

## Discussion on online courses from the point of view of the research community

Discusión sobre los cursos en línea desde el punto de vista de la comunidad de investigación

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### ABSTRACT

This study involved students feedback from various faculties from a Malaysian university which incorporates hybrid learning model in its education ecosystem. The aim of this study is to explore the factors that influence online student to actively engage in discussion forum via platform of Learning Management System (LMS) provided by the university. This study employed qualitative approach involving seventy-three research participants from the university. Qualitative data from open-ended survey toward online discussion were collected and analysed based on classical content analysis method. The feedback were coded based on the pre-determined themes in the Community of Inquiry (CoI) model. It was found that teaching presence was a main predictor of the effectiveness of the online courses offered. In other words, the ability of online instructors in designing, organizing, instructing, and facilitating via online platforms are essential in the successful implementation of the hybrid learning model.

**Keywords:** Community of Inquiry, Teaching Presence, Online Learning.

### RESUMEN

En este estudio participaron los comentarios de los estudiantes de varias facultades de una universidad de Malasia que incorpora un modelo de aprendizaje híbrido en su ecosistema educativo. El objetivo de este estudio es explorar los factores que influyen en los estudiantes en línea para participar activamente en el foro de discusión a través de la plataforma del Sistema de Gestión de Aprendizaje (LMS) que proporciona la universidad. Este estudio empleó un enfoque cualitativo que involucró a setenta y tres participantes de investigación de la universidad. Los datos cualitativos de la encuesta abierta hacia la discusión en línea se recopilaron y analizaron en función del método clásico de análisis de contenido. Los comentarios se codificaron en función de los temas predeterminados en el modelo de Comunidad de Investigación (CoI). Se descubrió que la presencia docente era un predictor principal de la efectividad de los cursos en línea ofrecidos. En otras palabras, la capacidad de los instructores en línea para diseñar, organizar, instruir y facilitar a través de plataformas en línea es esencial para la implementación exitosa del modelo de aprendizaje híbrido.

**Palabras clave:** comunidad de investigación, presencia docente, aprendizaje en línea.

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## 1. INTRODUCTION

The effectiveness of online learning remains unclear from educators' perspectives (Khalid & Quick, 2016). Any discourse on online learning must not fail to include the discussion on e-forum. It is important to examine the issue in a holistic manner, especially those relating to text-based communication (Allen & Seaman, 2014; Croxton, 2014; Garrison & Anderson, 2003). Educators and learners no longer confine their teaching and learning to face-to-face as the virtual alternative is gaining ground (Baharudin et al., 2018; Knowles, 2011; Mohammad et al., 2014). Hence, a number of Malaysian institutes of higher learning have taken the opportunity to offer numerous online courses to potential students of different ages (Kementerian Pendidikan Tinggi Malaysia [KPTM], 2013). At the moment, there are more than seven million students enrolled in at least one online course (Allen & Seaman, 2014). In terms of Massive Open Online Courses (MOOCs), Nordin and Norman (2018) stated that there are as of November 2017, there 226 MOOCs with almost 250,000 users enrolled in Malaysia MOOCs.

Three aspects have been identified by researchers as contributing to the effectiveness of online courses: teaching presence, social presence and cognitive presence which later developed into Community of Inquiry model (CoI) (Garrison, Anderson & Archer, 2000; Garrison, Anderson & Archer, 2010a; Garrison, Cleveland-Innes & Fung, 2010b). Teaching presence refers to e-tutors' ability to communicate with learners whereas social presence focuses on learners' ability to virtually interact with each other, and characterised by the notions of affective expression, open communication, and group cohesion. The third aspect, i.e. cognitive presence entails the cognitive applications of critical thinking, problem solving, reflection and resolution (Garrison et al., 2000; Garrison et al., 2010a; Garrison et al., 2010b).

Croxton (2014) and Spears (2012) emphasised that teaching presence is an important factor that contributes to learners' active engagement in forum discussion. One of the issues that hinders the learners' engagement is their discontentment with e-tutors (Nasir et al., 2018). Their discontentment, which was later manifested in the forms of psychological distress, declining interest in learning, enrolment attrition, and even dropping out of the course, needs to be seriously addressed (Bolliger & Martindale, 2004; Grandy, 2013; Howell, Jeffrey, & Buck, 2012; Roblyer & Wiencke, 2003; Swan, 2001). Apart from tutors' feedback, communication among students was also important in encouraging participation in online discussion (Hostetter & Busch, 2006; Cobb, 2011; Spears, 2012; Zhan & Mei, 2013).

