ORIGINAL PAPER





Cross-cultural Dialogues in an Open Online Course: Navigating National and Organizational Cultural Differences

Vanessa P. Dennen 1 · Jiyae Bong 1

Published online: 23 March 2018

© Association for Educational Communications & Technology 2018

Abstract

This study examines the interactions of educators and instructional designers during a four-week open online professional development course about using social media in education. Discourse analysis was used to elucidate points where national and organizational cultural differences arose, noting whether and how learners expressed and bridged differences. Findings suggest that the learners first identified with their national culture, and then, if they did not experience any cultural challenges, began to explore topics related to organizational culture. In this course, Chinese students were most likely to experience national cultural challenges, and Western participants were most likely to raise organizational culture issues. Language and national political climate also played a role in how and what learners expressed in an online learning environment. Flexible course design and facilitation can be used to help make learners from all cultural backgrounds feel more comfortable and engage in crosscultural sharing.

Keywords online discussion · online learning · MOOC · national culture · organizational culture · social media

Introduction

The Internet has created spaces where international dialogues can easily take place, but to assume that the technology alone sufficiently bridges the distance between participants is naïve. Although technology unites people globally for communication purposes, the ability to engage in meaningful communication is dependent on myriad intersecting factors, including shared language, norms, and outlook.

Online courses provide the space for uniting learners across diverse geographic settings so long as language differences are mitigated. Students in an online course can be located anywhere, and barriers such as travel expenses and visas are nullified in online settings. Massive Open Online Courses (MOOCs) are a good example of this phenomenon. MOOCs were initially hailed for their potential to educate a global learner audience (Boven 2013; Lewin 2012) and promote learning equity (de Freitas et al. 2015). However, while these courses create possibilities for cross-cultural learning

experiences, there is no guarantee that cross-cultural learning will occur or that learners from different national and organizational cultures will have similar experiences and perceptions of the course learning environment and activities.

This study examines the interactions of an international group of educators and instructional designers who enrolled in an online professional development course about using social media in education. Specifically, it considers how cultural differences arose within the course and how course design can help support learners with diverse cultural backgrounds and expectations. This MOOC was designed and offered by an instructional team at a university in the United States. International learners were welcomed into this course for its first offering. The opportunities for educational technology-related cultural issues to arise within this course reflected both the medium being used in the course (online discussion forum) and the topical content of the course (social media).

Brief Review of Literature

Individualistic national cultures, such as the mainstream United States culture, tend to foster learners who focus on personal goals, whereas learners raised in collectivist cultures tend to value relationships most highly (Aparicio et al. 2016).



Vanessa P. Dennen vdennen@fsu.edu

Instructional Systems & Learning Technologies, Florida State University, Tallahassee, FL, USA

This point has been substantiated through research on online learning. For example, Chen and Bennett (2012) found that Chinese students enrolled in online courses at an Australian university experienced different cultural expectations from other students. Specifically, the constructivist underpinnings of the classes in which they had enrolled conflicted with their prior pedagogical experiences, which had been more instructivist. The potential for a cultural mismatch between student and instructor expectations has been shown in other studies, too (Cronjé 2011; Kang and Chang 2016).

Prior research also has elucidated different technology adoption preferences and patterns for people from different countries (Arenas-Gaitán et al. 2011). In studies of crossnational social network use, differences were noted in terms of how networks and interaction are cultivated (Kim et al. 2011). However, the online participatory culture is a technoculture that appears to permeate across national cultures (Veletsianos and Kimmons 2012).

People's cultural experiences differ among different organizations and institutions. Jackson (2011) found that organizational culture – which may reflect national culture – has an effect on how technology is adopted and used. Similarly, organizational culture has been linked to technology infrastructure and knowledge sharing (Jasimuddin and Hasan 2015). Jackson (2011) suggests that organizational culture should not be treated as an immutable force. Within organizations, cultural change may occur through planned interventions or may be the result of the natural evolution of the organization's membership and environment (Gover et al. 2016).

Theoretical Framework and Research Questions

The purpose of this study is to illuminate how national and organizational cultural differences manifest in individuals' perspectives on both online learning and social media-based learning. The findings are intended to help educators and instructional designers better understand how these differences shape the way technology is used as a learning medium in a global context. At the national level, we draw upon Hofstede's (1983) work on national cultural dimensions. We particularly focus on three dimensions: individualism-collectivism, power distance, and uncertainty avoidance. These three dimensions are the ones most commonly examined in studies of cultural differences in information technology (Leidner and Kayworth 2006).

