often regarded as stressful or unnecessary (Warkentin et al., 2014). The focus, delivery, and teaching of research have led to a perception among students that research is complex, challenging, and difficult to translate to practice (Hewitt-Taylor et al., 2012). Research, however, is fundamental to the sustainability of the profession, clinical practice and safe patient care (Rourke and Kanuka, 2009; Warkentin et al., 2014). Research training for registered nurses and midwives, therefore, is an obvious and important target for "innovative" methods of education. Equipping nurses with the capability to not only undertake research but also to challenge the contextual barriers that impede research endeavours can improve research activity and the development of evidence-based practice (Adamsen et al., 2003; Mattila and Eriksson, 2007).

A routine review of the research subject materials provided an opportunity to restructure content delivery to improve student engagement and increasing satisfaction. The subject was redesigned using the Communities of Inquiry [CoI] framework (Garrison et al., 2000). Subject content delivery was restructured around online learning circles facilitated by one of the three subject lecturers. The three lecturers were experienced in delivering online subjects in a blended learning mode using a variety of technologies. In-house workshops on blended learning strategies and use of learning technologies were also attended by the lecturers. The name "learning circles" was chosen to describe the online learning groups to reflect the non-hierarchical nature of the groups. The aim of the learning circles was to increase opportunities for students to connect with other students and the teaching team. Students were allocated to a six-person learning circle at the beginning of semester. Fortnightly live online video-conferenced learning circle meetings facilitated synchronous communication between lecturers and students. Additionally, each learning circle had its own blog with a compulsory critical thinking question related to that week's subject content to facilitate asynchronous communication between students. Participants were required to respond to the critical thinking question posed and incorporate feedback on earlier posts. Podcasts in a conversational format were also used to highlight key elements or concepts of course material.

## 3. Aim

The aim of this study was to evaluate student satisfaction with a redesigned postgraduate core nursing and midwifery research subject, delivered using a Community of Inquiry framework.

## 4. Methods

### 4.1. Setting

*Research Design: Theory and Methodology* is a mandatory, external course work subject for postgraduate diploma and master's levels students of nursing and midwifery at an Australian university. External coursework subjects are delivered using a combination of online resources, printed material, workshops and other technologies.

### 4.2. Design

This study used an evaluative approach to examine student satisfaction with the redesigned subject. Both qualitative and quantitative data were collected and analysed to measure student satisfaction using a validated *Communities of Inquiry Instrument* (Garrison et al., 2000). Follow-up interviews were used to explore these findings in more depth if permission was received.

### 4.3. Survey Instrument

The *Communities of Inquiry Instrument* consists of three sections, *Teaching Presence*, *Social Presence* and *Cognitive Presence*, and 10 sub sections. Each question is scored on a five-point Likert scale ranging from 1 = strongly disagree to 5 = strongly agree. Previous studies have validated the CoI as a measure of Teaching, Social and Cognitive Presence (Arbaugh et al., 2008; Garrison et al., 2004). Reliability analysis shows Cronbach's alpha scores for all CoI scales and sub-scales are above 0.7 indicating good internal reliability and consistency (Gliem and Gliem, 2003).

### 4.4. Sampling and Participants

Participants were a convenience sample of 56 students enrolled in postgraduate nursing or midwifery programs who were undertaking a core research subject in either Semester 1 or Semester 2. At the end of each semester, after their assessments were completed, students were invited by email to complete a study survey and/or participate in individual telephone interviews. The email invitation contained a link to the online version of the Community of Inquiry Survey. Survey completion implied consent. A total of 29 questionnaires were completed, giving a response rate of 52% (n = 29). Demographic data was not collected from survey participants. The final survey question invited respondents to participate in a telephone interview.

Students interested in participating in an interview were requested to contact the subject coordinator. An information sheet and an informed consent form were sent to interested participants. Signed consent was required prior to telephone interviews being conducted. Ten students participated in semi-structured individual telephone interviews. A single researcher, who was not one of the lecturers, conducted all interviews to ensure consistency in data collection and to reduce the risk of coercion. Interview participants included eight females and two males. Interview duration was between 11 and 46 min. During interview, participants were asked about their overall experience of the subject, peer-to-peer interaction, and student-to-facilitator interactions.

### 4.5. Ethical Considerations

Ethics approval (H4990) from the University ethics committee was obtained prior to the study commencement.

### 4.6. Data Analysis

Statistical analysis of the quantitative survey data was conducted using SPSS version 22 (IBM SPSS Inc., Chicago, Illinois, USA). Survey data were analysed descriptively. Sub-scale mean scores were calculated by summing the results of the individual questions and dividing the score by the number of questions. Additionally, responses for individual questions were collapsed to combine agree and strongly agree responses, and disagree and strongly disagree responses. Correlation analysis was also conducted to explore the relationships among variables (teaching presence, cognitive presence, social presence).

Interviews were audio-taped and transcribed verbatim professionally. Data were analysed using Microsoft® Word and Excel following a process suggested by Hahn (2008). Data were coded and comparatively analysed to identify major theoretical concepts. Inter-coder agreement

Download English Version:

<https://daneshyari.com/en/article/367821>

Download Persian Version:

<https://daneshyari.com/article/367821>

[Daneshyari.com](https://daneshyari.com)