

## **Learning During COVID19 University Closure: Case Studies of University of UK**

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### **Abstract**

The aim of this present study was to explore the experiences of under graduate and post-graduate level students who abruptly transitioned from classroom learning to an online learning environment due to the COVID-19 pandemic. The research question was: What strengths and challenges are associated with online learning among under graduate and post-graduate students abruptly transitioning from a classroom to an online learning environment due to the COVID-19 pandemic? Participants were 30 undergraduate English students at Poland university, College of Education for Human Sciences and 20 undergraduate students at Al-Muthanna University. All participants completed a 10-item questionnaire. Data were analyzed using a six-step thematic approach and was interpreted through the lens of the Community of Inquiry theoretical framework. Findings indicated that online courses strengths included increased student engagement and flexibility, prior familiarity with teaching, increased personal time, and the use of multiple learning modalities. Challenges included problems with teaching, reduced engagement due to family interruptions, and lack of visual cues. Limitation of this study was the small sample size, which may limit the ability to generalize the findings to other students. These findings provide insight into the issues which can hinder success in online programs.

**Keywords** online learning, COVID-19, Community of Inquiry, Cognitive presence, Social presence, Teaching presence

### **Introduction**



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Online learning is utilized by a substantial number of undergraduate and post-graduate students. This form of learning may be broadly defined as “access to learning experiences via the use of some technology” (Moore, Dickson-Deane, & Gaylen, 2011, p.130). About one-third of all post-secondary students utilize this form of learning in some manner. Of the students who do participate in online learning, 15.7% do so exclusively. These numbers are higher for graduate than undergraduate students. For example, 38% of graduate students take at least one online course, and of those, 28.9% take exclusively online courses (National Center for Educational Statistics, 2018). A number of benefits and challenges are associated with this modality of learning. Benefits include flexibility with respect to time and learning preferences, increased motivation, increased access to learning activities for students with limitations, improved learning engagement during learning and assessment, improved interaction among peers, less student anxiety regarding participation, and the provision of more detailed feedback by instructors (Poon, 2013; Marteney, & Bernadowski, 2016; Gikandi, Morrow, & Davis, 2011). Challenges associated with an online learning format include the need for technological knowledge and confidence, difficulty in teaching hands-on skills, lack of attentiveness or attention span in students, and academic integrity/plagiarism (Alammary, Sheard, & Carbone, 2014; Mukhtar, et al., 2020). Challenges specific to teaching online language teaching include decreased character reading and writing abilities, technical sound issues, and difficulty transmitting verbal cues (Sun, 2011). Some schools and universities have created an online component to supplement the face-to-face course (blended-learning). Many universities offer online courses for those who cannot participate in on campus courses or to supplement on campus courses. The choice to participate in fully online courses are often made by the student. However, unique circumstances have removed that choice for many individuals. In December 2019, an outbreak of pneumonia in Wuhan, China was found to be caused by a novel

coronavirus (SARS-CoV-2). By mid-February, the virus had spread from China to at least 24 other countries with 51,857 confirmed cases (Rothan, & Byrareddy, 2020). By the beginning of May 2020, the World Health Organization (2020) reported 3,517,345 cases of the disease, COVID-19, worldwide along with 243,401 deaths attributed to the disease. Countries across the world responded in a variety of ways to mitigate the threat, including enforcing social distancing procedures and self-quarantine. 202 203 An additional outcome of this pandemic was the temporary closing of schools and universities and the transition of learning from a classroom environment to an online environment. While online learning is certainly not a new phenomenon, the circumstances under which this rapid and extensive transition occurred are. Due to the decency of this situation, a gap currently exists in the literature regarding the impact of this rapid transition upon post-secondary students.

#### Review of the Literature

This section presents a review of factors which impact online learning through the lens of the Community of Inquiry (COI) theoretical framework. This framework assumes that learning occurs through the interaction of three elements, which also represent the dimensions of role adjustment in an online learning community: cognitive presence, social presence, and teacher presence (Garrison, & Akyol, 2013). After a description of the conceptual framework, its use within the literature is discussed.

#### **Role Adjustment**

Students required to quickly transit from classroom instruction to online learning likely undergo a role adjustment. In addition to maintaining the expectations of

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being a student, they may need to learn new technologies, new methods of communication with peers and instructors, and improved strategies for selfdirected learning and time management. In addition, the student's physical learning space changes from the classroom environment to one more aligned with the home environment (Garrison, et al., 2004). In a study of graduate students who transitioned to an online learning environment, Kinsel, Cleveland-Innes, and Garrison (2005) reported that student concerns to this new role included decreased direction from and interaction with instructors and difficulty adjusting to new technology. However, on a positive note, students in this study also reported feeling more open and interactive in an online environment and stated that they were able to develop closer relationships with their peers (Kinsel, et al., 2005).