In terms of organizational culture, we also draw on the work of Hofstede et al. (1990). Of the six organizational culture dimensions they identified, three dimensions – process versus results orientation, employee versus job orientation, and normative versus pragmatic – were most relevant to this study of educational technoculture because they focus

explicitly on how the organization and its employees conduct their work. The other three organizational culture dimensions focus more on interpersonal relationships and sense of belonging within the organization, which are topics that were not addressed within the course or by the participants.

Culture was identified through participant descriptions of the two deepest manifestations of organizational practices: rituals and values (Hofstede et al. 1990). The concept of membership categorization devices (MCDs) was applied within this study, with a focus on category boundedness (Psathas 1999; Schegloff 2007). According to the MCD rules of economy and consistency, the initial membership identifications (e.g., "I am from (country)" or "I am a corporate trainer") in a context will influence subsequent membership identifications to the degree practical. In other words, if an interlocutor begins an interaction with reference to membership within a national culture, that membership category will take precedent over organizational culture in the ensuing discussion. The converse would be true if the interlocutor leads with an organizational membership. By examining membership categorization, we were able to elucidate which technology preferences and issues the participants raised were related to national culture and which were related to organizational culture.

The research questions guiding this study are:

- 1. What cultural differences exist in an open, online course made available to a global learner audience?
 - 1a. What national cultural differences are evident in online learning actions and preferences?
 - 1b. What organizational cultural differences are evident in online learning actions and preferences?
- 2. How do professional development learners express their cultural differences?
- 3. How can online course design be responsive to cultural differences?

To answer these questions, we relied on statements made by learners in an open online course focused on social media for educators both in the course discussion forums and in end of course evaluations, as well as the instructor's reflective notes on the course.

Method

Participants and Context

Participants in this study were the 96 learners who contributed to at least one of the four module discussion activities of a four-week online course. These participants were a subset of the 778 students enrolled in the course. Most participants worked in some capacity as educators, whether in a formal



classroom, designing instruction, or educating in a library or public health environment (see Table 1). The participants were geographically located across five major regions of the world (see Table 2). Although they were not all native speakers, all were able to read and write in English, which was the language used in the course. Additionally, there were several instances in which participants indicated living in one country but originating from another.

The MOOC in which these participants were enrolled focused on social media use for educators. It was designed and taught by an instructional team consisting of an instructor, a lead teaching assistant, and a group of 15 additional teaching assistants from a university in the United States. The course was open and free to all learners, and participation in learning activities was voluntary. The course was taught using webinars, asynchronous discussion, social media interactions, and online content (for more information about the course, see Dennen and Bong 2015). The four module topics were curation, social media lessons, personal learning networks, and privacy and ethics.

Data Collection

Data collection consisted of downloading the participants' archived discussion posts from the course discussion boards. Posts were collected from forums related to the four topical modules. Posts from the Chinese language forum, where Chinese learners were offered the opportunity to discuss module topics in Chinese with Chinese-speaking instructional team members, also were reviewed. Learners were required to post at least two messages in a module forum in order to receive the module badge. Across the four topical modules, 1339 posts were written. Table 3 provides information about the number of posts from each module. Posts from other forums in the course (e.g., technical support, social) were not included in this analysis. Additional data, in the form of module and end-of-course surveys, and the instructor's reflective teaching notes, also were used (see Table 3 for summary of survey responses).

 Table 1
 Summary of participant job positions

Job	Number of participants
Educator	39
Instructional designer	15
Director/Staff of learning center	9
Corporate trainer	8
Higher education student	10
Other	9
No response	6
TOTAL	96

Data Analysis

Data analysis focused on identifying points within messages where participants either (a) directly highlighted potential areas of cultural difference or (b) indicated, directly or indirectly, challenges faced or accommodations made due to cultural differences. These messages were then iteratively coded so they could be classified as national or organizational cultural. A third category, tool culture, was emergent. Tool culture refers to norms and practices associated with a particular tool (e.g., *Facebook* networks are personal, whereas *LinkedIn* networks are professional). The researchers triangulated the presence of cultural differences and how individual learners dealt with them with data from open comments from course evaluations, the instructor's reflective notes, survey comments, and email communications.

