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AN APPRECIATIVE INQUIRY OF TEACHER'S PERSPECTIVES ON SYNCHRONOUS LEARNING AND MYANMAR EDUCATION DURING THE COVID-19 PANDEMIC

Irene Thang[1], Brian Mahaso[2]

Abstract
This study examined the use of appreciative inquiry to guide the development of online synchronous learning resources for teachers in Myanmar. Through the four appreciative inquiry processes: discover, dream, design, and delivery, teachers in this study reflected on their own teaching experiences and provided valuable recommendations for other teachers. The appreciative inquiry, a qualitative research approach, was applied to identify and understand the best features and practices in asynchronous learning at faith-based institutions. The constructivist theory is employed to understand the experiences of teachers practicing online synchronous learning and construct new knowledge upon the foundation of prior knowledge about asynchronous learning. This study aims to appreciate the best practices of online synchronous learning and to design an ideal online synchronous learning in faith-based institutions in Myanmar. The data collection methods were interviews and observations. The data analysis process was done by thematic analysis from Braun and Clarke (2006). This study was conducted at two faith-based institutions: high school (3 participants) and college (6 participants). The findings of this study were disseminated to research participants, school administrators, and teachers practicing online synchronous learning.

Keywords
Appreciate inquiry, constructivist, synchronous learning, faith-based institution

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INTRODUCTION

Myanmar has been facing a COVID-19 pandemic since March 2020. Since March 2020, face-to-face classroom learning in Myanmar has shifted to online synchronous learning (OSL). COVID-19 caused a quick transition from face-to-face classroom instruction to online learning in Myanmar and worldwide (Day & Verbiest, 2021). Internet users are increasing daily, and internet usage has reached 65 percent of the population (Myanmar Times Magazine, 2020). Nevertheless, teachers from Myanmar interested in technology must gain teaching experience in online education.

The COVID-19 pandemic and the political issues in Myanmar have affected the country's educational system (Myanmar Ministry of Education, 2021; San, 2021). Many teachers are still discovering how to launch widespread online teaching and learning. Some teachers need training for OSL because they have never utilized it (Mon, 2020; Myanmar Ministry of Education, 2021). However, starting online teaching and learning in Myanmar is challenging and threatened by the following three reasons: limited internet connection, the COVID-19 pandemic, and political issues (Marnn et al., 2021; Mon, 2020; Myanmar Ministry of Education, 2021; San, 2021).

To construct the ideal online synchronous learning environment in Myanmar's faith-based institutions, this study attempts to comprehend the best practices of online synchronous learning. The constructivist theory is applied to comprehend teachers' experiences using online synchronous learning and to build new knowledge based on existing knowledge about asynchronous learning. In this study, we focused on creating the effective cycle of an ideal online synchronous learning.

REVIEW OF LITERATURE

Online synchronous learning is becoming important for education in the technology age (Chen & Jang, 2010). However, this

synchronous learning is new in Myanmar, so many teachers need to become more familiar with this learning (Mon, 2020; Myanmar Ministry of Education, 2021). Moreover, teachers can face some issues with technology and internet connection. Another issue is learning tools for OSL (White et al., 2010). Despite of challenges, there are some benefits to both teachers and students during the covid-19 pandemic through OSL. This literature review reviewed OSL tools, benefits, and challenges.

Online synchronous learning tools

For online synchronous learning, both teachers and students need to access the following tools: the form of the text chat (Johnson, 2008; Lidstone & Shield, 2010; Oztok, Zingaro, Brett, & Hewitt, 2012; Szeto, 2015), video-conferencing (Cunningham, 2014; Okita, 2013; Spann, 2012; Wang, 2006), zoom (Moser & Smith, 2015), google forms such as google classroom, google hangouts, and google meet (Roseth et al., 2013). These tools can be used on computers, laptops, tablet PCs, and smartphones (Cain & Henriksen, 2013; Cunningham, 2014). The purposes of using all these learning tools are to promote students' learning in practical ways (Bower et al., 2014; Moser & Smith, 2015), communicate with students and teachers (Wang & Huang, 2018), make synchronous learning successful and capture teachers and students' face-to-face discussion (Bower et al., 2014; Park & Bonk, 2007).

Learning tools or platforms for OSL should have reliability and functionality (Stewart, Harlow, & DeBacco, 2011; White et al., 2010). Teachers should master in using all these tools and train students on how to use them. Through synchronous technologies, teachers and students can meet face-to-face for lesson discussion from different locations. However, failing or breaking during video-conferencing and audio transmission can be uncomfortable for students and can become a hindrance to the success of OSL activities (Okita, 2013; Pope, 2010; White et al., 2010). When

teachers use OSL tools effectively, both teachers and students receive benefits from synchronous learning.

The benefits of online synchronous learning

During the covid 19 pandemic, online synchronous and asynchronous learning become widespread around the world. Students can continue their study from where they are and access educational information without spending much time (Moser & Smith, 2015). The OSL program can provide students to learn the way they learn in the classroom (Cunningham, 2014; Moser & Smith, 2015; Norberg, 2012), enable working students to continue their study (Pope, 2010), offer them more inclusive learning experiences (Cunningham, 2014), allow them for asking questions and discussion (White et al., 2010), and provide them opportunities for sharing knowledge with each other, supporting each other, and networking (Bower et al., 2014; Park & Bonk, 2007; Rogers, 2003). Students can ask the teacher questions and receive the feedback from the teacher in real time. They feel that teachers care of them and develop a stronger connection with their teachers as well as their friends, so they stay engaged with class activities (Francescucci & Rohani, 2019; Yamagata-Lynch, 2014).

Online synchronous learning has the possibility to expand the accessibility and flexibility of classes information and lesson units if the online synchronous classes are designed well (Zydneya, Warnera, & Angeloneb, 2020). In the findings of Papadima-Sophocleous and Loizides (2016), students felt that tutorials in videoconferencing helped them construct knowledge, experiences, and skills for their class lessons. Moreover, they felt comfort and reassurance because the lessons were uploaded in google platforms, so they were able to access the lessons 24/7. They received an opportunity to share their knowledge related to their lessons, their understanding of the lessons, and how they accomplished their assigned tasks. The online synchronous learning allowed both teachers and students observe the awareness and

interaction with each other and clarify misinterpretation or misconceptions that students may have in the lessons uploaded. Although the synchronous learning has benefits for both teachers and students, there are some challenges occurred during synchronous teaching and learning.

The challenges of online synchronous learning

Despite the benefits of online synchronous learning, teachers and students face some problems and challenges in the synchronous learning. Before commencing teaching with online synchronous approach, teachers should consider their students' technical skills and familiarity with the online platforms for communication and learning (White et al., 2010). Less technical skills and unfamiliarity with the online platforms for communication and learning can cause challenges to both teachers and students (Cunningham, 2014; Szeto, 2015). Most students from remote area have experienced uncomfortable learning situations because of the technical capability of the software (Bower et al., 2014; Gillet-Swan, 2017; Salmon, 2014).

Engaging students in learning is a challenge to teachers because students have some personal issues that can hinder to focus on the lesson or to attend live tutorials (Stoessel et al., 2015). Although teachers provide a variety of lesson activities, if they feel that lesson activities make no sense for them, they will not engage in synchronous learning (Lidstone & Shield, 2010; Quevillon, 2021). A group working in synchronous learning is also a challenge for students when they are not physically present together in the same classroom (Quevillon, 2021). Students with inflexible schedule may not be able to collaborate in a group work (Lin & Gao, 2020; Olson & McCracken, 2015). Some students may not have enough time to reflect on the comments that they were supposed to make responses on time (Falloon, 2011).

For teachers, they feel that adopting tools for synchronous learning consume their time, teaching and learning will not be

effective (Roughton et al., 2011). In the OSL program, communication is not as immediate, so teachers may delay in answering students' questions, some students, therefore, feel vulnerable while waiting for teachers to respond. In this situation, students cannot receive the immediate feedback, so they may do their assignments the way they understand (Francescucci & Rohani, 2019).