The aim of this study is to explore the experiences of online students in discussion forum via platform of Learning Management System (LMS) provided by a Malaysian university. Based on the CoI model, the objective is to identify whether teaching presence is the main contributor that influences students to actively engage in online discussion. This study also sought to investigate other variables that expand the knowledge base of CoI model. It is expected that context plays significant role as online learning ecosystem in Malaysia is different than that of other countries such as the United States, Korea and Taiwan.

## 2. METHODOLOGY

This study employed qualitative approach involving seventy-three research participants of a private institute of higher education. Research participants were selected based on the sampling frame provided by the university. *Classical content analysis* (Miles & Huberman, 1994; Coffey & Atkinson, 1996) was used to analyse participants' responses based on themes of CoI ie teaching presence and subthemes of design and organisation, direct instruction and facilitation. Data were coded using NVivo and Microsoft Word to identify key word in context (KWIC) and key word outside context (KWOC).

## 3. RESULT AND DISCUSSION

Forty-six participants (63%) responded to the email through Qualtrics hyperlink - an open-ended question: What are factors that motivate you to participate actively in online discussion? Most of the responses were from the Faculty of Business, Education and Language as summarised in Table 1.

**Table 1 Student responses from various faculties**

| Faculties              | n  | %    |
|------------------------|----|------|
| Education & Language   | 12 | 16.4 |
| Social Science         | 5  | 6.8  |
| Business Management    | 25 | 34.2 |
| Science & Technology   | 1  | 1.4  |
| Nursing Health Science | 0  | 0    |
| Others                 | 3  | 4.1  |
| Total                  | 46 | 62.9 |

Word count analyses show that words such as e-tutor, discussion, student, course, online, participation, learning, answers and forum have high frequency as in Table 2 and they are summarized in graphical form using word cloud analysis as in Figure. The larger font size indicate the higher frequency.

**Table 2 Analysis of word frequency**

| Words      | Frequency |
|------------|-----------|
| e-tutor    | 42        |
| Discussion | 36        |

|               |    |
|---------------|----|
| Student       | 30 |
| Course        | 32 |
| Online        | 25 |
| Participation | 27 |
| Learning      | 35 |
| Answers       | 22 |
| Forum         | 18 |

Based on CI themes, data were coded, count and sorted according to categories. Responses from 38 out of 48 students (83%) - teaching presence, especially on e-tutor's ability to design, arrange, facilitate and teach online through LMS platform.

Data were sorted based on e-tutor's capability of designing online teaching consisting five variables: (1) Clear explanation on main topics of a course, (2) Clear explanation on important information about a course, (3) Clear instruction on how to engage in learning activities, and (4) clear explanation on deadlines and duration of each of the learning activities.

Two participants said that if e-tutor's instruction is clear, they feel motivated to actively discuss in the e-forum. Among their responses are:

"...to set rules and to predetermine only postings with a good quality are taken into consideration..."

"...if every good posting is given a score.. So I don't have to spend much time, only if necessary..."

"...we have been using e-forum only to discuss about assignment, change of class schedule, topics for next meeting, but there is no clear guidelines like other courses..."

"...we only use e-forum to discuss about assignments, class rescheduling, and topics to be discussed in incoming meetings, but there has been no clear guidance like other courses..."

Data were sorted based on e-tutor's ability to organize and facilitate students aspects of: (1) recognizing the similarities and differences in the topic of discussion; (2) comprehending the topics in the course; (3) encouraging more meaningful discussion in the e-forum; (4) helping students to focus on learning; and (5) encouraging more interactivity between students and learning communities/

Generally, 14 participants reported that they would be more motivated to actively participate in e-forum discussion if e-tutor could help them in comprehending the topics in the course. For instance,

"If there is any question, e-tutor would ask students to refer to the chapter but he/she did not specify which part"

"My e-tutor is not very skillful in giving explanation to students, he/she sometimes asks us to refer to the course modules...my e-tutor did not encourage me to discover more about this course..."