Findings

National Cultural Differences

National cultural differences were evident in the students' reaction to the course design and the use of computer-mediated communication in the course. Many of the students from North American, Western Europe, and Oceania appeared to share expectations about course design and communications. In contrast, the course had a cluster of students from China, known for its collectivist culture, who had different perspectives and expectations. Eight of the Chinese students participated in the course discussion forums and, thus, were included in the data set for this study. Three personal communications from Chinese students, and two responses by Chinese students to the end-of-course survey indicated that they had expected a more lecture-oriented approach in the course, and had not envisioned interacting with peers as part of the learning experience. They were reticent to share their experiences with others and instead were poised to learn via reception.

This cultural difference, in which learner pedagogical expectations did not match the course design, was determined in part through the absence and clustering of contributions from the Chinese participants, who tended to limit their interaction to other Chinese participants. Some Chinese students shared with the instructional team that they had signed up for the course together and met for out-of-course discussions in their native language to help each other understand the course material. They sought peer help (from their own group) rather than help from the instructional team. They also were more likely to engage with other Chinese learners in the course's Chinese language forum than they were to interact with non-Chinese learners in the module forums. The eight Chinese participants who posted in the general module forums generated 43 posts. All but two of these posts were initial posts to



Table 2 Participant locations

Continent / Region	North America	Europe	Asia	Oceania	South America
Participants	58	14	11	5	2
Countries / Territories represented	Anguilla Barbados Canada United States	Croatia France Greece Hungary Lithuania Netherlands Spain United Kingdom	Azerbaijan China India Malaysia	Australia New Zealand	Brazil

n = 90; not all participants shared location

the instructor's prompt. In contrast, in the Chinese forum there were 111 posts that represented ongoing dialogue among the Chinese participants about the course topics.

These students' learning choices suggest a collectivist approach to learning. This approach allowed them to minimize interaction with non-Chinese classmates (an uncertainty issue) and the instructional team (a power issue). This avoidance was observed, and later confirmed via survey comments (e.g., "I posted in China forum because my English is not good. I did not think non-Chinese would be interest (sic) in our talk and instructor should not have time for talk to students."). The instructor's reflective teaching notes further documented email interactions with these participants in which shared that they were meeting as a group in China, discussing the course material among themselves, and also maintaining a blog outside of the course to direct and document their group's learning journey.

As indicated by the survey comment above, language differences were cited by several students as a contributing factor in their choices to interact in other spaces. Although languagerelated challenges are not inherently representative of cultural differences, reticence to communicate in a second language can be indicative of a low threshold for uncertainty.

The volume and pattern of posting to the forums also differed between Chinese and North American students. Whereas North American participants shifted between writing

 Table 3
 Summary of participation across modules and surveys

Module topic	Discussion contributors	Posts	Survey responses
Curation	102	376	73
Social media lessons	58	227	47
Personal learning networks	45	204	36
Privacy and ethics	37	149	28
Chinese language forum	14	111	n/a
End-of-course survey	n/a	n/a	68

Contributors column includes instructional team members (n = 17) and learners (n = 96). The Chinese language forum topically spanned all four modules

initial posts and replies to classmates, Chinese students only commented on other students' posts twice across all four module forums. Further, when other students commented on Chinese students' posts, they did not reply. Consequently, little national cross-cultural dialogue occurred between Chinese learners and other participants within the course.

Although they expected to complete assignments and answer questions according to the instructor's directions, the Chinese participants had not anticipated bi-directional interaction with instructors in the course. One Chinese participant said that interacting with the instructional team felt uncomfortable because she did not expect instructors to converse freely with students. Another Chinese participant who had 10 years of teaching experience shared that their interest was to follow the instructor via a Personal Learning Network (PLN), to learn from her:

If possible, I want to interact with ... the Educational Technology professor via a PLN, because through the PLN, I can learn many academic knowledges, and I can also connect with the professor's PLN, and then pay attention to the professor's PLN.

Personal Learning Networks were a course topic, and participants were encouraged to build their own networks via social media channels.

Another Chinese learner reinforced the idea that technology-mediated learning interaction with instructors was a newer and fairly unique educational experience:

In my instructional context I can remember that one of my teacher using QQ (in China) to discuss the problems we met in the learning progress. It is so convenient that there is a module called "QQ group" which allows all the students discussing at the same time ... Teacher and students are on line at the same time. We solve some problems together and exchange ideas."

In her full message, she not only specified her national culture and shared a perceived culture-related technology difference



(in China, interacting with instructors in a collaborative sense would be a novel experience), but also informed co-learners that in China a different set of social media tools are used. These tools reflect the political situation in China, which has resulted in the banning of several popular social media tools (e.g., Facebook, Twitter, and Instagram) in Mainland China, and the development of alternate national-sponsored tools over which the government has some control.

