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Negotiating Cultural Spaces in an International Mobile and Blended Learning Project

Charlotte N. Gunawardena, Agnieszka Palalas, Nicole Berezin, Caitlin Legere, Gretchen Kramer, & Godwin Amo-Kwao

Abstract. This paper explores the cultural spaces that had to be negotiated by a team of North American and Ghanaian partners when designing, developing and implementing a mobile and blended learning solution to train physician assistants in Ghana. In addition, it examines how these cultural spaces correspond to five mobile and blended learning spaces: temporal, physical, transactional, technological and pedagogical. Employing qualitative narrative inquiry and paradigmatic analysis procedures, we analyzed six types of data to determine the cultural spaces that emerged. Results indicate that cultural spaces were most often negotiated in the transactional mobile and blended learning space and included: identity negotiation, power, status and authority, communication, relational, resource sharing, and organizational spaces. Learning and instructional cultural spaces corresponded with the pedagogical m-learning space while the technology adoption, and technology affordances and interface space corresponded with the technological m-learning space. In addition, negotiation of cultural spaces occurred in the physical and temporal spaces. This study has significance for future international partnerships that plan to provide education and training in emerging economies, and for those who plan to design mobile and blended learning solutions for diverse audiences.

Keywords: *Cultural Spaces, Mobile and Blended Learning Spaces, International Partnerships, Cross-cultural Learning Design*

1. Introduction

With the global spread of the Internet and wireless telecommunication systems, distance learning, which can transcend national, political, and geographical boundaries has become a viable option for providing higher education in many developing countries. International partnerships and collaborations often funded by Western countries or international banks are established to provide distance learning solutions to address acute education and training needs in developing regions, including many African countries. These partnerships to implement technology solutions are increasingly taking place in a cross-cultural and global context. But, a continuing concern has been determining how to design and implement technology-mediated learning environments that accommodate differences in sociocultural contexts, and the values, needs, and expectations of diverse learners and educational systems. Madzingira (2001) observed that the “The greatest challenge for Africa’s Internet connectivity is not access, but content because there is a dearth of information for Africa from Africa” (p. 12).

An opportunity presented itself to explore this challenge when a leader of a physician assistant

(PA) program at a Ghanaian university requested assistance from a faculty member in a Southwestern U.S. university to develop a distance education solution to offer a bachelors degree to practicing physician assistants who were serving rural communities spread throughout Ghana. These physician assistants (PAs) shoulder responsibility for the health care of a large percentage of the rural Ghanaian population.

A Ghanaian university, hereafter referred to as GU took up the challenge to train PAs and became one of the pioneers in developing an accredited Bachelor of Science in Physician Assistant Studies program. However, it was limited to only 50 students per year who had to come on campus to follow the program. The program accommodated not only Ghanaians, but also participants from neighboring African countries.

When the request for assistance to develop a distance learning component to the existing PA program came from the leader of this PA program at GU in 2010, the Southwestern U.S. university began a collaborative relationship to determine the most appropriate distance learning solution for the sociocultural context. A blended learning program, including online learning using Moodle (an open access Learning Management System), mobile learning, and face-to-face clinical practice was considered the most appropriate solution. During a period of three subsequent years, the U.S. institution worked with the Ghanaian Lead to develop and test distance learning course prototypes in Moodle. When a distance learning solution became a viable option, an international, interdisciplinary project team consisting of Ghanaian, Canadian, and U.S. partners was formed with the Ghanaian institution as the lead to secure funding for a blended learning solution to training PAs. The project team was successful in securing funds in 2013 from a Canadian organization to implement this blended learning solution in Ghana using mobile interface friendly courseware that resided in the university's Moodle platform, which could be accessed through mobile tablets and phones.

The North American partners included a senior faculty member and graduate students specializing in eLearning and instructional design at the Southwestern U.S. University and two Canadian faculty members, whose expertise was in mobile learning. The North American partners represented diverse cultural heritages, including American, Canadian, South Asian, African, Eastern European and South American. The main goal of the volunteer North American partners was to assist in the design and development of the online and mobile learning component, hereafter referred to as the blended learning program, that was centered on content developed by Ghanaian physicians, the subject matter experts (SMEs), so that it could be an educational program relevant for the Ghanaian sociocultural context. The Ghanaian partners consisted of the Lead physician, the Head of the PA program and his faculty, Information Technology (IT) staff in charge of the Moodle platform, and Administrative Assistants.