In the findings of Lin and Gao (2020), the following challenges were happening during online synchronous learning:

1. Students could not follow the lesson explanation because the teacher explained it too fast.
2. Students faced difficulty to learn in their own pace.
3. Some students forgot to turn off their microphone so the distraction made the lesson explanation unclear.
4. Some students missed a live lesson explanation and delayed submitting their assignments due to the slow internet speed.
5. Some students are not familiar with learning management systems.
6. Students were exhausted due to a long time using the electronic device for learning.

METHODOLOGY

The research perspective of this study is qualitative, which is a method used to study the natural social life in a systematic manner (Merriam, 2009; Saldana, 2011). Creswell and Creswell (2017) explain that qualitative research is an exploration and understanding of human's reaction to a social problem. It enables researchers to conduct in-depth studies about their topics (Yin, 2014). The study's epistemological underpinning was philosophical hermeneutics, which is the practice of comprehending and interpreting human realities or experiences (Bulhof, 1980). Epistemology is the study of knowledge and how people come to know or comprehend the truth (Knight, 2016).

Objectives

The objectives of this study are to appreciate best practices of online synchronous learning and to design an ideal online synchronous learning in faith-based institutions in Myanmar. Since this study is qualitative research, we hope that the results of the study may be applied in any other schools, which launch online synchronous learning because of the COVID-19 pandemic.

Research questions

To create an ideal online synchronous learning, we developed three research questions:

1. What best features and practices in the online synchronous learning at faith-based institutions can be appreciated?
2. What best features and practices can be envisioned in the online synchronous learning to create an "ideal online synchronous learning" at faith-based institutions?
3. How can we seek commitment to implement the "ideal" online synchronous learning in faith-based institutions?

We prepared semi-structured interviews to provide clarification on the interview questions. Each participant received the informed consent form before the interviews and observations take place. The interview process took 15-20 minutes, and the observations took 10-15 minutes for a month. After collecting the information, we proceeded data analysis process.

Methods

The research type of this study is appreciative inquiry (AI), which "is based on the simple assumption that every organization has something that works well, and those strengths can be the starting point for creating positive change" (Cooperrider, Whitney, & Stavros, 2008, p. 3). The main function of AI is to make a positive change for organizations, departments, or teams. It has

four phases in its cycle: discovery, dream, design, and destiny (see figure 1).

Discovery. The discovery phase is to recognize and appreciate the best practices of what is. In this phase, people share their stories about their accomplishments and achievements, which are positive and strengths. During this phase of the inquiry, researchers emphasize on the best practices or facilities that organizations, teams, or schools have at the present time and appreciate them. In this way, the positive core of the main subject is reached and providing positive visions for further development (Cooperrider et al., 2008; Whitney, Trosten-Bloom, & Vianello, 2019).

Dream. The second phase of AI is a dream, which helps organizations, teams, or schools envision a brighter and better future. In this phase, people are more motivated to move forward because their achievements and best practices are appreciated, and they are encouraged to work alongside to imagine what result they will obtain if they continue working on their visions for the future. In this phase, people imagine their dreams and ambitions which are significant and beyond their current limits to develop their organization (Cooperrider et al., 2008; Whitney et al., 2019).

Design. In the design phase, the focus is creating an 'ideal' organization to achieve the dreams and ambitions that the organization envisions. Based on the best features and practices that the organization has, an 'ideal' organization is designed as new products in action. There are four steps in this design phase: selecting elements, identifying internal and external relationships, identifying themes, and writing stimulating propositions (Cooperrider et al., 2008).

Destiny. It is the final phase of the 4-D cycles of AI, and it presents the conclusion of the Discovery, Dream, and Design phases and the beginning of new products or ideas as an appreciative learning culture. This phase is to bring the dream comes true by implementing the ideal design for the organization. People are

encouraged to accomplish new levels of activity which is the 'ideal' design of the organization (Cooperrider et al., 2008).

Tools

For data collection, we utilized the following instruments: observations and interviews to explore the best features and practices of online synchronous learning at two faith-based institutions. There are 9 participants included in this study. All of them participated willingly to share their experiences of OSL and to provide the dreams and ambitions to create an 'ideal' design for synchronous learning based on their present best practices. Teachers who have been experiencing OSL were interviewed.

Population

This study was carried out at two faith-based institutions in Myanmar: high school and college levels. The focus of this study is to appreciate the best features and practices of online synchronous learning. The high school level has 35 faculty, and the college level has 40 faculty. All of them are practicing online synchronous learning since 2020 due to COVID-19. We selected three participants from high school level and six participants from college level. The participants are currently using OSL for teaching.

Ethical considerations

In this study, we followed several ethical consideration guidelines, which enable us to think the ethical challenges in research and plan to eliminate them. All participants in this study received the informed consent form to understand about the study and to decide whether they are willing to participate in the study. They were informed that they can withdraw from the study any time without harm and danger. We explained them the purpose of the study, the procedure of data collection, the purpose of the research findings, how the data would be used, and how and where

the data would be kept. The research participants understood their names would not be mentioned, but pseudonym names would be used in the study to protect their identity. The findings of the study were shared with participants, school administrators, and teachers who are teaching online synchronous learning.

RESULTS

In this section, we presented the findings of the study by using the cycle of appreciative inquiry: discovery, dream, design, and destiny. We answered the following research questions:

1. What best features and practices in the online synchronous learning at faith-based institutions can be appreciated?
2. What best features and practices can be envisioned in the online synchronous learning to create an "ideal online synchronous learning" at faith-based institutions?
3. How can we seek commitment to implement the "ideal" online synchronous learning in faith-based institutions?

In the discovery phase, three themes emerged; in the dream phase, two themes emerged; an ideal model of OSL was created in the design phase; and the implementation of the ideal model of OSL was presented in the destiny phase.

Discovery

In the *Discovery* phase, we asked participants the best practices of online synchronous learning that they have experienced. All the participants shared their stories about their accomplishments and achievement that are positive and strengths. We, as researchers, emphasize on the best practices that schools have at the present time and appreciate them. There are three themes emerged in this *Discovery* phase: practical online platforms for learning, the benefits of online synchronous learning platforms, and students' performance.

Practical online platforms for learning. Since the pandemic happening in Myanmar, most of the private schools were trying to initiate OSL. Among private schools, faith-based schools were able to launch OSL for high school and college levels. For online learning in Myanmar, teachers utilized online platforms that are available and practical for both teachers and learners. Teachers from where we collected data used the following online platforms for their teaching and learning processes: Facebook, messenger, g-mail, google meet, zooms, WhatsApp, google classroom, and YouTube channel.

Participants in this study explained that they applied online platforms that were available and familiar with them. The reason is that the schools could not purchase online platform for ownership. Based on the interviews, most of the participants received online teaching training before they launch online classes. Bawa (2016) indicated that providing good training programs for online learning is needed for teachers before launching the programs. The school should spend more money, time, and effort on online learning training for empowering teachers to design online courses using various online platforms.

Participants H. and I. commented that online synchronous learning was new for every teacher in their school. Although teachers needed online teaching training before they launched online classes, they did not receive the training from the experts; they were assisting each other (San, 2021; Soe, 2021; White et al., 2010). Teaching materials such as laptops, computers, and internet connection were not enough for online teaching and learning.

Participant A. described, “When I heard to start an online learning, the first thing that came to my mind was where to get online teaching and learning training” (Vol. 1, p. 1). Participants B., D., and E. mentioned that teaching online classes were beyond their imagination because they did not have laptops for online teaching. What they needed was online teaching materials, including laptops and the internet connection as well as training. Participant G.

also said, “I thought about technology. I need to learn how to teach through online. If not, my teaching may not be affective for students” (Vol. 7, p. 1). Bower et al. (2014) and Moser and Smith (2015) discussed about the use of technology and tools for online learning. They explained that instructors and students should fathom how to access tools for online classes.

The online learning tools should have reliability and be usable (Stewart et al., 2011; White et al., 2010). Participants A., C., D., F., and G. mentioned that they used g-mail and Facebook messenger for online learning. As time goes by, they learned other useful online platforms such as google meet, google classroom, and zoom. Nevertheless, participants B. and E. explained that they were old and slow to learn technology, so they only use g-mail for uploading teaching and learning materials and submitting assignments. For live lesson explanation, they used the Facebook messenger room.