Another Chinese student expressed frustration with the disparity in tool access on a survey. This student wrote, "It's such a big pity that we can't use some curation tools you recommended directly, while curation tools in China are few." The lack of shared tools among all students created distance between the Chinese learners and other learners in the course. The other learners were interacting with each other via *Twitter* and *Facebook*, and also practicing with the social media tools that were introduced during the course, such as the curation tools *Storify* and *Scoopit*. The Chinese learners could not interact with learners from other countries over social media unless those other learners adopted the Chinese tools, which did not happen. Consequently, the Chinese participants had a different, and certainly less global, experience of social media than other participants in the course.

Another notable observation was that the Chinese students tended to only write positive things on the forums, even in instances where they were explicitly asked to offer counterpoints. For example, in response to a question about advantages and disadvantages of curation, a Chinese learner responded:

As the online resources floods, curation tools are really benefit for students. With the help of curating, students can find what the need as soon as quickly. This can save their time and energy. Frankly speaking, I haven't found some drawbacks about curating.

In this example, the learner directly responds that no disadvantages have been observed. The other Chinese learners did not acknowledge the disadvantages part of the question at all. By purposefully focusing on positive elements of the technology, the Chinese learners offer respect to the person who introduced the idea. In contrast, Western learners did not hesitate to share both positive and negative perspectives related to course content.

For Western learners, whose national cultures are individualist and have low expectations of power distance overall, connecting social media culture with educational culture posed some challenges. A participant in the United Kingdom offered:

Rather than considering how I might use [social media] to support specific learning within the classroom (I see a multitude of ways to do this), I prefer to consider this an

opportunity to help students develop wider skillsets that would be applicable to the kinds of working environments they will encounter. As an example, here in the UK much of our education system is geared towards 'selfish' learning (this is driven by the overbearing number of tests students are required to take). Whilst there is often group work in class and occasional group projects, ultimately the student will revise alone and sit exams alone. I am attempting to build a sense of 'community learning' amongst my students, this is the power of social media in education - for me. Rather than have my students seeing themselves as being in competition with each other and with students from other establishments I would like to develop a sense of compassion and empathy, collaboration and sharing and other such qualities that would enable my students to become effective practitioners in whichever field they specialise.

This individual saw a way to use social media to try to change the influence of the national culture of education in her country. Interestingly, the participant took an individualist stance to offer up a solution that would push learners toward a more collectivist approach to learning.

Discerning national culture from other types of culture was not always straightforward. In one instance a participant located in the United States commented on what she believed to be a cultural difference based on religion, although digging further into the context suggests otherwise. In reference to the idea of integrating social media tools into the class setting, this university-level instructor stated:

My class is international and many Muslim students do not want to use Facebook [and are] less comfortable with public communication tools

Taken at face value, one might assume a connection between being Muslim and minimizing social media presence. However, upon closer inspection it is evident that her students represent an international population, and she is teaching English as a second language. Given this context, these students she identifies primarily as Muslim may not be reticent to use social media because of their religion, but perhaps related to some other factors not apparent to her (and as a point of counter-evidence it should be noted that American Muslims are very active on social media).

Organizational Cultural Differences

The learners in this course came from a variety of work organizations and environments, and held different positions in these environments (see Table 1). The course targeted educators at all levels, and course materials were designed to span across educational levels to the greatest degree possible.



Organizational cultural differences that emerged were related to the type of institution for which the individual worked. To that end, participants tended to include a declaration of their work context and indicate policies or beliefs specific to that context. Table 4 provides an example of a message from participants in each of the four major organizational contexts that were represented. By stating information about the type of educational organization in which they worked, participants were able to find others who shared common experiences. It became evident that they wanted to locate and network with other participants who had similar work cultures and experiences, believing that these would be the most valuable partners for sharing ideas. For example, one participant commented to another, "My uni has a lot of the same policies. I'd like to hear more about how you have overcome their limits. I struggle to get admins to understand what I'm trying to do in my classes and to not freak out about privacy or similar.".

Organizational culture was likely to dictate how technology should and should not be used. In some instances, it was just an expectation, but in others, culture was built around rules (see the corporate instructional designer example in Table 4).