2. Purpose

The purpose of this paper is to explore the cultural factors that emerged and had to be negotiated when we worked cross-culturally to design, develop and implement a blended learning project. In addition, we examine how these cultural factors, conceptualized as *cultural spaces* correspond to the five mobile and blended learning spaces identified by Palalas (2013). The context of this study is the PA program in Ghana. Addressing the conference theme, "Sustaining quality research and practice in mobile learning" we attempt to look beyond the nature of technological intervention to consider the cultural spaces within which mobile and blended learning projects are implemented.

3. Research Questions

The main research question that guided our study was:

What cultural spaces had to be negotiated by a team of Ghanaian and North American partners when designing, developing and implementing a mobile and blended learning solution to train physician assistants (PAs) in Ghana?

A sub-question we explored was:

How do these cultural spaces correspond to the five mobile and blended learning spaces identified by Palalas (2013)?

We approach the main question from a “social embeddedness perspective” rather than a “transfer and diffusion perspective” as defined by Avgerou (2010). A social embedded perspective highlights distinctive features of a cultural context, such as attitudes to hierarchy, sense of space, and cross-cultural interactions; while a transfer and diffusion perspective implies transferring technology applications from a western to a non-western culture often using Hofstede’s (1980) dimensions of national culture. Avgerou observes that the transfer approach oversimplifies cultural differences and cites Walsham (2001) who noted that such an approach will “sweep the subtleties of cultural difference under the universal carpet.”

Given this social connectedness approach, we discuss our findings from the perspective of North American partners who have become aware of important cultural lessons when planning and implementing international blended learning projects, and discuss them from a position of cultural humility well aware of our own need for more perceptive cultural awareness.

4. Method

A qualitative research design utilizing narrative inquiry (Creswell, 2013) helped us to reflect on and study our own experience throughout the project from the initial stages of planning to evaluation of the first blended learning course offering. Narrative inquiry helps to think about and study experience. Our narrative inquiry followed a recursive, reflective process moving from the initial planning stages using collaborative technologies such as Skype, Wiggio, and Dropbox to implementation of the project online, and subsequently to examination of interview data gathered from Ghanaian PA students during the initial needs assessment and a focus group during the latter stage of implementation of the first blended learning course. Data sources included: (1) minutes of meetings conducted with project partners through Skype; (2) memos of meetings conducted on site with administrators, faculty and staff at GU, and wireless service providers; (3) course design documents from Ghanaian and North American partners retrieved from the drop box and the collaborative Wiggio space, (4) the Moodle course, (5) interviews with students who volunteered for the needs assessment and acted as cultural informants, (6) focus group interviews conducted with 22 students, ages 22-54, from the first student cohort, and (7) our own storyline of the project. We gathered stories from our data sources and used paradigmatic analytic procedures (Polkinghorne, 1995) to produce a framework of cultural spaces that emerged across our data. In the Results and Discussion section, we synthesize and organize our story and narrative analysis into this framework of cultural negotiation spaces. These negotiation spaces were evident from the inception of the project and throughout the project implementation phases.

5. Conceptual Framework

We begin our narrative with a definition of culture. Edward T. Hall (1959) declared “Culture is communication and communication is culture” (p. 217), and we adopt this definition as it focuses on both culture and communication and includes nonverbal communication where many of the cultural nuances are generated. This definition also accommodates the notion that culture can be negotiated in space through a communication process mediated by technology interfaces.

Hall further observed, “culture hides much more than it reveals and, strangely enough, what it hides, it hides most effectively from its own participants.” (1959, p. 53). With this conceptualization of culture in mind, which accommodates both manifest and tacit culture, we discuss our conceptual framework below.

Cultural Spaces

St. Clair and Williams (2008) have noted that the concept of culture as a unit of knowledge shared by all individuals within a nation state no longer holds relevance, and one way to conceptualize culture is to examine cultural spaces where culture is negotiated. St. Clair and Williams (2008) modify Foucault’ (1969) metaphor of cultural spaces as the sedimentation of knowledge layers over time and change it to the sedimentation theory of time in space which envisions time as the accumulation of social practices layered in cultural space. It differs from the linear model of time and presents time as embedded in space: the present is embedded in the cultural past and the future is embedded in the cultural present. Martin and Nakayama (2010) extend these conceptualizations and define cultural space as the particular configuration of the communication (discourse) that constructs meanings of various places: “A cultural space is not simply a particular location that has culturally constructed meanings. It can also be a metaphorical place from which we communicate” (p. 287). Cultural spaces are places that are defined by cultural practices, such as the languages spoken, identities enacted, and rituals performed, and they often change as new people move in and out of these spaces. The discourses that construct the meanings of cultural spaces are dynamic and ever-changing.