The benefits of online synchronous learning platforms. Participants shared the benefits of online synchronous learning platforms that they have been using for online classes. According to their experiences, some online platforms require payment, and some have limited numbers to use them. In this case, they looked for free and available online platforms for all. Facebook messenger allows only 8 people for live chat but google meet and zoom accept more people for live presentation and discussion. However, zoom is free for 45 minutes, and if it is used for more than 45 minutes, it requires payment. Google meet is the most useful platform for live lesson presentation.

Online classes are effective when they are designed well for flexibility and accessibility of each class and operating different online platforms assist students fathom the lessons (Papadima-Sophocleous & Loizides, 2016; Zydneya, Warnera, & Angeloneb, 2020). We listed the advantages of using online platforms that participants used for online classes. Google classroom was

accessible from all devices so students were able to use it without any problems. Participants used it for:

1. Uploading the lesson materials including videos that are needed for my classes.
2. Preparing class quizzes and assignments.
3. Setting up due dates for each class activity.
4. Submitting class activities.
5. Grading students' assignments.
6. Providing the feedback to each student on their assignments.

Facebook messenger and WhatsApp assist teachers for communicating, sending important messages, and reminding students what they need to do. Participant D. commented, "Facebook messenger is helpful for me because it helps me post my teaching materials, and I can use it for live lesson explanation. I can communicate well with my students" (Vol. 4, p. 2).

Zoom and google meet are helpful for live presentation and discussion (Cunningham, 2014; Moser & Smith, 2015; Roseth et al., 2013). 5 out of 9 participants remarked that zoom helps them to group students for group activities, and cooperative learning can be applied through online classes. When they practiced cooperative learning, students attentively listen to the live lesson explanations. Students are motivated to learn because they need to take their assigned responsibilities.

Participant I. said, "I can use google classroom and google meet effectively. I use messenger for conversations, sending link, or important information to students" (Vol. 9, p. 1). Participant F. also shared his experiences,

> I use the platforms that are easy and effective for both teachers and students. I use OBS for video recordings, Facebook messenger for contacting my students because it is available and easy. Google classroom is for submitting students' assignments and uploading course materials. (Vol. 6, p. 2)

After teaching online classes for a semester, he learned a new platform, which is the YouTube channel for uploading the video. Participants G., H., and I. requested students to turn on their cameras during the live lesson presentation. The rest of the participants requested students to turn on their cameras only in the discussion time. They are constantly learning about online synchronous teaching and learning for the improvement of online classes.

Participant E. explained, "Google classroom is powerful for uploading class materials and submitting assignments. I can also give them the feedback and grade them. Google meet is very effective for live lesson presentation. I can share my PowerPoint lessons and explain them" (Vol. 2, p. 3). For designing online classes effective and interesting, teachers should develop teaching strategies such as creating a due date to submit students' assignments, providing feedback, and uploading activities with a clear explanation, including rubric (Bawa, 2016; Jaggars, 2014; Weber & Farmer, 2012). All participants are constantly learning and updating their online teaching processes to be effective.

Students performance. Due to the economy in Myanmar, most students could not purchase laptops, computer, or digital phone for online learning during this pandemic period. As a result, student enrollment is 40 % less than the normal enrollment before the pandemic. However, students who are enrolling for online classes perform effectively in their class activities. Most participants in this study said that they are satisfied with students' performances, although classes are through online. Some participants mentioned that they doubted whether students completed their assignments by themselves. Participant I. talked about the students' participations in online classes by explaining,

> For me, my classes have a lot of practical projects. In fact-to-face classroom teaching, I can monitor them closely, they also can come to me. Through this synchronous learning, both teachers and students have a few challenges. I do not know that whether

> they are doing their projects by themselves, or someone is helping them. (Vol. 9, p. 3)

Participants expounded that some of their students could not submit their assigned projects on time because of slow internet speed. Sometimes, distractions such as unclear voice and unable to turn on the camera due to slow internet speed can happen during live lesson presentations. Students enjoyed attending class meeting more than listening to the lesson videos. Participant B. shared the feedback from her students,

> Attending class is good for them through google meet. They understand the lesson very well when they attend class meeting. Some students said that they don't listen to the lesson video from google classroom, but they like attending class and listen to my presentation. I showed them how to solve the problems. I always have class activities that can help their understanding. Through activities, they can remember and do their assignments. I am teaching business classes, so I showed them how to solve the angry customers. (Vol. 2, p. 3)

Participant D. shared her students' performances, "I use my time to teach them through messenger room for live lesson explanation; I encourage my students to do their best. I am satisfied with their performances in my class. I can see that they always try their best" (Vol. 4, p. 3). Participant G. also shared his students' performances, "I am satisfied with my students' performance in this online synchronous learning. I can see that they pay attention in every class meeting because these generations are interested in technology. They want to use gadgets all the time" (Vol. 7, p. 3). According to Bower et al. (2014) and Francescucci and Rohani (2019), when teachers explain the lessons and contact with students through video conferencing, students develop a healthy and fresh connection with their teachers and friends.

All the participants mentioned that students are well instructed on using online platforms for online classes, and they were fast learners because they were interested in using their gadgets.

Some students made excuses while live presentation was going on by informing the teachers that their phones were not working properly, or the connection was slow, or they could not hear what the teachers said.

Dream

In the *Dream* phase, participants shared their expectations on online learning for a better improvement. They were constantly updating online platform for the development of teaching and learning processes. In this phase, two themes were emerged: improvements from schools and improvements from teachers.

Improvements from schools. Participants agreed with launching online synchronous learning during the pandemic time because they commented that if students could not continue their study during this pandemic, they would not know what to do because no jobs are available. However, participants provided some recommendations that the school could accomplish by providing the necessary equipment for online synchronous learning such as computer, laptops, and a Wi-Fi connection. Some research studies show that the achievements of teachers and students in teaching and learning are related to the leadership of school administrators (Day, Gu, & Sammons, 2016; Louis, Dretzke, & Wahlstrom, 2010). Park, Lee, and Cooc (2018) agreed with Day et al. (2016) and Louis et al. (2010) on the impact of school administrators in online teaching and learning as well as students' achievements.

Four out of nine participants mentioned that the school administrators should observe online teaching and plan a training for teachers if needed. Participant B. said, "I want to remind school administrations to follow up the teaching process of each teacher. If they set up rules and regulations for this online synchronous learning, all teachers should follow them. They should check whether teachers follow the rules" (Vol. 2, p. 4). Participant E. agreed with participant B. on what the school administrators should do by saying, "The administrators need to observe

teachers' teaching process to see whether teachers use online platforms effectively and successfully. If there is any problem in online teaching, then the administrators should solve the problem" (Vol. 5, p. 4). Participant G. continued,

> What I wanted the school to do is that to group the slow learner in technology and give a close training on using online platforms. If it is possible, one by one tutoring will be effective for those who are slow in learning. Observation is needed for teaching and learning. (Vol. 7, P. 5)

Participant F. explained what he wanted the school administrators prepare as follows:

> If we continue teaching through the OSL program, the school should provide all the devices that are needed for online classes for teachers. Then, if we plan to use the cloud, the school needs to buy storage for cloud. For instance, 6 teachers per one storage cloud. It will be good if the school can buy more storages. I want Microsoft team platform for online teaching. If we can use a Microsoft team platform with license, it will be very good. Teachers can communicate with students, post course materials, and everything there. I believe that it will be effective for teaching and learning. (Vol. 6, p. 4)

Participants discussed about how they commenced online teaching. Although they received online teaching training, some teachers faced problems with technology. For this reason, the school administrators should organize a meeting once a month to allow teachers to share their online teaching experiences with each other. Zincirli (2021) indicated that the school administrators have obligations in planning and launching online teaching, observing teachers' teaching process, and providing the necessary training for teachers. Participant H. commended, "Besides online teaching training, if it is possible, I want the school administrators to provide internet access in my house because I want to be available anytime when my students need clarification on my lessons" (Vol. 8, p. 4). In the findings of Zincirli's (2021) study, the research

participants mentioned that school administrators need to improve the internet infrastructure for making online teaching and learning more efficient. School administrators generate competencies and characteristics to meet the needs of online teaching.