 Table 4
 Participants sharing organization-specific information

Organizational context (position)	Forum message
Elementary school (teacher)	I love using social media tools. However, as a Grade 5 teacher,there are lots of different areas of the curriculum that I simply would avoid using these tools.
High school (instructional technologist)	When supporting the teachers and asking them about social media, many of their responses are that they are just overall uncomfortable with using it with the high school students. If I were to ask them if they use it personally to begin with I would say most do not. Their concern comes from the lack of knowledge of using the tool from the start.
University (faculty)	My university does not have any rules about faculty using social media, however, they did institute a rule that all official university FB pages were university property The pages that I maintain that are related to my university position now all have a disclaimer that they are not the official university page.
Corporation (instructional designer)	Managers are able to schedule training during the business unit's slow times. They are also able to schedule the training to make sure the employees are able to complete the training during their regular work hours so we do not violate the Federal Labor laws or union contracts. This becomes hard for manager when social media is used. We also cannot use any of the normal social media sites because we can only install apps and programs on company equipment that has permission from our IT security department.

Individuals sometimes expressed preferences that fell outside organizational culture, such as this course developer who felt limited by her organization's approach to course resources:

It has been suggested for us to try to avoid using outside sources when building our courses. Reason being, if we needed to make any changes to the course, it can be real time consuming when making these changes to several dozen courses. However, I think creating a curation tool to be utilized in a course, can be extremely beneficial for the learner as well as the developer ... This way links can be changed, and students will always be able to access the tool whenever they need support for researching.

The solution offered by this participant was not to change her organization's expectations outright, but rather to seek a tool that could help mitigate the problem the organization was trying to avoid while still allowing outside sources to be shared within a course.

Another participant demonstrated an awareness of how types of organizations embrace and use technology in different ways based on members, context, and purpose.

With regards to my position and the organization I work for I do not have the flexibility to use this sort of teaching. Also, many of my trainings occur in low income, government funded sites that for the most part do not even have access to a projector so most of the times handouts and other visuals are used. With this being said, I am in the process of beginning my journey into a Masters in Educational Technology program with the intent of designing course ware and felt that the use of social media is not only beneficial but is a wonderful way to help learners be active in their education

This individual experienced technology use in two educational contexts simultaneously, and noted how in one setting technology use was discouraged and prohibitive, whereas the other fully embraced technology Throughout the course, participants did not challenge each other's organization-based limits, or really even discuss them at all. Instead, they either accepted or ignored their differences, and then engaged with people who had similar beliefs and work contexts.

Tool Culture

Fitting within the context of neither national nor organizational culture, one participant also shared an example of how different online writing spaces and tools have their own cultures. Additionally, a participant in the United States found it challenging to reconcile what she perceived as social media culture at large with educational culture:

I have been struggling a bit with thinking about social media, in part b/c I only hear about the "bad" or "silly" aspects of it. When I hear people talk about twitter, I think about movie stars posting inane things. When I think about FB (which, admittedly I use), I think about cute cat videos. Hence, I have been really challenged to reshape my notions – as well as expose myself a bit more – to all sorts of social media, so that I can see the many different valid uses of the medium

Although this topic was not further discussed within the course, these posts were nonetheless a reminder that for some learners it may be important to alternately teach the norms and expectations of a particular tool or challenge their preconceived notions of the tool.

Discussion

In this course, participants from North America, Europe, and Oceania most frequently raised organizational culture issues. National culture issues were most likely to be raised by Asian participants, participants who worked with international populations, and participants who were employed in a country other than their country of origin. Individuals who felt the greatest cultural differences at the national level used their nationality as their primary membership classification. Per the rule of economy (Psathos, 1999; Schegloff 2007), they did not further explore or raise cultural differences in other context (i.e., organizational ones). Individuals who shared the instructional team's national cultural or who had prior experience mitigating these national cultural differences were more likely to identify themselves through their organizational or institutional membership and focus on cultural differences at that level. Additionally, we did not see much evidence of the phenomenon described by Viberg and Grönlund (2013), in which technology shapes culture, beyond the allusion to online tools developing their own user cultures. Although technology may be shaping culture on the Internet at large, an international technoculture for educational communications does not yet seem to be established, suggesting that national educational culture remains a stronger force than technoculture.

National Culture

For the discussion of national culture, we will contrast the national cultures of China and the United States because there was a large cluster of Chinese students enrolled in the course and the instructional team was from the United States. Per Hofstede's (1983) study of cultures, China is a collectivist culture with strong power distance and high uncertainty avoidance, although more recent studies of technoculture have failed to fully support this position (Viberg and Grönlund 2013),

which may reflect cultural changes that have occurred. In contrast, the United States has an individualist culture, with weak power distance and low uncertainty avoidance, although there has been some suggestion that the latter has shifted with time (Fernandez et al. 1997).

