



Design considerations in emergency remote teaching during the COVID-19 pandemic: a human-centered approach

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Abstract

This paper is in response to the article entitled “The process of designing for learning: understanding university teachers’ design work” (Bennett et al., *Educ Tech Res Dev* 65:125–145, 2017). Bennett et al. (*Educ Tech Res Dev* 65:125–145) present a descriptive model of the design process that reports findings from a qualitative study investigating the design processes of 30 instructors from 16 Australian universities through semi-structured interviews. This exploratory study provides rich, contextualized descriptions about university teachers’ design process and pinpoints key design characteristics as top-down, breadth-first, iterative, responsive, and reflective. These key design characteristics revealed by the rich contextual descriptions could provide applicable insights into the design process especially for new instructors. The findings of the study could inform how learning design could be adapted during an emergency remote teaching (ERT) as it is dynamic and open to revision. A noteworthy limitation of the study is that complementary data such as design artifacts could be utilized to ensure data triangulation in addition to self-reported data obtained via interviews. The study found that university instructors’ design process did not appear to draw on instructional design models. Therefore, future studies could focus on to what extent and how such models could be used by university instructors. Lastly, future studies may explore how technology is used in ERT design to support their needs. In this article, I share how design can be informed by humanizing pedagogy and pedagogy of care during ERT.

Keywords Design · Emergency remote teaching · ERT · Design process · Student-centered · Humanizing pedagogy · Pedagogy of care

In the midst of the COVID-19 outbreak, many higher education institutions around the world had to make a sudden shift to online instruction. The abrupt transition to online instruction was named as “emergency remote teaching” (ERT) due to the challenges caused by the outbreak (Hodges et al. 2020, para. 5; Milman 2020, para. 3). It is known

Notes: “University teacher” and “university instructor” are used interchangeably in the paper.

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that effective online learning is the result of a meticulous planning and instructional design. However, ERT is viewed as a temporary solution to an immediate problem. In this respect, the widespread school closures due to the COVID-19 outbreak has led many university instructors shift their pedagogy to ERT (Trust and Whalen 2020). The shift to ERT requires university instructors to “take more control of course design and development, and implementation process” (Hodges et al., para. 15). Considering this pivotal need for instructors’ increased agency in course design during ERT, Bennett et al.’s (2017) article that reports a descriptive model of the university instructors’ design processes is a key resource to reflect upon the design process of university instructors and how it could be adapted during ERT.

Bennett et al. (2017) highlight that design is a top-down iterative process that starts with a broad framework and is detailed with cycles of elaboration. Establishing this overarching framework involves decisions about the learning outcomes, the scope of the content and assessments, and learning activities. Following the establishment of the initial framework, the design process proceeds with the specific details that involve an iterative effort to form alignment among outcomes, content, activities, and assessment. This iterative design process continues throughout the teaching period and is adapted accordingly based on students’ feedback and teachers’ reflection. A notable finding resulting from Bennett et al. (2017) denotes that university instructors work iteratively throughout the design process and modifies it in response to the new ideas about the problem and context. Given that COVID-19 entailed unprecedented challenges for both teachers and students, university instructors may consider providing better support for students. In ERT contexts, students may lack access to technology or reliable Internet and experience a psychological-communication gap due to the “transactional distance” (Moore 1993; Zilka et al. 2018). Therefore, acknowledging that moving to ERT requires greater reflexivity and redesign of the learning environments (Henriksen et al. 2020), this paper focuses on how university instructors could prioritize their students’ needs, feelings, and challenges in their designs in the midst of transition to ERT. The remainder of this paper describes how human-centered design could help implement humanizing pedagogy and pedagogy of care in ERT design.

Human-centered design

Two noteworthy approaches that could be considered to adapt to student needs during ERT are humanizing pedagogy and pedagogy of care, which may also respond to the call for a student/learning-centered design foregrounding student needs in Bennett et al. (2017). One way to manifest the student-centered design would be achieved by adopting a human-centered pedagogy (Luka 2014). Because “university teachers often have high levels of autonomy in deciding what and how to teach” (Bennett et al. 2017, p. 127), they can purposefully dwell on a human-centered design which fosters a problem-solving approach through empathy building (Baran and AlZoubi 2020). Such a human-centered design may help university teachers build empathy with their students and tailor teaching designs that reflect students’ needs and supportive online learning environments. Through a human-centered design, university teachers may seek for ways to adapt their designs based on humanizing pedagogy and pedagogy of care.