Improvements from teachers. For better online classes, teachers need to constantly learn and update online teaching materials for classes. They should prepare the class lessons using PowerPoints and videos to make online classes effective and interesting. All participants agreed to prepare the class lessons in effective ways. Participant B. mentioned, "In my opinion, when teachers prepare the class lessons, they should use PowerPoints and videos to make the lesson understandable. Using pictures and samples is also effective for students learning" (Vol. 2, p. 5). Participant C. also explained what he has been doing,

> For me, I need to update all my lectures every semester. I am doing it now. I am updating my class based on the up-to-date information, the real situation. We should not use the same materials all the time. The world is changing. We need to check the real world and update our class materials. I know we need to spend more time to do that. (Vol. 3, p. 5)

Participant H. shared his experiences,

> I am teaching and learning at the same time. I constantly inquire more about how to make my online teaching to be active. I am learning how to use teaching structures, strategies, and methods in effective ways. I am continuously looking for useful tools for online synchronous learning. I realize that some teachers do not know how to share a PowerPoint lesson in zoom. (Vol. 8, p. 6)

Several studies show that teachers experienced some challenges in online teaching such as the lack of knowledge in using hardware and software (Bakioğlu & Çevik, 2021), internet connection during the live presentation (Lin & Gao, 2020), and limited internet access for both teachers and students (Çakın & Külekçi Akyavuz, 2020). Although challenges appeared, participants 5 out

of 9 explained that the class live meeting is needed besides sending class lessons to students. Some students can learn when teachers explain the class lessons directly to them. The research studies from Bawa (2016) and Wong (2017) indicated that having a video conferencing with zoom or google meet with students fosters more comfortable social interaction between students and teachers; moreover, students can grasp the ideas of the lesson units. Participants in this study revealed that if there is no class meeting, some students may not be able to complete their assignments. They ensured that students understood the lesson and completed all assignments without difficulties.

Participants experienced that some students copied from others and submitted their assignments. They thought that it happened because students did not understand the class well, so they copied from others instead of asking teachers. Participant A. explained,

> When I checked my students' papers, I found out that some students had the same answers. So, I messaged them and asked them who was the original, then I excused the original person. I spent time to explain those who did not understand the lessons and assignments. I allowed them to do it again. I want them to understand and apply them in their real life. (Vol. 1, p. 6)

Teachers help each other in online teaching. They try their best for this online synchronous learning during this pandemic period. They continue learning and seeking for improvements for online classes. Participant I said,

> We have crisis in everything this time, so I allow my students to submit their assignments in an essay way, for example, they write down on the paper and take a picture of it, then submit it to me. Not all students have laptops. Teachers need to make them feel comfortable with online learning. (Vol. 9, p. 6)

Teachers should plan for continuous learning to improve their teaching and participate in designing and implementing the OSL

program. School administrators need to cooperate with teachers for enhancing the quality of online teaching (Cisneros-Cohernour, 2021; Sterrett, 2015; Wong, 2017).

Design

After sharing the participants' dreams for online teaching, participants designed an ideal online synchronous learning as a new model in action. In this design phase, we selected themes, identified internal and external relationships of the selected themes, and wrote stimulating propositions. The following items were selected for the ideal online synchronous learning:

1. Finding best practices
    a. Online learning platforms
    b. Benefits of online learning
    c. Students' performance
2. Seeking improvements from schools
    a. Observations
    b. Training for online learning
    c. Internet speed
3. Seeking improvements from teachers
    a. Continuous learning
    b. Sharing experiences
    c. Assisting each other

Based on the above items, we designed the ideal OSL and displayed it to participants. We obtained the feedback from the participants and finalized the ideal OSL (*see Figure 2).*

Destiny

The destiny phase is the conclusion of the *Discovery, Dream, and Design* phases. In this phase, we designed a new ideal model of online synchronous learning and encouraged teachers and administrators to implement it. We provided that the cycle of an ideal online synchronous learning to the selected participants and asked them how they can accomplish it. All participants

mentioned that they will follow each step of the cycle of an ideal online synchronous learning.

Participant C. commented, “I am glad that now we have the cycle of an ideal online synchronous learning. School administrators and teachers must work together to implement it. We need to agree with each other, discuss, and make decisions for a better improvement” (Vol. 3, p. 6). Participant F. added, “To improve online synchronous learning and accomplish the ideal plan, the administrators and teachers need to know how to accomplish each part of the ideal plan and act it out” (Vol. 6, p. 6).

Participants agreed that working cooperatively is crucial for implementing the ideal OSL. Participant H. recommended,

> Because of our country situation now and the pandemic, we will continue teaching through online, so we need to look for a better improvement in teaching and learning. For this reason, we must understand and implement the ideal online synchronous learning. In order to implement it, we need to have the same vision and goal for making online learning effective and successful. (Vol. 8, p. 6)

Participant I. suggested, “We have staff worship through zoom, so anything that is important can be reported to the school administration. The administrators are the main assets to implement the ideal plan” (Vol. 9, p. 6). All the participants realized that both school administrators and teachers must cooperate in implementing the ideal plan for online synchronous learning.

CONCLUSIONS

Online synchronous learning is a substitution for face-to-face learning in Myanmar during COVID -19 pandemic. Although teachers and students needed to become more familiar with this learning process, they learned rapidly and made it into practice. The OSL program has been practiced since 2020 in Myanmar. The participants in this study appreciated what they had been practicing

for online learning. They keep learning new platforms that will be available and useful for online learning for teachers and students.

Based on the collected data, participants shared their experiences and dreams about online teaching and the ideal model for designing better learning online. Since this study employed an appreciative inquiry, participants have positive visions to improve their learning. They are enthusiastic about designing the ideal model for OSL and implementing the model that they designed. We have learned that appreciative inquiry motivates people to move forward, see better results, and simultaneously empower themselves and others.

After analyzing the data, we designed the ideal model for a better OSL. We displayed it to all participants and allowed them if they wanted to correct or add more information. The ideal model includes six steps (see figure 2). It shows school administrators and teachers what they should do to implement the ideal model for improvement in online learning. Finally, we shared the model with school administrators and teachers who have been practicing online learning and are interested in it.

We recommend that school administrators carefully examine this study's findings and the ideal online synchronous learning cycle. They should encourage teachers to put the study's findings into practice. School administrators provide training online synchronous learning to teachers. Additionally, administrators and teachers at the school should keep track of any changes that result from using the cycle of an ideal online synchronous learning.

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APPENDICES

Figure 1

The appreciative inquiry model

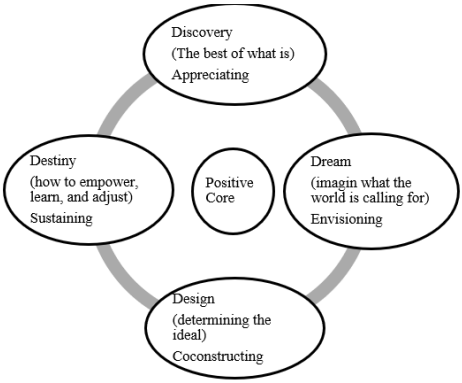
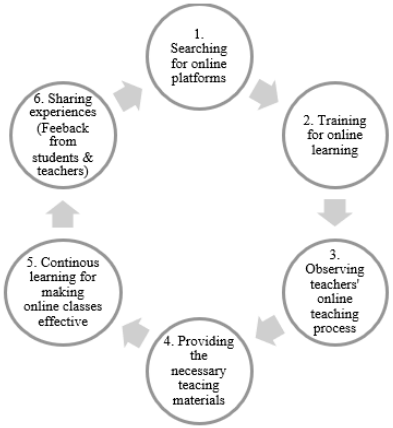


Figure 2

The cycle of an ideal online synchronous learning



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THE EXISTENCE SPATIAL REASONING OF PRESERVICE TEACHER IN PRIMARY MATHEMATICS LEARNING

Lingga Nico Pradana[1]

Abstract
Spatial reasoning is an ability related to the representation and use of objects and their relationships in the 2D and 3D worlds. This research examines the spatial reasoning' of pre-service teacher primary education and its use in their course. The subject involved 120 pre-service teachers (60 second years students; 60 third years students; 37 males; 83 females) in the primary education department of Universitas PGRI Madiun. The measurement uses a spatial reasoning test based on three constructs: spatial visualization, mental rotation, and spatial orientation (20 items spatial visualization; 20 items spatial orientation; 20 items mental rotation). The test was used to choose subjects with high spatial ability in every three aspects. Then, the selected subject was observed to view the use of spatial reasoning ability. This research results in spatial reasoning ability used to explain objects, draw objects, and the relations between objects in the classroom. That is the possible way to improve student achievement through spatial reasoning ability used by teachers.