## **Community of Inquiry Theoretical Framework**

The COI contains three elements essential to learning in a variety of contexts, namely cognitive, social, and teaching. This theoretical framework is applicable to online learning in higher education, as well as face-to-face and online learning in primary and secondary school. The first element in the COI is cognitive presence, which is defined as "the extent to which the participants in any particular configuration of a community of inquiry are able to construct meaning through sustained communication" (Garrison, & Akyol, 2013, p. 108). Cognitive presence relates to critical and reflective thinking, which are keys to inquiry and higher-order thought processes. This element of the COI is operationalized by the Practical Inquiry Model, which consists of four phases of crucial inquiry. The first phase is a triggering event associated with a problem or issue that consists of an activity which generates curiosity. Next is the exploration phase, in which students reflect internally and collaborate with peers to derive meaning from a complex issue. Integration, the third phase, involves critical discourse among

students that further refines their understanding of the issue. They construct a meaningful framework by which to derive solutions to the problem. Finally, during the resolution phase, students decide upon and test a specific solution (Garrison, & Akyol, 2013). The second element, social presence, may be defined as “the ability of participants to identify with the group or course of study, communicate purposefully in a trusting environment, and develop personal and affective relationships progressively by way of projecting their individual personalities” (Garrison, & Akyol, 2013, p.107). While establishing social relationships among peers is important, the true purpose of social presence within the context of learning is to support inquiry and educational outcomes. When students are able to identify with a peer group and its purpose, this group becomes more productive (Garrison, & Akyol, 2013). The category of facilitating discourse includes the pedagogical strategies, interpersonal skills, and organization which facilitate learning with the COI. Finally, direct instruction refers to issues related to course content, such as correcting misunderstandings, identifying essential course concepts, organizing the learning materials, and creating meaningful learning activities (Garrison, & Akyol, 2013). Teaching presence is associated with learner satisfaction, learner participation, quality of responses, and higher-order learning (Garrison, & Akyol, 2013).

Cognitive Presence Cognitive presence refers to the construction of meaning and the development of understanding within a learning environment (Garrison, & Akyol, 2013). A variety of attributes and experiences within online learning may contribute to the development of cognitive presence. High levels of student engagement in online classes, such as through posting in discussions and completing assignments, are associated with the successful development of cognitive presence (Kovanovic, et al., 2015). Two additional factors contributing to the development of cognitive presence in online learning are “externally

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facilitated regulation scaffolding” (Gasevic, et al., 2015, p.55) and role assignment. With respect to the former, instructors who provide students with a framework for interaction and participation in discussions promote an earlier triggering event, or an event that motivates the learner to learn. This triggering event is needed in order for the student to progress through the remainder of the stages of cognitive presence (exploration, integration, and resolution). Role assignment refers to the assignment of individual responsibilities within a group discussion, such as the individual who summarizes the ideas and the individual who hypothesize new solutions to a problem (Gasevic, et al., 2015). The three elements of the Community of Inquiry Model interact to form a positive feedback loop. Wang, et al. (2016) explained that an established social presence supports the development of critical thinking and cognitive presence. Both social presence and teaching presence create the conditions for high quality interactions, which in turn promote learning. Social Presence Social presence refers to the ability of a student to insert his or her personal characteristics into the community so as to ultimately facilitate the development of cognitive presence. The three dimensions of this construct are emotional expression, open communication, and group cohesion (Garrison, & Akyol, 2013). Social presence allows students to feel as though they experience authentic interaction with other individuals. This feeling is necessary in order to facilitate continued social interactions (Cunningham, 2015). Factors related to the establishment of social presence in an online learning environment include the ability to see a visual representation of the individual, whether through an avatar or actual image on video, the ability to interact with peers, lower levels of instructor control over student discussion contributions, student continuation of a discussion thread, students complimenting their peers, and expressing appreciation to peers (Cunningham, 2015; Horzum, 2017; Costley, & Lange, 2016; Joksimovic, et )

## **Methodology**

In order to explore the experiences of students rapidly transitioning from classroom to online learning, a qualitative, phenomenological approach was used. A phenomenological study describes the lived experiences of research subjects within the context of a phenomenon of interest. The purpose of this approach is to reduce individual experiences to a set of universal understandings. A phenomenological study consists of several key components, including data collection through interviews or questionnaires, systematic procedures for data analysis that move from the narrow to the broad, and a description of the essence of the experience of the research subjects (Creswell, 2013).