"E-tutor's feedback was very brief and not very valuable ..."

"...there has been lack of support or involvement from tutors in the online discussion..."

"...role of e-tutor as e-forum moderator is very important in developing students' interest to actively involved in the forum..."

Finally, data were sorted based on e-tutor's ability to conduct online teaching in the aspects of: (1) to facilitate students' focus on learning-related issues; (2) to provide feedback that enable the students to acknowledge their strengths and weaknesses, and (3) to give feedback within the reasonable period. There were seven participants were concerned about discussion on learning-related issues and five participants reiterated that they would be more motivated if e-tutor could give feedback in a reasonable time frame. Among their responses are:

"...most of e-tutors did not immediately provide feedbacks. For me they should be more active, to help and to assist..."

"...immediate feedback from e-tutor would encourage students to ..engage in the forum discussion

"...the feedback is so slow and it's like there is no one looking after the discussion forum..."

"...why not e-tutor who posts the questions in the discussion forum? ..."

**Table 3 Keyword in Context (KWIC) and Classical Content Analysis Technique Based on Existing Content Themes: Teaching Presence**

| KWIC            | Codes & Item No | Frequencies |
|-----------------|-----------------|-------------|
| Design & Layout | 1-Topic         | 0           |

|              |                             |    |
|--------------|-----------------------------|----|
|              | 2-Aim                       | 0  |
|              | 3-Teaching                  | 5  |
|              | 4-Date/Time                 | 0  |
| Facilitation |                             |    |
|              | 5-Similarities/ differences | 1  |
|              | 6-Understanding             | 7  |
|              | 7-Involvement               | 7  |
|              | 8-Facilitation              | 3  |
|              | 9-Encouragement             | 0  |
|              | 10-Enforcement              | 1  |
| Teaching     |                             |    |
|              | 11-Focus                    | 7  |
|              | 12-Strengths                | 2  |
|              | 13-Weaknesses               | 0  |
|              | 14-Feedback time            | 5  |
|              | Total                       | 38 |

Responses from open-ended questions show that e-tutor's ability to design online teaching which includes important topics, course objectives, clear instructions on learning activities, is needed in order to maintain the quality of the courses offered. Findings of this study corresponds to the earlier studies on text-based e-forum discussion although different platforms were used.

Research participants were found to be more interested to join the e-forum if there were reward systems such as point reward system, with clear guidelines on how to conduct online discussions in focussed and orderly manner as suggested by previous studies (Garrison et al., 2000; Garrison et al., 2010a; Garrison et al., 2010b). The point reward system in the e-forum must be based on quality and not quantity. A post is considered the one with quality if it reflects critical thinking and attracts other students to join in. If the discussion is outside the scope, it is not qualified to be rewarded.

The e-tutor's ability to organize and assist students in terms of identifying similarities and differences, understanding courses' contents, guiding students towards more productive involvement in e-forum, helping students to focus on what they are learning, encouraging them to explore new concepts, and stimulating more interactivity with online learning communities were among the concerns raised by the students. The biggest concern was e-tutors' inability to help students to comprehend learning contents that are difficult to understand. The e-tutors usual response of "please refer to the modules" was not helpful at all.

The participants also felt that it is important for e-tutors to have moderation skills in order to effectively run the e-forum. They suggested that there should be a timeframe for e-tutors to respond to questions in the e-forum, for instance within 24 hours. The teaching presence construct was the most important construct in comparison with social and cognitive constructs.

#### 4. CONCLUSION

Adult and lifelong learning can happen without a teacher's presence. The advance of technology has enabled the online learning happen without teacher's presence. In order to make this happen, the online courses must be systematically designed if the objectives are to be realized. CoI offers the best model of online teaching because it takes learning styles such as visual, audio, kinaesthetic, logical and social into consideration (Lacey & Lawson, 2013). The possible threat that hinders the online learning process is the ecosystem infrastructure, especially in terms of internet bandwidth. In general terms, the keywords represented in CoI are applicable to be used in Malaysian context and in fact, has already been implemented by a local online institution. Technologies are there to be explored, hence the exploration of more online learning related models and the deeper inquiry of CoI model are recommended in order to expand the knowledge horizon of this discipline.

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