Keywords
Primary mathematics learning, spatial visualization, mental rotation, spatial orientation

INTRODUCTION

In preparing students to master a variety of disciplines, pre-service teachers must have spatial literacy skills and the ability to teach these skills to their students (Moore-Russo, Viglietti, Chiu, &

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Bateman, 2013). Spatial Literacy is a person's perception and understanding of spatial objects and their relationships (Lange, 2003). To be spatially literate, one must be able to imagine spatial objects, reasoning about the nature and relationships between spatial objects, and send and receive communications about spatial objects (Moore-Russo et al., 2013).

Spatial Literacy consists of three domains involve visualization, spatial reasoning, and communication (Moore-Russo et al., 2013). The domain of spatial Literacy that has been proven to improve student mathematics performance in elementary schools is spatial reasoning. Spatial reasoning is an ability related to representation, the use of objects and their relationships in a two-dimensional and three-dimensional world (Linn & Petersen, 1985; Williams, Gero, Lee, & Paretti, 2010). Based on this definition, the spatial reasoning scope is the use of two-dimensional and three-dimensional objects (Grossner, 2017; Pittalis & Christou, 2010).

Spatial reasoning has three aspects. These three aspects are spatial visualization, mental rotation, and spatial orientation (Linn & Petersen, 1985; Lowrie & Jorgensen, 2017; Ramful, Lowrie, & Logan, 2017; Williams et al., 2010). Spatial visualization is the ability to describe situations when components move and are compared to each other based on information (Linn & Petersen, 1985; Lowrie, Logan, & Ramful, 2017). Mental rotation is the ability to rotate two- or three-dimensional objects and imagine their position after playback (Lowrie et al., 2017; NCTM, 2006). Furthermore, spatial orientation is the ability to enter certain spatial situations and imagine how the stimulus arrangement will emerge from another perspective (Lowrie et al., 2017; NCTM, 2006). These three aspects are the criteria for one's spatial reasoning ability.

Research on spatial reasoning in the field of mathematics education states that training in the ability of spatial reasoning makes improvements in students' mathematical performance in primary schools (Cheng & Mix, 2014; Lowrie, 2016; Lowrie et al., 2017). A teacher who has good spatial reasoning ability can improve

teacher ability in the STEM field (Mulligan, Woolcott, Mitchelmore, & Davis, 2017). Furthermore, spatial reasoning is also a predictor of one's success in the STEM field (Newcombe, 2013; Williams, 2003). Based on previous research, spatial reasoning is a matter that must be considered in primary school learning mathematics.

Research on spatial reasoning is much to suggest that spatial reasoning can improve student math performance in elementary schools. However, the results of the study were obtained by training conducted outside of mathematics learning. Mathematical performance increases with increasing spatial reasoning ability (Cheng & Mix, 2014; Lowrie, 2016; Lowrie et al., 2017; Pradana, Sholikhah, Maharani, & Kholid, 2020; Ramful, Ho, & Lowrie, 2015). This implies that mathematical performance indirectly increases due to spatial reasoning training. In these studies, the teacher directly taught spatial reasoning to students by ignoring the curriculum (Cheng & Mix, 2014; Lowrie, 2016; Lowrie et al., 2017; Sholikhah & Pradana, 2018). Then it raises a question of whether spatial reasoning that encompasses these three aspects exists and can be taught through mathematics learning in accordance with the curriculum, especially in the curriculum in Indonesia.

When a pre-service teacher has a good spatial reasoning ability, whether the ability is used in learning mathematics, the question becomes important considering that spatial reasoning is a predictor of one's success in the field of mathematics (Newcombe, 2013; Pradana & Sholikhah, 2019; Wiker, Schwerha, & Jaraiedi, 2009).

Questions based on previous research are questions relating to the existence of spatial reasoning in mathematics learning. Are these aspects of spatial reasoning ability can be used to perform mathematics learning in accordance with the curriculum in Indonesia? The importance of this is revealed to confirm that spatial reasoning exists and can be adapted to mathematics learning in accordance with the curriculum in Indonesia. Given that spatial reasoning can improve students' mathematical performance

(Cheng & Mix, 2014; Lowrie, 2016; Lowrie & Jorgensen, 2017; Lowrie et al., 2017), then it can be predicted that pre-service teachers who use the ability of spatial reasoning will be able to make learning effective and improve student math performance.

Based on the value of the previous research, this study aims to examine the spatial reasoning' of pre-service teachers in primary education and its use in their courses.

METHODOLOGY

Participants

The subjects of the study were pre-service elementary school teachers in Universitas PGRI Madiun, Madiun, East Java, Indonesia. 120 pre-service elementary school teachers who are second- and third-years students (60 second year students; 60 third year students; 37 males; 83 female). The pre-service elementary school teachers are a collage-student who has taken the course of geometry and learning mathematics in elementary school.

Materials

The instrument used in this study is spatial reasoning test based on three constructs: spatial visualization, mental rotation, and spatial orientation. The test measures every aspect of spatial reasoning by criteria on Table 1. Test construct in multiple choice as 60 items (20 items spatial visualization; 20s item spatial orientation; 20 items mental rotation), in Figure 1.

Assessment of spatial reasoning test

The score of each item is one point for correct answer and zero point for incorrect answer. If any item not answered by participant, the score is zero point. The total maximum score of this test is 60 points. The result of the test categorized as following: 41–60 (high ability); 21–40 (average ability); 0–20 (low ability).

Procedure

This study begins by providing a spatial reasoning test on the subject. The tests are conducted simultaneously on the same day. The tests were conducted in 6 classes with each class containing 20 subjects. After the tests are given the subject is classified based on spatial reasoning ability (high; average; low). The classification is also specific to each aspect of spatial reasoning.

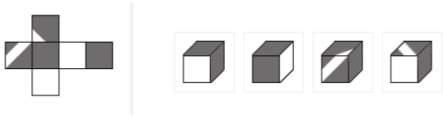
Table 1

The criteria of spatial reasoning

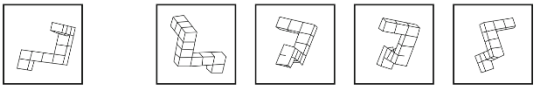
Spatial reasoning aspect	Criteria
Spatial visualization	Visualizing the outcome of folding/unfolding a particular configuration
	Constructing a solid from a given net and vice versa
	Matching pieces and parts
	Finding the symmetry in an object
	Reflecting an object
Spatial orientation	Determining the position of an object relative to that of the observer
	Reading maps from different perspectives
Mental rotation	Determining the outcome of a rotation of a 2D and 3D object
	Differentiating between reflection and rotation

Figure 1

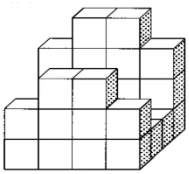
Sample item: (1) Spatial visualization test; (2) Mental rotation test; (3) Spatial orientation test



(1) Spatial visualization test



(2) Mental rotation test



Which one the left view of this figure!

(3) Spatial orientation test

Based on the classification, subjects were chosen with high criteria on spatial reasoning as well as on each of the three aspects. The main reason chosen subject with high criterion is that the subject potentially uses the ability of spatial reasoning in teaching elementary school mathematics. After the subject is selected, the subject is facilitated to do the classroom learning. Subject teach mathematics in the field of geometry. During the learning, subjects were observed with the aim of whether the subject showed symptomatic use of spatial reasoning in learning. The observation criteria are based on the three aspects of spatial reasoning (spatial visualization, spatial orientation, and mental rotation). To strengthen research data after learning, subjects interviewed to

be able to know and confirm the actions of the subject at the time of learning is a symptom of the existence of spatial reasoning.

Data analysis

We analyzed the spatial reasoning test result in three categories (high, average, and low). The data from observation analyze by describing spatial reasoning categories in terms of spatial visualization, spatial orientation, and mental rotation.

RESULTS

The results of spatial reasoning tests conducted based on aspects of spatial reasoning are spatial visualization, mental rotation, and spatial orientation, presented in Table 2.