We use the conceptualization of cultural space to discuss the various cultural factors that emerged in our project as we view cultural spaces to be symbolic entities where cultural negotiations take place. Negotiation is the process of searching for an agreement that satisfies various parties; it is not one party dictating or imposing terms on another. To obtain agreement, one must generally sacrifice or yield something in order to get something in return (Negotiation Techniques, 1998). We then examine how negotiations in cultural spaces correspond to the mobile and blended learning spaces discussed by Palalas (2013).

Mobile and Blended Learning Spaces

Crompton (2013) defined mobile learning as “learning across multiple contexts, through social and content interactions, using personal electronic devices” (p. 4). Palalas (2013) observed that mobile learning with the inherent affordances of mobile tools, its ubiquitous nature and the nomadic tendencies of mobile learners, has the potential to transform learning spaces and go beyond the traditional physical and conceptual boundaries of education. Graham (2006) defined blended learning as combining multiple instructional methods and instructional modalities (or delivery media), as well as mixing face-to-face (f2f) and online learning. Integrating the concepts of mobile learning and a redefinition of blended learning, Palalas (2013) in her discussion on expanding learning spaces with mobile technologies, identifies five conceptual spaces of mobile learning that make up the m-learning ecosystem as demonstrated in Figure 1: (1) Temporal (mix of within and outside schedules, time-flexible and time bound, brief event and a series of learning episodes); (2) physical (mix of location-based and location-flexible practice, context dependent and context independent learning, formal, informal and non-formal, physical and virtual learning); (3) transactional: intrapersonal, personal, and interpersonal (social and public) communication and exchanges; (4) technological (blend of mobile and non-mobile devices), and (5) pedagogical (context-embedded, real-world practice, learner-centered, ubiquitous, collaborative, personalized, technology-mediated, learner-generated artifacts, and inquiry). Palalas notes that the intersection of these spaces results in a unique m-learning space: the optimal m-learning zone.