hanna university . Purposive sampling was used to select study participants. All thirty Iraqi students signed consent letters for participating in the study. Twenty students completed and returned the survey out of the thirty participants in college of education for human sciences . Twenty-five adult students enrolled in the same teaching course provided written consent to participate in the study and were emailed a survey with openended questions. Twenty students completed and returned the survey. The survey instrument consisted of 10 items seeking the opinions of participants on their recent online experience in the course. These items addressed teaching , training in online coursework, time management, motivation, family responsibilities, instructor involvement and course delivery. Participants were also provided with an opportunity to add any additional insights not addressed in the survey questions. Data analysis followed a six-phase thematic analysis approach as described by Braun, Clarke, and Terry (2015). This form of analysis allows for the identification, analysis, and interpretation of themes found in qualitative data and is appropriate for phenomenological studies. The first phase, Familiarization with Data, requires a thorough reading and re-reading of the data in order to know the data and begin to engage in a preliminary analysis. The researchers note casual observations about the data, which serve as reminders for the analysis phase (Braun, et al., 2015). The second phase, Coding the Data,

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consists of a systematic process for deriving labels which capture key ideas in the data. Effective codes consist of a word or short phrase which captures both the focus of the data and the subject's position. Codes can be descriptive, summarizing the text, or interpretive. These codes are written on the transcript directly next to the relevant text. Once all of the relevant data is coded, the researcher compiles a list of all codes generated and their associated extracts of data (Braun, et al., 2015). Searching for Themes represents the third phase of analysis. A theme represents a broader level of meaning than a code and may consist of clusters of codes. The fourth phase is reviewing themes. The purpose of this phase is to ensure that the themes appropriately fit the coded data and to reshape themes so that they provide a comprehensive picture of the data.

### **Conclusions**

The purpose of this study was to explore the experiences of undergraduate students who abruptly transitioned to an online learning environment due to COVID-19, including perceived strengths and challenges associated with this change. The results indicated that major strengths included increased engagement and learning flexibility due in part to the use of multiple learning modalities, prior familiarity with teaching, increased personal time, and instructor familiarity with teaching. Challenges include technological problems, reduced engagement due to family disruptions, and lack of visual cues when interacting with peers. One limitation of this study was the small sample size, which may prevent the generalization of the results to other groups of students. Future research should examine the long-term impact of this unique situation on academic success. 206

### **Discussion and Findings**

The purpose of this study was to explore the experiences of undergraduate students rapidly transitioning from classroom to online learning in order to uncover the strengths and challenges associated with this transition. This section



discusses the findings through the lens of the Community of Inquiry framework, which includes cognitive presence, social presence, and teaching presence (Garrison, & Akyol, 2013). The findings from this study indicate that the greatest number of strengths and challenges of this new online environment are associated with cognitive presence. The strengths of the online course included increased student engagement and increased flexibility in learning, both due to the use of multiple learning modalities. These findings align with those presented by Kovanovic, et al. (2015) in that high levels of student engagement lead to the successful development of cognitive presence (Kovanovic, et al., 2015). An additional strength within this area was prior familiarity with the teaching used to implement the online course. These three factors, namely engagement, flexibility, and familiarity with teaching, enable students to more effectively exchange information with their peers. Despite these strengths, two notable challenges to the development of cognitive presence existed. Teaching problems, such as connectivity problems and sound issues, prevented participation at times. In addition, student engagement was reduced at times due to interruptions from family members also located in the home environment. With respect to social presence, one strength was the increase in personal time, while one challenge was the lack of visual cues, such as the ability to observe gestures, body language, eye contact, and facial expressions. Increased personal time due to not having to commute to class or maintain one's physical appearance may indirectly impact social presence by providing greater time to engage online with peers and a reduction in anxiety. The lack of visual cues appeared to be a significant challenge. Participants noted that the inability to observe body language and facial expressions contributed to decreased comprehension, concentration, enthusiasm, and willingness to elaborate on ideas. These findings align with Cunningham (2015), who reported that the establishment of social presence in an online learning environment includes the ability to see a visual representation of the

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individual. An additional outcome of the inability to visually see an accurate representation of peers and their body language may be reduced by cognitive presence, as the two dimensions support each other (Wang, et al., 2016). Findings also indicated that course instructors demonstrated strengths related to teaching presence. Participants noted that most instructors were generally familiar and able to use the teaching associated with online courses, and most instructors utilized multiple learning modalities when teaching. Teaching presence, which supports the development of social presence and cognitive presence, involves activities that provide interesting, safe, and engaging learning environments (Chakraborty, & Nafukho, 2014). Instructors that use multiple modalities when teaching, such as a combination of discussion, lectures, and activities, may be more likely to meet the needs of diverse learners with differing learning preferences and abilities. Students whose learning needs are met may be more likely to engage in the learning experience and thus build both cognitive and social presence.

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