Implementing humanizing pedagogy during ERT

Humanizing pedagogy refers to establishing a relationship of dialogue with the environment and an effort to understand that “humans are motivated by a need to reason and engage in the process of becoming” (Salazar 2013, p. 125). Humanizing pedagogy can be operationalized by “pushing beyond purely cognitive approaches” and becoming more reflexive “addressing issues of power, access, and representation” (Shelton et al. 2020, p. 125). University teachers may draw upon the implications of humanizing pedagogy in ERT, considering the uncertainties imposed on the learners during the COVID-19 pandemic. For example, ERT designs may intentionally coach learners on how to learn online, discuss expectations with the learning community, and attempt to understand all learners in remote teaching contexts (Robinson et al. 2017). As learners may experience mental and physical health issues in the wake of COVID-19, ERT design could offer flexible deadlines and accommodate learners’ lived experiences and context to reduce unnecessary stress (Mehta and Mehta 2020; Shelton et al. 2020). Establishing a reciprocal communication with learners may also contribute to the ERT design as it allows for understanding the contexts learners go through and create equitable online experiences taking into consideration learners’ particular learning needs in their contexts (Aguilera and Nightengale-Lee 2020). In this way, teachers are more likely to identify digital pedagogy/practices that could support student learning rather than impeding them. For example, it might be easier to determine what challenges learners face (e.g., technology access, (un)reliable Internet) and reflect these challenges in ERT designs to achieve a more inclusive and humanized digital pedagogy. This is likely to pave the way for establishing a pedagogy of care that will foster listening to students who might potentially be influenced by the inequities such as technology access and empower such learners.

Considerations for pedagogy of care during ERT

Showing and receiving care is a fundamental component of human relationships, and the concept of care has been examined in traditional educational contexts (e.g., Noddings 1984). Exploring the pedagogy of care in online learning is viewed as “an effort to understand the role of emotions, specifically the feeling of caring and being cared for” (Robinson et al. 2020). This notion of nurturing and supporting students via a care pedagogy may allow university teachers to plan more effective and supportive ERT designs. For example, design work could be informed by continuous dialog, clarity of communication, and promptness (Velasquez et al. 2013). Instructors may pre-consider students’ needs in design process and place resources, such as frequently asked questions, introductory videos, and assignment rubrics in an easily accessible location on the course delivery platform to avoid unnecessary questions from students and to let them find the critical course information at ease (Robinson et al. 2020). Another critical consideration for implementing pedagogy of care in ERT is to ensure a timely response to student inquiries and questions as well as feedback to student assignments. Furthermore, designing assignments with more flexible deadlines could be reflected in ERT design as learners’ obligations with their family, jobs, and other engagements are more than likely to increase during crisis times such as COVID-19 (Robinson et al. 2020; Velasquez et al. 2013).

Discussion, conclusion, and future research

Educators all around the world needed to transition to ERT and adapt their design based on the changing needs entailed by the COVID-19 pandemic. University instructors design their teaching acting on students' responses informed by their communication with students and reflecting on the student work submitted in activities or for assessment. Design efforts that foreground students in the midst of crisis or emergencies (e.g., COVID-19) could be relevantly informed by humanizing pedagogy and pedagogy of care. Instructors may deliberately establish a more humanized approach by becoming more cognizant of the challenges their students face and implement a pedagogy that is more inclusive and sensitive to learner needs. Likewise, in order to design a climate of care online, university instructors could implement practices such as "flexibility with course requirements, promptness, clarity of communication, multiple points of contact, personal connections, reciprocity of caring, and students centered design and teaching practices" (Bozkurt et al. 2020). Based on the findings from Bennett et al. (2017) and the related literature on humanizing pedagogy and pedagogy of care, I recommend that university instructors get prepared to adapt their design for ERT to better support their students during a time of crisis and uncertainties when care for their well-being is much needed. Future research studies are needed to explore how educators used technology in ERT design to address the communication gap with their students and how technological tools helped establish a pedagogy of care and humanizing pedagogy.

Compliance with ethical standards

Conflict of interest The authors declare that they have no conflict of interest.

Research involving human and/or animals participants This research does not involve human participants or animals.

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