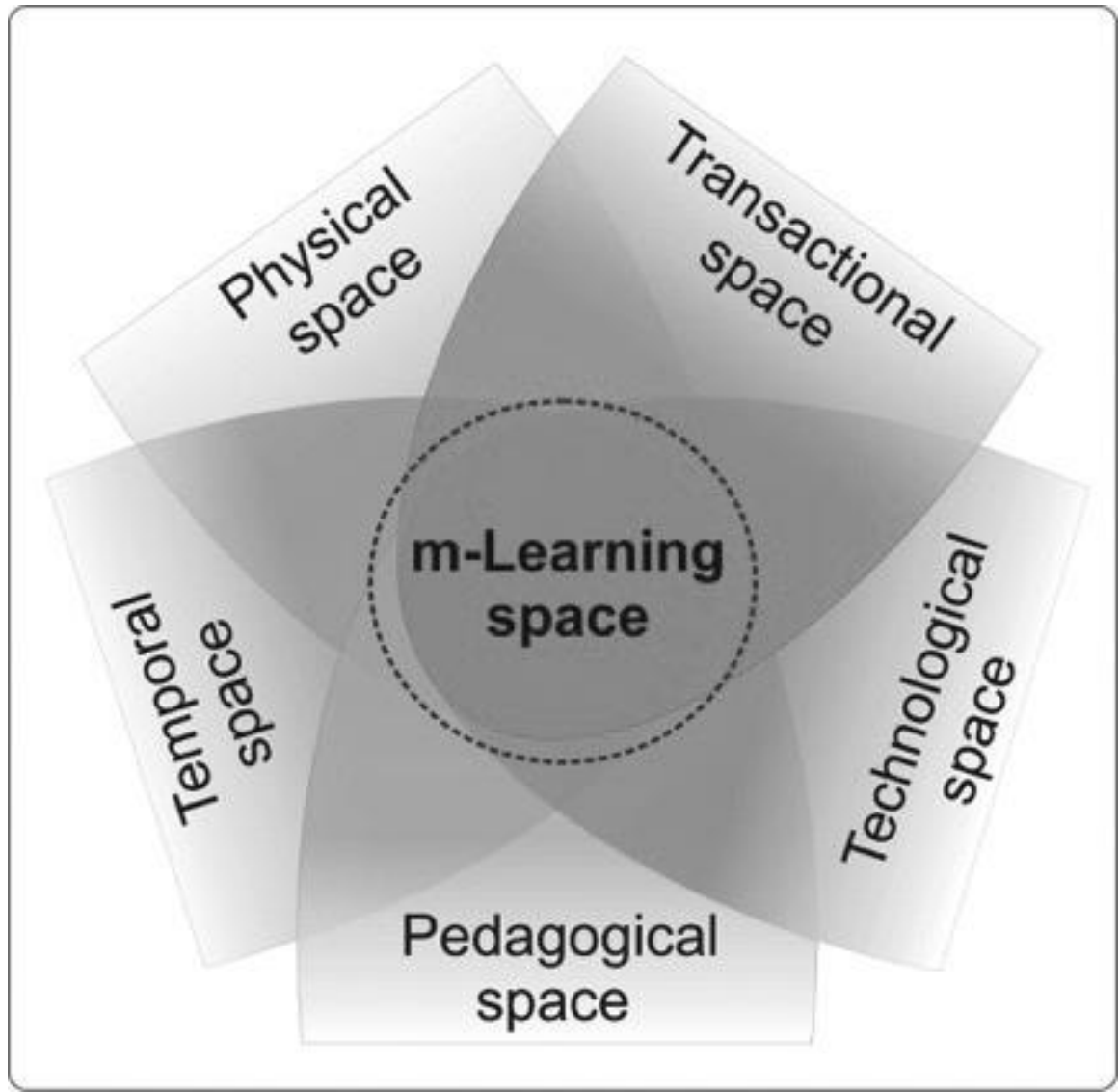


Figure 1: **Blending Mobile Learning Spaces** developed by Palalas (2013). Used with permission.

We discuss below how each mobile learning space (Palalas, 2013) corresponds to several underlying cultural spaces which had to be carefully negotiated when implementing our blended learning project.

6. Results and Discussion

We frame our project as a negotiation exercise across cultural spaces during the different phases of project planning and implementation. Figure 2 presents the cultural spaces where cultural negotiation was enacted and shows how these cultural spaces corresponded to the m-learning spaces in Figure 1. We use the metaphor of “our lens,” a multi colored eye to visualize the cultural spaces that emerged from our data analysis. These spaces intersect and interact with each other and correspond well with Palalas’ (2013) five mobile and blended learning spaces.



Figure 2: Cultural Spaces and Corresponding m-learning Spaces

As can be observed in Figure 2, cultural spaces were most evident in the transactional m-learning space and we discuss this space first, followed by pedagogical, technological, physical and temporal spaces.

Transactional Space

We identified six cultural spaces that corresponded with the transactional space of mobile and blended learning: (1) identity negotiation, (2) power, status and authority, (3) communication, (4) relational, (5) resource sharing, and (6) organizational/institutional spaces. We discuss each of them in detail below.

Identity Negotiation Space

Identity negotiation spaces personify how individuals perceive themselves in relation to each other and society. From the inception of our project, identity negotiation both professional and personal between Ghanaian and North American partners played a critical role in building trust.

While the Ghanaian Lead and North American Lead met initially face-to-face at a conference when the request for the project was made, the extended negotiation of identity across team members occurred through electronic media when the project and design team met weekly to plan, develop and implement the project. Therefore, virtual identity and anonymity played a role in negotiating identity. Our electronic identity negotiation led to the development of a Memorandum of Understanding between GU and the US university, which was strengthened with the Ghanaian Lead's visit to the US University.

However, it was not until the North American team's visit to Ghana that we realized the depth to identity negotiation, which was not evident through electronic media. We had not been aware of the key role that tribal identity and tribal affiliation played in the lives of Ghanaian people. As with many African states, tribal identities remain entrenched in people's consciousness, and play a role in organizations, politics, and education. In organizations, individuals tend to gravitate more towards fellow tribe members or people from their region. Those in authority cement their power by surrounding themselves with classmates, relatives, tribesmen, and clansmen to ensure their power is consolidated. This dynamic came into play when the North American partners observed that the Ghanaian Lead wanted to employ people from his own tribe and had difficulty collaborating with administrators and fellow faculty at GU, which is located in a region different from his own tribe. Tribal consciousness came into play in hiring decisions as those from one's own tribe were considered to be more supportive of one's decisions and goals even though they might not be adequately qualified for the position. The North American team with its well prepared job descriptions to hire the most qualified project director and instructional designers for the grant funded project, had to negotiate with the Ghanaian Lead's tribal affiliations.