Table 2

The criteria of spatial reasoning

Classification	Interval score	Number of participants		Total
		2nd year	3rd year	
High ability	41–60	6	7	13
Average ability	21–40	34	39	73
Low ability	0–20	20	14	30

Figure 2

Mean value of spatial reasoning in each aspect

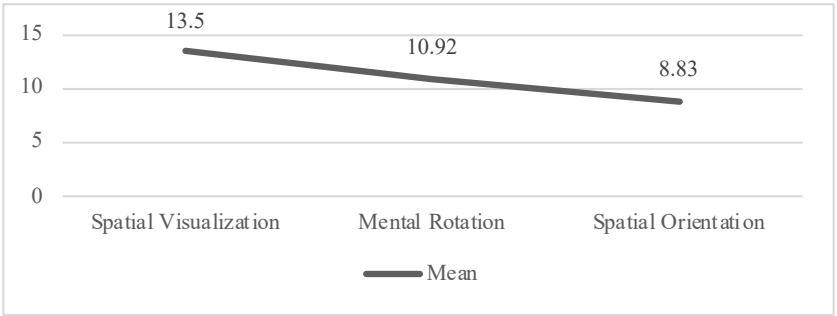


Figure 3

Mean value of spatial reasoning student based on year

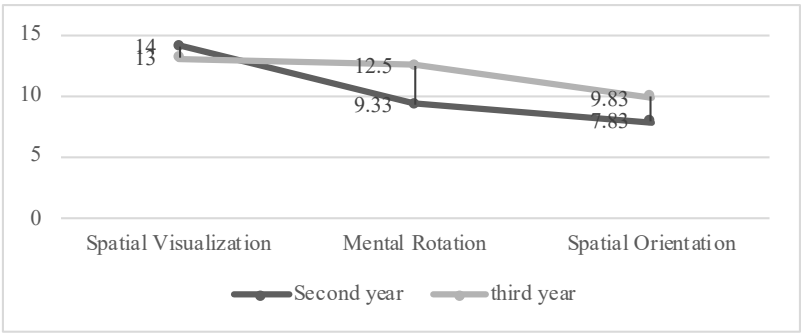
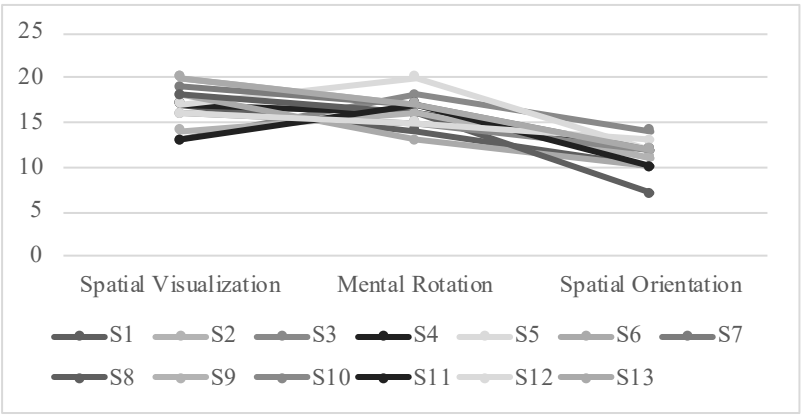


Figure 4

High ability student score



Based on these results, the aspect of spatial visualization is the aspect that has the highest value compared to the other two aspects. The aspect of spatial orientation is the least value aspect. Then if the results are compared by grade, then the second-year participant excels at the spatial visualization aspect. On the other hand, third-year participants excel at aspects of mental rotation and spatial orientation.

The result of spatial reasoning ability classification found that 13 participants have high spatial reasoning ability. Then if reclassified based on the value on each aspect then obtained as in the following Figure 3.

Based on Figure 4, subjects with the highest scores on spatial visualization are S2 and S13. The highest score in mental rotation is S5. Then on the spatial orientation is S3. The four subjects were selected and facilitated to conduct learning in primary school.

At the time of learning, the four subjects were observed to see whether the spatial reasoning they used was used in the lesson. Observations are based on three aspects of spatial reasoning. Learning is doing in grade V on mathematics subject with material of cube and cuboid.

The observations made on subjects based on the spatial visualization aspect indicate many learning activities that reflect spatial reasoning. Aspects of spatial visualization are widely used in drawing and showing the properties of cubes and cuboid. In this case the subject describes the cube on the board. Cube drawings made on the blackboard are ribs drawn with dashed lines. After being confirmed by interview, the subject stated that the ribs were not visible from the front. Therefore, it needs to be drawn with dashed lines. This suggests that spatial visualization ability is used in explaining it.

Then still on the aspect of spatial visualization, in the explanation of the cube net, the subject explains the process of opening the cube into a variety of nets. The explanation made by the subject shows the existence of the construction process from waking the room into webs and vice versa. The most important part of what the subject explains to the student is the explanation of the various forms of cube nets.

Furthermore, the observations on the mental rotation aspect showed quite unique symptoms. Drawing up solids ie cubes and cuboid, the subject describes it in various positions. Usually in drawing cuboid, both the pictures contained in the book and the

usual draw by the teacher in general is always horizontal. In this case, the subject draws up the space in a vertical, horizontal, or diagonal position. It shows that however the position of the waking space, the concept will not change. The images presented by the subject are drawn clearly and very well. The subject's creativity is really shown in this case.

In the aspect of spatial orientation, the results obtained cannot be separated from the mental rotation and spatial visualization aspects. When describing the properties of the cube through the created image, the subject explains that the six sides of the cube are square even in the drawings made on the board all the sides are not square. This shows that the subject views the cube not from what is seen in the picture but looks at the cube side from the front, back, left, right, up, and down. This has been confirmed during interviews that show the subject views the image from a variety of perspectives. The same thing is done when explaining the cuboid. Uniquely, the learning instrument created and given to students to provide a question that corresponds to the aspect of spatial orientation.

Based on findings on learning by subjects with high spatial reasoning abilities, the phenomenon of using spatial reasoning exists in learning. Spatial reasoning is mostly used when explaining the concept of using spatial objects. Therefore, the existence of spatial reasoning in learning can be shown.

DISCUSSIONS

This study aims to show the existence of the spatial reasoning of preservice elementary school teachers in learning mathematics. The existence of spatial reasoning in learning is very important as a form of spatial reasoning connection with mathematics (Joh, 2016; Mulligan et al., 2017). By showing the existence of spatial reasoning in learning, the findings in this study can serve as the basis for the integration of spatial reasoning in learning.

The form of existence of spatial reasoning in mathematics learning is the process of preservice teachers in explaining the concept of mathematics. While explanations are used every day in the mathematics classroom (Levenson, Tsamir, & Tirosh, 2010). The explanations made by preservice teachers in the classroom proved to be charged with spatial reasoning. Furthermore, explanations in the classroom contain spatial visualization, mental rotation, and spatial orientation.

Explaining is an activity in which teachers communicate subject-matter content to students (Charalambous, Hill, & Ball, 2011; Stein & Kucan, 2010; Subramaniam & Esprivalo Harrell, 2013). The explanation can be a description of concepts and procedures (Stein & Kucan, 2010). With an explanation of charged spatial reasoning, it will provide the potential for improving students' mathematical performance and spatial reasoning abilities.

The results of this study show the various activities undertaken by teachers in learning mathematics. These activities are activities that show the use of spatial reasoning in learning. Activities that correspond to spatial reasoning on spatial visualization aspects allow teachers to be able to give an image of an object about a particular situation. This corresponds to the training undertaken by Lowrie et al., (2017). The difference is that Lowrie designed his training outside of mathematics learning and did not pay attention to the curriculum. The next difference is that Lowrie directly develops the students' spatial reasoning.

Furthermore, this study shows that without intervention, teachers can teach spatial reasoning through the content provided by the curriculum. This is very likely to be done in the 2013 curriculum in Indonesia. On the other hand, this study complements research based on spatial reasoning interventions. Spatial reasoning is intervened through an activity such as arranging blocks and viewing perspectives (Casey et al., 2008; Kurtulus & Yolcu, 2013; Peng & Sollervall, 2014; Pradana, Sa'dijah, Sulandra, Sudirman, & Sholikhah, 2020), using Cabri 3D software (Basham &

Kotrlik, 2008; Güven & Kosa, 2008; Hartatiana, Darhim, & Nurlaelah, 2017) or origami instruction (Akayuure, Asiedu-Addo, & Alebna, 2016). This means that spatial reasoning can be integrated not only through intervention but also through the content available in the mathematics curriculum.