The experience and actions of the Chinese students in this course were similar to those noted in Cronjé's (2011) study of a cross-cultural blended class, in which power distance and uncertainty avoidance led certain learners toward collectivist activities. Additionally, for the Chinese students, social relationships such as networking with the professor were more important than completing learning tasks, which is part of a collectivist cultural approach to learning (Aparicio et al. 2016). Chinese students indicated the desire to learn from the instructor rather than with the instructor, and as nonexperts hesitated to offer contributions. This is particularly notable because the instructor repeatedly referred to herself as a "co-learner" and suggested that any course member might share valuable content. Several Western students were ready to accept this approach to the course and readily shared resources and experiences during Webinars and in the course discussion. However, for the Chinese students, both the discursive approach to learning that was being used in the course and the approach to learning that was being taught within the course were unfamiliar and challenged the preference for learning hierarchies that is common in cultures with great power distance (Hofstede 1983). Additionally, the agreeableness offered by Chinese students in the course, including their reticence to offer critique or discuss disadvantages may be attributed to respect for authority (Zhang 2010).

The issue of digital equity should be considered here, exploring whether all learners have access to technology as well as the requisite knowledge and social support to use it (Resta and Laferrière 2015). Digital equity can be an issue when learners do not share the same national culture (Yuen et al. 2017). In this course, all participants were able to access the learning management system, but the Chinese learners lacked digital equity in terms of access to social media tools referenced within the course. Although efforts were made to bridge this gap by cross-referencing equivalent Chinese tools, these students were at a disadvantage for interacting fully with their classmates on some topics. Additionally, while all students appeared to be equally able to navigate the course interface and use the course tools, their technology-mediated communication norms and experience varied, which can lead to different course experiences.

Organizational Culture

In this class, the participants had their own impressions of learning and what could be done in a course setting based on their institutional culture and personal orientation toward learning, the latter likely reflecting a broad range of



influences. This finding mirrors an earlier study of faculty social media use in which professional culture and personal values were found to shape social media use (Veletsianos and Kimmons 2013). Additionally, organizational rules and policies affect the ways individuals view technological possibilities. As learners, individuals may be open to and embracing of new approaches to technology-based learning, but their work culture may limit their practices as instructional designers and educators. Still, once they have experienced new ways of using technology to support learning, if the experience has been positive, they seek ways to integrate it within their existing organizational culture and structure.

Expression of Cultural Differences

National cultural differences may not be readily visible within an online learning context, or at least may not be noted as such unless the instructor is looking for them (Milheim 2014). In this course, the participants from Asia and South America were among the least visible and vocal on the discussion forums. Course user statistics and a course map suggested that there were even more learners enrolled from these regions, as well as learners from Africa, although they did not identify themselves on the forums. Students whose national culture differs from the dominant course culture may experience othering based on their differences. In other words, they may be treated differently and in ways that marginalize or downplay their experiences and beliefs. This form of othering can lead to isolation (Phirangee and Malec 2017). Essentially, students who find themselves in the minority due to divergent national culture may silence themselves or take actions to make their differences invisible.

Designing for Different Cultures

It is difficult to design a course that will meet the expectations of global learners in terms of national cultural norms related to education and online interaction. Similarly, it is difficult to design a course that comprehensively addresses course material in a manner that is consistent with application in all organizations. Hofstede (1986) suggested that the burden should be on the teacher to address and accommodate national cultural differences and, based on this course, we concur. Although it may not be possible for the instructor of an open online course to fully anticipate the learner population in advance, providing a variety of learning options, some didactic and some discursive, is one way to accommodate learners whose cultural understandings of learning vary. Instructors can identify, reach out to, and encourage learners who may have different cultural definitions and expectations of a online instruction. We agree with Milheim (2014) that it is important for learners to feel that the course space is a safe one for experimentation, and that their contributions will be

welcomed and respected. Positive feedback for their efforts along with the understanding that they have stepped outside of their comfort zone also may be important. In sum, courses should be facilitated in a manner that is proactive in identifying learners' national cultural expectations, and responsive to helping all learners succeed.