Power, Authority, and Status

Power dynamics played an underlying role in practically all our transactions with the Ghanaian partners. How power is distributed in Ghanaian society predates colonial times where the power structure in communities was determined by the amount of people or "things" a person commanded. When the Europeans arrived, those close to colonial power assumed important societal status. This carried over to modern society where people with white collar jobs hold more power in society, and having any form of regular income has, in fact, prestige associated with it. Very often, a person's status (educational or otherwise) and personal connections determine employment rather than ability or experience.

The extent to which cultures accept inequalities in power and status was defined as "power distance" by Hofstede (1980). In Hofstede's Power Distance Index, Ghana had high power distance (80), compared to USA (40). This means social and political organizations are hierarchical in nature where members accept and expect that power is distributed unequally. Daniels and Greguras (2014), however, have pointed out that although power distance is often treated as a homogeneous national value, it varies at the individual, group, organizational and societal levels. In our transactions with the Ghanaian partners, we observed that power distance varied at each of these levels.

We observed that power distance played a role in the educational transaction, especially, the relationship between PA students and the Ghanaian Lead. Education revolves around teachers with students respecting teachers in and out of the classroom and relying on them for guidance and decision making. Students address teachers formally with acquired titles and rarely oppose their teacher's point of view. During our needs assessment, students stated that they respected age and teachers and found it difficult to question authority. However, when the authority figure of the teacher was removed in a focus group interview with 22 PA students from different regions in Ghana, the students opened up to the North American partners about their concerns related to the project and offered to work as a team to co-design the online case studies. As practicing PAs they had a great deal of experience to offer to future PA students and, as one PA student pointed out, they had a wide range of experience to contribute into the program curriculum design: "We see 40-50 patients in an 8 hour day. We have to be prepared for anything at all times. In one day we can see a woman with pregnancy difficulties, to people with malaria." During our needs

assessment, Ghanaian students expressed that online interaction may be preferable because it could equalize status differences present in face-to-face interaction.

In hindsight, we felt that our approach of group consensus and group leadership, with all decisions being made collectively, may not have helped in the Ghanaian power-distance context. We deliberated whether nominating one key individual as an authoritarian figure, a strong leader, a key negotiator to communicate and convey our decisions and represent the North American team would have made it more of a business transaction, perhaps a more effective solution, and less of a personal, friendly, more collegial negotiation. Many of our suggestions and recommendations, originally jointly accepted during the planning phase, were never implemented by the Ghanaian Lead, making us wonder about the winning approach for cross-cultural negotiations in the Ghanaian context.

Another factor that may have impacted our situation was that the negotiators at the North American end were predominantly female while those at the Ghanaian end were all male. We felt that gender and power dynamics played a role as the underlying masculine superiority may have impacted the value placed on advice given by the North American team.

Communication Space

Traditionally, Ghana is an oral culture, which relied on face-to-face communication. Thus, radio and television supported this time-honored form of oral expression. Mobile and online learning, however, shifted the conventions of interpersonal communication and reduced the power dynamics present in face-to-face and oral communication. The exchange of information between North American and Ghanaian partners occurred predominantly by means of technology. Integrating traditional modes of communication with virtual tools, such as Skype and Wiggio was often a challenge. The Ghanaian Lead felt that some of his authority was being eroded in online discussion spaces where he had no control. Therefore, instead of facilitating online discussions, he chose to answer questions individual students asked online by calling them on their mobile phones despite the many pleas by the North American team to post the answers online for the benefit of all students. In this instance, mobile technology helped to solidify the authority of the teacher, maintain the status quo, yet personalize the communication for an individual student. This example also reflects the Ghanaian Lead's discomfort in facilitating online discussions. Therefore, the North American team took it upon themselves to facilitate discussions online often on unfamiliar topics so that the Ghanaian students felt supported in an online learning community.

Hall's (1976) conceptualization of high context and low context communication styles, and implied indirect and direct communication, was useful for analyzing our cross-cultural interactions. While the North American partners employed direct communication and often communicated both orally and in writing, the Ghanaian partners were more indirect in their communication and mostly communicated orally. In a predominantly oral culture, meanings expressed are highly specific and local, and the North American partners lacked that local knowledge to understand communications and their connotations. While online communication tools and web conferencing proved to be very effective in planning this project, we missed out on understanding the local context by performing most of the activities remotely. While communication was challenging, non-communication was even more perplexing. We often encountered silent periods in our planning process and wondered about the meaning of this silence, which we gathered was a form of communication.