Spatial reasoning is very potential to improve students' mathematical performance (Cheng & Mix, 2014; Hawes, Moss, Caswell, & Poliszczuk, 2015; Lowrie et al., 2017; Newcombe, 2013; Rabab'h & Veloo, 2015). Based on this situation, if spatial reasoning can be routinely used by teachers in learning, then the potential that the learning is done can make students' math performance better. Besides, the mathematical performance of the students' own spatial reasoning abilities will also develop. With the development of students' spatial reasoning, then teachers can help students have the potential to succeed in both mathematics and STEM (Gilligan, Flouri, & Farran, 2017; Hawes et al., 2015; Newcombe, 2013).

This study also provides an overview of a cycle of spatial reasoning abilities. It has the potential to make students' mathematical skills and spatial reasoning better. When the student graduates and then becomes a teacher, with his spatial reasoning ability will do the same to his or her students someday. This cycle is something that theoretically needs to be developed further.

Research to develop and improve spatial reasoning has been widely practiced (Francis, Khan, & Davis, 2016; Hallowell, Okamoto, Romo, & La Joy, 2015; Lowrie et al., 2017; Stevenson & Gernsbacher, 2013), but still have not seen from the teacher's perspective which then leads to the cycle. This study shows that spatial reasoning is used in learning that is compatible with the mathematics curriculum. Therefore, the potential to lead to a cycle of spatial reasoning is likely to be enormous.

CONCLUSIONS

The results of this study indicate the existence of spatial reasoning in mathematics learning by pre-service teachers. This is

demonstrated by using spatial reasoning by pre-service teachers with high spatial reasoning. The three aspects of spatial reasoning are spatial visualization, mental rotation, and spatial orientation, which can be integrated through learning mathematics. Spatial reasoning activities in the classroom are more likely to occur when the pre-service teacher explains. The explanation made by the pre-service teacher is an explanation of the concept of mathematics. Thus, mathematical content is very much in line with spatial reasoning, especially in geometry. Then, it becomes the basis for cultivating spatial reasoning in mathematics learning.

This research has also connected with previous research in which mathematical performance can be enhanced by training spatial reasoning. Integrating spatial reasoning in learning can make students successful in many fields, especially in the field of STEM. Further research can develop a learning model based on spatial reasoning in learning. In addition, the field of mathematics under study can be developed in other mathematical fields, such as algebra.

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A BIOGRAPHY OF THE FIRST SEVENTH-DAY ADVENTIST EVER TO BE AWARDED A UNIVERSITY DEGREE IN RWANDA: PASTOR EZRA MPYISI

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Abstract
This study describes capturing the life story of an exemplary Seventh-day Adventist church member in Rwanda. It aims to present the essential details that led to understanding the participant's life experiences that may inspire current and future Christians, educators, and church leaders. The leadership emergence theory by Robert Clinton formed the theoretical framework, which extended to several related themes. The study used a narrative inquiry design with one purposefully selected participant. The data was collected through interviews, observations, documents, and a literature review. Reported here is the biography that is the initial product of a narrative inquiry. This biography results from restoring, a procedure used in narrative inquiry where the story is chronologically organized to the purpose of the study. The participant of this study applied the spiritual gifts and skills he obtained throughout his training in different fields of his work-life experiences. As a result, he made a vast contribution to developing the Seventh-day Adventist church and schools he served. This study recommends that aspiring Adventist Church leaders and church members accept God's calling and serve Him, regardless of position, time, place, monetary benefits, or other things.

Keywords
Narrative inquiry, career path, leadership emergence theory

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INTRODUCTION

Storytelling is one of the ways human beings have used to communicate since a long time ago. People tell stories to their children to get their attention and be able to transmit the message to them. When the family sits together in the evening after work, parents use storytelling form to share interesting life events with the rest of the family members. In the same way, neighbors, during weekends and holidays, enjoy chatting with each other, whether at home, under trees, or in the open areas. Others like to tell stories while sharing food over their tables to make conversations more fun. Religious preachers often tell stories to make Bible lessons more attractive to their audience. Lovers enjoy hearing and sharing their love stories. Children, teens, adults, and even older people like to hear stories.

People can use stories to entertain others, educate, and broadcast. Research confirms that through Stories, people may know their past events, present, and what they wish for the future (Clandinin & Rosiek, 2007). Humans use stories to explain their thoughts and actions (Hunte & Golembiewski, 2014). “Humanity has a need for stories, as there isn’t a culture anywhere in the world that survives without them” (Hunte & Golembiewski, 2014, p. 75). According to Clandinin, Caine, and Lessard (2018), “stories are always with us, always part of who we are and are becoming” (p. 2). Research also highlights that “respect for the stories lived and told is respect for each person’s living, for their life” (p. 2). Researchers use narratives “as a source of important knowledge and understanding” (Clandinin, 2016, p. 17). Therefore, it is essential to value narratives as a method of conducting research (Clandinin, 2016; Creswell, 2013; Pinnegar & Daynes, 2007).

This study is a story of a Seventh-day Adventist (SDA) church member over one hundred years old. He is among the few people who could study during his time. For his entire life, he studied and worked in SDA Church institutions.

Since narrative studies are rarely published in Africa, specifically in Rwanda, this study aims to present the essential details that led to understanding the participant's life experiences that may inspire current and future Christians, educators, and church leaders. Therefore, it adds to the existing narrative methodology literature about educational leadership in Rwanda.

Two research questions guided the study:

1. What enduring personal relationships and experiences in childhood and adolescence contributed to the development of the selected Adventist church member?
2. What significant professional relationships and experiences enhanced the development of the selected Adventist church member?

REVIEW OF LITERATURE

This study is supported by the leadership emergence theory by Robert Clinton. The leadership emergence theory points to how God works in developing people over their entire lifetime. Christian leaders undergo six developmental phases as their lives unfold (Clinton, 1989). Those phases are named as follows: (a) sovereign foundations, (b) inner-life growth, (c) ministry maturing, (d) life maturing, (e) convergence, and (f) afterglow celebration. These phases help assess how God works in leaders' lives if they become more attentive to His leading and give attention to important tasks. This theory is a useful tool to assess Christian leadership development.

METHODOLOGY

The narrative inquiry focuses on "studying one or two individuals, gathering data through the collection of their stories, reporting individual experiences, and chronologically ordering the meaning of those experiences" (Creswell, 2013, p. 70). Clandinin (2016)

explains that it is a "study of human lives conceived as a way of honoring lived experiences" (p. 17).

When conducting narratives, there should be an interaction between the participant and the researcher (Clandinin, 2016). This study was conducted by two researchers who chose to write a life story of one participant who has a lot of experience in the Seventh-day Adventist (SDA) Church.

Participants

This study consists of only one participant. Purposive sampling was used in choosing the participant for this study. Purposive sampling is the most sensible strategy for this research because it allows the freedom to choose someone who can provide rich information about the topic of this study (Creswell, 2008), one who is willing to collaborate with the researcher for a period actively, and one who is willing to give extensive and multiple types of information (Creswell, 2013). The participant was selected according to the predetermined criteria.

Data collection

The most common data collection method that narrative researchers use in data collection is the in-depth interview, which is to gather stories (Chase, 2013). In addition to that, researchers also collected data by using observations, documents and artifacts, and field notes. Researchers met several times with the participant to collaborate and produce rich data. Interviews were recorded and transcribed in the mother tongue of the participant (Kinyarwanda) before it was translated into the English language.

Data analysis

Interviews collected from the participant of this study were transcribed by researchers. Transcription was done in the Kinyarwanda language which is the mother tongue of the participant.

Then, it was analyzed by all researchers of this study who also speak the same language as the participant. After that, one of the researchers who is an expert in languages and literature translated it from Kinyarwanda to English. The writing of a participant's narrative followed the restoring process (Creswell, 2013). Restoring is a process of reconstructing the narratives as told by the participant in a chronological sequence observing the elements of time, place, plot, and scene.