In terms of organizational culture, learners who have no prior professional experiences are more likely to simply accept organizational culture as it is referenced and taught within course materials. In contrast, learners with prior professional experience have likely internalized at least one organizational culture. For these learners, any initial gulf between what is presented in a course and their beliefs and practices can be bridged. By encouraging learners to apply new concepts to their organizations and share about their organizations with the class, everyone has greater opportunity to learn about how the course topic plays out in different organizational contexts.

Conclusion

This study offers a unique perspective by exploring the interplay of national and organizational culture differences in an online course. When online learning offerings support professional development, both cultural contexts may influence how learners identify themselves, what they share, and how and with whom they interact. Of particular note is the finding that learners in this context tended to lead with their national culture and identity, unless that cultural identity was similar to the instructor's identity and pedagogical approach. Only then did organizational cultural issues shift to the forefront. This is a topic that warrants additional research, and could influence pedagogical approaches to cultural differences.

This study has implications for how educators and instructional designers approach both formal and informal online learning experiences involving diverse participants. Instructors need to demonstrate awareness of and sensitivity toward cultural differences, whether geographic, institutional, or related to other factors. This can be done via modeling, and can both be anticipated and accommodated within the course design. For example, different spaces may be designated for small group discussion in different languages or for people with shared institutional contexts, with larger spaces designated for more general sharing. The use of small group spaces based on homogeneity would not be for the purpose of separating groups, but rather for helping them find those with the most in common. Learners might be actively encouraged, then, to use larger group spaces for cultural comparisons on all levels.

Although it is easy to attribute learner reticence to participate fully in online course discussions to national cultures, especially when an Eastern-Western cultural merge occurs, to do so is to neglect other systemic factors. Learners who are writing in a second language may not feel comfortable



expressing themselves, and learners from countries where the political climate has made online communication risky may not feel secure about sharing their opinions in this forum.

A major limitation of this study is that most of the data was culled from discussions of course content, rather than direct queries about the learner's cultural experiences. We were fortunate that many learners directly discussed elements of both national and organizational culture within the course; the discussion prompts offered in the course invited them to do so by asking them to write about technocultural experiences within their own personal work contexts. Additionally, the participants in this study are only those learners who were present across the four main course discussions. While generalizability of our results is limited, our findings suggest a compelling direction for further inquiry. Future studies in this area might integrate interviews for more in-depth exploration of cultural differences and include learners who were not highly visible to determine whether cultural differences affected their participation.

In closing, the communication of cultural differences in an online course can be subtle and embedded in a learner's response to course activities and content. In these messages, learners take the activities and content, and make sense of them through their respective lenses, responding through the lens (e.g., national, organizational) that is most challenged. Moving forward, we recommend not only providing space to acknowledge and address both national and organizational cultural differences, but also the space to help learners better understand each other's cultures. Doing so may help create online learning experiences that can truly welcome and accommodate the needs of global learners.

Compliance with Ethical Standards

Ethical approval This study was approved by the researchers' Institutional Review Board, and all procedures involving human participants were in accordance with these ethical standards. Informed consent was obtained from all individual participants included in the study.

Conflict of Interest Vanessa Dennen declares that she has no conflicts of interest. Jiyae Bong declares that she has no conflicts of interest.

References

- Aparicio, M., Bacao, F., & Oliveira, T. (2016). Cultural impacts on elearning systems' success. *The Internet and Higher Education*, *31*, 58–70. https://doi.org/10.1016/j.iheduc.2016.06.003.
- Arenas-Gaitán, J., Ramírez-Correa, P. E., & Rondán-Cataluña, F. J. (2011). Cross cultural analysis of the use and perceptions of web based learning systems. *Computers & Education*, 57(2), 1762–1774. https://doi.org/10.1016/j.compedu.2011.03.016.
- Boven, D. (2013). The next game changer: The historical antecedents of the MOOC movement in education. *E-learning papers*, 33, 1–7.