Relational Space

Our needs assessments with PA students and initial interactions in Ghana, highlighted the value placed on family and relationships and how communication needs to be understood within the context of these relationships. Contextual information as well as relational information were key to understanding a message and its meaning as is the case in cultures described as high context and high power distance. Communication in shared social and public spaces had its own conventions, such as knowing who needed to be awarded respect. We found that building

meaningful relationships with those in authority in the institution must take precedence over negotiation of the project itself.

Resource Sharing Space

Resource sharing relates to how funds, human and technology assets are negotiated. Since ours was a grant-funded project, sharing resources within GU became a challenge. Although the grant was given to the University and the President was a signatory on the grant, the Ghanaian Lead as Principal Investigator felt that the funds were rightfully his because he made the effort to bring in the funding working with the North American partners. This led to hoarding the funds, such as not spending on the wireless plans for students and not hiring necessary project personnel. Although the North American partners trained the Ghanaian Lead on administering the grant through the university, the tendency was to hoard and not share and spend the allocated funds.

The practice of the funding agency to deposit the total direct costs of the project (96 %) of the entire grant in the GU account at the beginning of the project with the stipulation that grant funds must be invested in interest-bearing bank accounts with the primary objective of preservation of principal, led to many challenges within the GU administration, as grant funds were invested in Certificates of Deposit and not available when needed by the Ghanaian Lead. Those who held power and status controlled the resources that should have been made available to students who would have benefitted from them.

Organizational/Institutional Space

The organizational culture of GU was hierarchical and, coupled with high power distance, challenged innovation. The Ghanaian Lead as a retired physician and head of an academic department wielded substantial power and authority over those in lower status positions, considered the project as his own and excluded lower status individuals, such as his junior faculty, in the planning process. Therefore, lower status faculty who were more technology savvy were not involved in planning and executing the project; they attended the training that North American partners offered because they were required to do so, and overall lacked commitment to move the project forward. It was a similar case with the Information Technology (IT) Department, with lower ranked IT personnel, who were potential innovators, reluctant to engage in the project as they were afraid to incur the displeasure of their department Head. Daniels and Greguras (2014) have observed that new ideas and innovations, especially from lower levels of the organization, often do not get voiced or receive serious attention in high power-distance cultures because this threatens the social hierarchy of the organization.

Pedagogical Space

We identified two cultural spaces: learning and instructional spaces that corresponded with the pedagogical m-learning space. They are discussed below.

Learning Space

The needs assessment conducted with Ghanaian students who are practicing PAs provided insights on how to negotiate the design of the mobile and blended learning space to shift from a traditional hierarchical one to a more egalitarian interactive space. As one student remarked: "For a Ghanaian, learning should be one of interaction as we do not do work alone." This student observed that Ghanaian students form study groups on their own and commented that for an online class, grouping students regionally would help so that, when experiencing bad wireless connections, they could go to each others' villages to get support and discuss the course. This rationale for grouping is embedded in the cultural context and may have also been influenced by regional tribal affiliations. We found that women would be more reticent to participate in online discussions and therefore would need more guidance and support to feel comfortable. Students discussed the importance of conducting an orientation session to orient them to mobile and online

learning, self-directed independent learning, learning how to learn skills, and training in the use of technology. In addition, students' requested avenues for visual and auditory learning preferences in course design and the incorporation of traditional culture, symbols and myths in the web interface. Clear goals and expectations and structure in the organization of the course were additional requests. Ghanaian students shared why online courses may be better. They said that those who are less fluent in English and reluctant to speak the language in face-to-face contexts are more likely to feel comfortable expressing themselves in the anonymity of the online environment where they can take time, reflect and edit. Students felt that introverts are more likely to put forward their opinions as the online environment is more welcoming and comforting.

Instructional Space

While the Ghanaian Lead had great passion and charisma for teaching PA students, he found it difficult to make the paradigm shift to online and mobile learning. It was difficult for him to grasp how technology is changing the role of the teacher from a disseminator of information to a learning facilitator. He sporadically attended the faculty development sessions we conducted but still found the entire online teaching experience daunting and did not make the effort as a SME to guide the learning design. We created and loaded the content based on documents he provided but we were never shown how the modules might connect to the clinical work students would be doing for the course. Therefore, from an instructional design perspective, we were not giving students everything they would need to succeed.

This points to the need for faculty development programs in online course design and teaching. While the North American partners provided over 300 hours of face-to-face and online training on instructional design, mobile learning, and online teaching, the faculty and staff who should have attended the training sessions did not do so. Nevertheless, the training did make an impact on some Ghanaian faculty; several months later they e-mailed the training facilitator to ask for resources demonstrated during the training sessions.

Technological Space

Two cultural spaces: technology adoption space, and technology affordances and interface space corresponded with the m-learning technology space and are presented below.

Technology Adoption Space

This space relates to how a technology is accepted and used in a specific culture. In an oral culture, such as in Ghana, the mobile phone extends oral communication and was readily adopted. Practically all PA students had access to mobile phones and were savvy at using them. However, wireless access in remote communities was problematic and often costly for students. This had to be kept in mind when designing the online course to make it compatible with mobile devices. All PA students benefitted from the orientation provided by the Ghanaian IT experts on how to use the digital tablet to access the Moodle server in which the course resided.

Mobile service procurement became an important negotiating point between North American partners and the Ghanaian Lead. After discussion with two mobile service providers in Ghana, the North American team and the Ghanaian IT experts recommended that a Ghanaian company be hired to provide both the tablets and data plans. However, the Ghanaian Lead chose to order the tablets from the USA and found that they were not compatible with wireless services in Ghana. This meant that the tablets had to be repurchased in Ghana. In retrospect, we concluded that this negotiation process was a case of talking past each other where hidden motivation for actions was not clearly discernible.

Affordances and Interface Space

Mobile technology affordances can extend the notion of learning beyond traditional learning spaces, methods and materials. However, we had to negotiate the potential of mobile affordances

and their juxtaposition with traditional teacher directed and controlled learning environments. It was important to embed the teacher presence – a short introductory video of the teacher and lectures via audio and text. Given the advantages to using mobile apps, we negotiated with the Ghanaian Lead to integrate apps that were relevant to the discipline and context. “Medscape” was used most often, followed by “Visual Anatomy.” In addition, we integrated Quizlet and YouTube into the course design. WhatsApp was used for learner support considering its popularity and access amongst the students.

Through trial and error, we found issues related to our interface design that had to be revised to better align with the Ghanaian cultural context. When we developed the gynecology course, for example, we had initially put a photo of an intensive care unit for babies in the U.S. in the main theme block of Moodle as seen in the screenshot in Figure 3. Our Ghanaian colleagues wanted that photo removed and replaced with a Ghanaian woman and her baby as seen in the screenshot in Figure 4.

We learned through this feedback that images and photographs must relate to the cultural context. Symbols unique to Ghana such as the Adinkra symbols from the Asante region have specific meaning and will be recognized by Ghanaian students. We had used these symbols in a pilot design to aid navigation and the design was well received.