- Chen, R. T.-H., & Bennett, S. (2012). When Chinese learners meet constructivist pedagogy online. *Higher Education*, 64(3), 677–691. https://doi.org/10.1007/s10734-012-9520-9.
- Cronjé, J. C. (2011). Using Hofstede's cultural dimensions to interpret cross-cultural blended teaching and learning. *Computers & Education*, 56(3), 596–603. https://doi.org/10.1016/j.compedu. 2010.09.021.
- Dennen, V., & Bong, J. (2015). Behind the scenes of an independent MOOC: Instructional design problems and solutions. *International Journal for Educational Media and Technology*, 9(1), 25–31.
- Fernandez, D. R., Carlson, D. S., Stepina, L. P., & Nicholson, J. D. (1997). Hofstede's country classification 25 years later. *The Journal of Social Psychology, 137*(1), 43–54. https://doi.org/10.1080/00224549709595412.
- de Freitas, S. I., Morgan, J., & Gibson, D. (2015). Will MOOCs transform learning and teaching in higher education? Engagement and course retention in online learning provision. *British Journal of Educational Technology*, 46(3), 455–471.
- Gover, L., Halinski, M., & Duxbury, L. (2016). Is it just me? Exploring perceptions of organizational culture change. *British Journal of Management*, 27(3), 567–582.
- Hofstede, G. (1983). National cultures in four dimensions: A research-based theory of cultural differences among nations. *International Studies of Management & Organization*, 13(1–2), 46–74. https://doi.org/10.1080/00208825.1983.11656358.
- Hofstede, G. (1986). Cultural differences in teaching and learning. *International Journal of Intercultural Relations*, 10(3), 301–320. https://doi.org/10.1016/0147-1767(86)90015-5.
- Hofstede, G., Neuijen, B., Ohayv, D. D., & Sanders, G. (1990). Measuring organizational cultures: A qualitative and quantitative study across twenty cases. Administrative Science Quarterly, 35, 286–316.
- Jackson, S. (2011). Organizational culture and information systems adoption: A three-perspective approach. *Information and Organization*, 21, 57–83. https://doi.org/10.1016/j.infoandorg.2011.03.003.
- Jasimuddin, S. M., & Hasan, I. (2015). Organizational culture, structure, technology infrastructure and knowledge sharing. *Vine*, 45(1), 67–88. https://doi.org/10.1108/VINE-05-2014-0037.
- Kang, H., & Chang, B. (2016). Examining culture's impact on the learning behaviors of international students from Confucius culture studying in Western online learning context. *Journal of International Students*, 6(3), 779–797.
- Kim, Y., Sohn, D., & Choi, S. M. (2011). Cultural difference in motivations for using social network sites: A comparative study of American and Korean college students. *Computers in Human Behavior*, 27(1), 365–372.
- Leidner, D. E., & Kayworth, T. (2006). A review of culture in information systems research. *Toward a theory of information technology culture* conflict MIS Quarterly, 30(2), 357–399.
- Lewin, T. (2012). Instruction for masses knocks down campus walls. New York Times.
- Milheim, K. L. (2014). Facilitation across cultures in the online class-room. *International Journal of Learning, Teaching and Educational Research*, 5(1). Available online at: https://www.ijlter.org/index.php/ijlter/article/view/66.
- Phirangee, K., & Malec, A. (2017). Othering in online learning: an examination of social presence, identity, and sense of community. *Distance Education*, 38(2), 160–172. https://doi.org/10.1080/01587919.2017.1322457.
- Psathas, G. (1999). Studying the organization in action: Membership categorization and interaction analysis. *Human Studies*, 22(2/4), 139–162.
- Resta, P., & Laferrière, T. (2015). Digital equity and intercultural education. Education and Information Technologies, 20(4), 743–756.



Schegloff, E. A. (2007). A tutorial on membership categorization. Journal of Pragmatics, 39(3), 462–482. https://doi.org/10.1016/j. pragma.2006.07.007.

- Veletsianos, G., & Kimmons, R. (2012). Networked participatory scholarship: Emergent techno-cultural pressures toward open and digital scholarship in online networks. *Computers & Education*, 58, 766–774. https://doi.org/10.1016/j.compedu.2011.10.001.
- Veletsianos, G., & Kimmons, R. (2013). Scholars and faculty members' lived experiences in online social networks. *The Internet and Higher Education*, 16, 43–30. https://doi.org/10.1016/j.iheduc.2012.01.004.
- Viberg, O., & Grönlund, Å. (2013). Cross-cultural analysis of users' attitudes toward the use of mobile devices in second and foreign
- language learning in higher education: A case from Sweden and China. *Computers & Education*, *69*, 169–180. https://doi.org/10.1016/j.compedu.2013.07.014.
- Yuen, A. H., Park, J. H., Chen, L., & Cheng, M. (2017). Digital equity in cultural context: exploring the influence of Confucian heritage culture on Hong Kong families. *Educational Technology Research and Development*, 65(2), 481-501.
- Zhang, J. (2010). Technology-supported learning innovation in cultural contexts. *Educational Technology Research and Development*, 58(2), 229–243. https://doi.org/10.1007/s11423-009-9137-6.