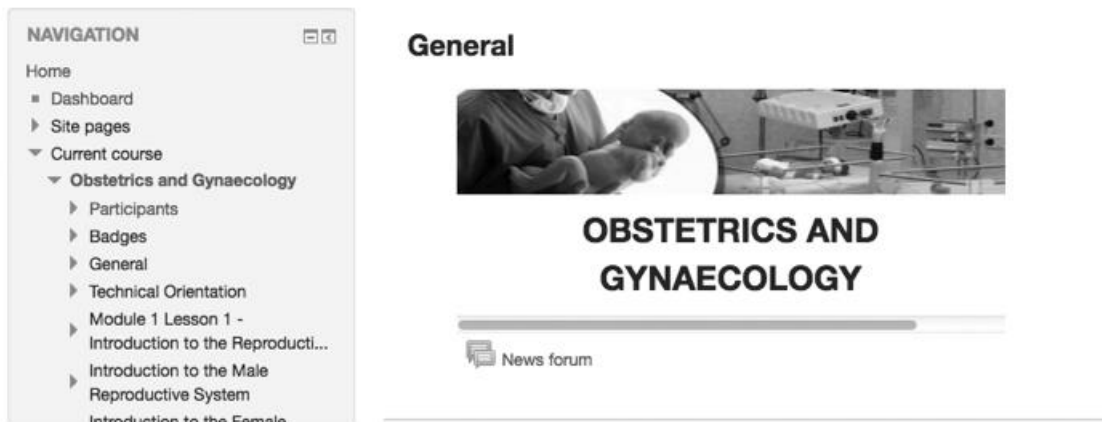


Figure 3. Initial Interface Design of the Obstetrics and Gynecology Course

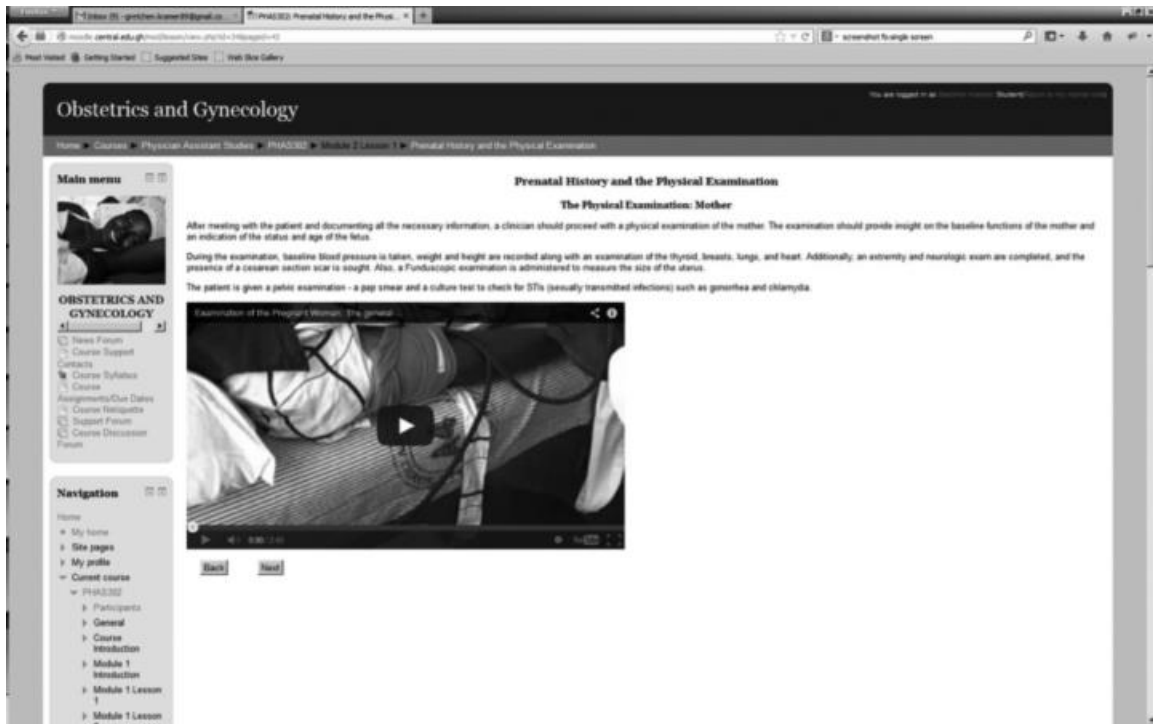


Figure 4. Revised Interface Design of the Obstetrics and Gynecology Course

Physical Space

Our learning design had to account for both physical space, such as clinical rotations, which are infused with specific meanings and cultural practices, and mobile and online virtual spaces. One major challenge we experienced was negotiating with the Ghanaian Lead on how to make virtual spaces come alive when he was used to teaching in physical space where he had control.

Temporal Space

One advantage of mobile and blended learning is the ability to provide for both time flexible and time bound learning events to accommodate PA student work schedules. In a culture where time is more cyclical than linear, temporal flexibility was an important feature and impacted the planning, development and implementation of the project. It was often at the 11th hour or later that content would be placed in the drop box to enable us to design the module that would open the following day. The need for prior planning in implementing a distance learning solution was difficult to communicate. The concept of time is different and North American partners had to adjust to it.

7. Conclusions

This paper has demonstrated how cultural spaces influence each of the five mobile and blended learning spaces identified by Palalas (2013) and the importance of negotiating these cultural spaces when implementing mobile and blended learning solutions in emerging economies. From the onset of this project, it became apparent that the concept of national culture alone was not adequate to understand the Ghanaian context in which the project was

implemented. This paper has provided a more expanded perspective employing the concept of cultural spaces to grasp the cultural negotiations that occurred.

Cross-cultural understanding is a learning journey traversing many of these cultural spaces. Our learning became both a personal and social journey through a complex set of cultural spaces that had to be negotiated continuously. Our journeys transformed each one of us and helped us to reflect on who we are and how we interact with others. This was our story and our perspective. Our own biases and frameworks have influenced our story. Other stories do exist from other perspectives.

We wanted to build a blended learning environment from the ground up so that the learning experiences and content would reflect the culture that created it. We realized that such an effort requires an enormous time commitment which the volunteer North American team found challenging. While we wanted to move toward to a more negotiated culture of cooperation, nuances of unfamiliar cultures, alternative expectations, and new layers of institutional hurdles, impacted our efforts to develop the best possible learning solution.

This study has significance for future international partnerships that plan to provide education and training in emerging economies. We recommend that future international partners spend time in the field learning the hidden culture of individuals, groups, organizations, and communities that will implement the project.

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