Researchers' reflexivity

The researchers of this study are all Seventh-day Adventist Church members. They are lecturers in an Adventist school which is in Rwanda where the participant of this study was born.

Ethical considerations

The study employed the protocols for collecting the data ethically. Approvals were obtained from the participant. Informed consent took the form of process consent as it was an iterative process of data collection. Interviews were collected in safe environments as suggested by the participant. The participant has given permission to use his name and so the issue of anonymity did not arise in this study. Confidentiality was maintained throughout the study.

RESULTS – A BIOGRAPHY OF PASTOR EZRA MPYISI

Pastor Mpyisi is a one-hundred-year-old Seventh-day Adventist Church member. He became a Seventh-day Adventist believer when he started his primary education and continued to exercise his faith up to the university level. He worked for the Church until he retired. He was a brilliant student and his performance resulted in him being employed as a teacher and evangelist. He worked in Rwanda, the Democratic Republic of Rwanda, Burundi, Tanzania, Kenya, and Uganda.

The history of pastor Mpyisi (1922-2022)

Pastor Mpyisi is a Rwanda national born in Rwamwata, Nyanza District, Southern Province, Rwanda. He was born in 1922 under the reign of King Yuhi V Musinga (12/1896-12/11/1931). His father was Rutarīra and his mother was Nyirankebya. His father belonged to the clan of Abanyiginya, from whom came the Rwandan monarchs, and his mother from the Abega clan, which provided queen mothers. During the time of his birth, there was no hospital in Rwanda. Mothers used to give birth in their homes. His parents did not know how to read and write. Therefore, he did not know his exact birth date. However, he says that, based on what his parents told him, he was probably born circa 1922.

He was born with eight children, of which six died. He was the last born. When he was born, his parents named him an unusual name because they used to fear death would take him away. He was given the name after a wild animal, "hyena", to despise it. Thus, Mpyisi means Hyena, which was given to him by his parents to have death fear him lest he could die at a young age. By God's grace, he did not die, though, and he grew up with his elder brother.

Pastor Mpyisi did not know his grandparents because he was born after their death. He explains that his parents were honest. During their time, they did not know the Heavenly God, yet their deeds were appreciated by other people. His father was elected by his fellows from his village to nominate him as their judge. He lived well with his neighbors and could give them beer reserved for male dignitaries. They loved him because he was not a misery. They felt at ease with him. He was a hardworking parent and could harvest many crops. His wife, Mpyisi's mother, was also an exemplary, heartily woman. Men servants at home loved her because she could give them milk. She loved Mpyisi so much because he was her last born and came after others who could not live. Therefore, he was cherished to protect him from death. Unfortunately,

his mother died while Mpyisi was seven years old only. Consequently, his father remarried.

His stepmother could not give birth. Still, Mpyisi says that she became a very good stepmother. She loved him, taught him hygiene, living with others honestly, and this stepmother lived with her husband well until they both passed away.

Before he started schooling, Pastor Mpyisi was keeping the cattle, watering their wells, milking them, praising their names, and doing other activities related to the cultural care of cattle. He did his work well too such extent that he was loved by his parents. On his arrival at home, he could extend the shepherd's rod to his father and said, "May you have cattle!". "May you have hundreds of cattle, my son," replied his father. That is how his father blessed him. Mpyisi grew up befriending other youth. He knew how to speak well as trained by his parents. He remembers that his parents lived in traditionally well-built thatch huts. The latter was decorated with grass and mats. They were solid and maintained in good hygienic living conditions. They were dressed in animal pelts except during the colonial period when technological development brought clothes. When Mpyisi started working, he bought clothes for his parents. This good deed motivated other parents to send their children to the white man's school because they realized that educated children could support their parents with clothing and other social services.

Pastor Mpyisi's education

Pastor Mpyisi says both parents supported him when he started school because not all parents agreed that their children should go to white men's schools. Besides this, the ruling monarchy at the time did not support it. The idea at the time was to go to school and become white men's servants. Mpyisi's parents, however, had a different view, believing that going to school would help their child gain comprehension, learn how to read, and write and be able to develop. Mpyisi's father wanted his son to

study as a white man's clerk and to be appointed head of a local administrative entity, called "village". Fortunately, Mpyisi was a boy, and at that time only boys were studying. Girls had not dared to go to school, and the ones who dared to go to school had no jobs. Furthermore, a girl who went to school could not easily get married. It was disgusting for a girl to go to school at that time. Of course, all the teachers at the time were males. A first to third-grade teacher had just finished the sixth grade. A fourth and fifth-grade teacher had graduated from the eighth grade. So much so! In addition, the teacher was the one who carried out the church work as an evangelist and combined it with teaching.

First, second, and third grades

Pastor Mpyisi attended primary school in Rwamwata where he was born. At Rwamwata there was an Adventist school that taught reading, writing, mathematics, history, social studies, and the Bible. At that time there were the first, second, and third grades. They learned everything by heart and were mentally challenged. They had nowhere to write. When the time came for him to be baptized in the Adventist religion, he became a believer in the Seventh-day Adventist Church. Mpyisi was a brilliant student. After graduating from primary school, he was allowed to continue his fourth year in Gitwe because that is where there was the fourth year through the sixth.

Fourth, fifth, and sixth grades

Gitwe School generated other Adventist schools such as Ngoma and Rwankeri in Rwanda, Kivoga in Burundi, and Lukanga in Congo. At that time there was a fourth, fifth, and sixth year. It was not easy for Mpyisi to go to Gitwe to study because it was far from home. It required him to travel seventeen kilometers (17 km) on foot, a three-hour walk. Mpyisi endured the daily journey to school in Gitwe. He was often hungry and thirsty, but he did not give up. By the time he was in the sixth grade, he looked for a

family to accommodate him near the school, as the classes were already crowded, and the travel was very tiring. He was fortunate enough to have a family that agreed to give him a home, and he went there to study until the end of his sixth year. Mpyisi continued to be brilliant in school. Now they were writing with slate pencils, writing on slates, but they had no textbooks. They memorized what they learned. He says he will never forget Pastor Daniel Kagegera, one of the pioneers of the Seventh-day Adventist Church in Rwanda, who would explain to him what he had learned read from the Bible.

Seventh and eighth grades

As Gitwe was getting more developed, the seventh and eighth grades were added. People from Rwankeri in northern Rwanda, Ngoma in western Rwanda, eastern Congo, and western Burundi were coming to study because Gitwe was the only school in the seventh and eighth year for Adventist schools. Here they also studied construction, questioning, first aid, the Bible, and more.

Mpyisi was given the opportunity to continue his studies in Gitwe because he was a well-behaved and talented student. At the end of his eighth year, he was awarded a diploma for teaching as a "teacher evangelist", i.e. a missionary teacher. After graduating, Mpyisi was offered a teaching job at the school. He taught in the fourth and fifth years and worked in the office of the school principal. He began to study typing because his work included registering students and writing church report activities.

Ninth, tenth, eleventh, and twelfth grades

After working in different places, Mpyisi was selected from the few students who had to study for the ninth, tenth, eleventh, and twelfth years. He also studied them at Gitwe. At this time, he was studying and working while living with his wife and children.

University studies

Pastor Mpyisi was later sent by the Adventist Union, with its headquarters at Gitwe, to study Theology at Solusi (Bulawayo Province) in Zimbabwe, former South Rhodesia. He was the only member of the Seventh-day Adventist Church Union (Rwanda, Burundi, and Congo) to be sent to study at the time. It was in 1960. He was accommodated with his family in boarding school. From the beginning to the end of his studies, he studied only in Adventist institutions.

Employment

Pastor Mpyisi began his career just after completing his eighth year. The reason is that he did his job well and was praised by his employer, the Seventh-day Adventist Church. He worked in Rwanda and in various other African countries, in the Great Lakes Region. From the beginning of his career until his retirement, he did nothing else but serve the church as a teacher and evangelist.

Pastor Mpyisi began his career as soon as he completed his seventh and eighth years. The reason is that he did his job very well and was praised by his employer, the Seventh-day Adventist Church. He worked in Rwanda and in various other African countries, like the Great Lakes Region. From the beginning of his career until his retirement, he did nothing else but serve the church (as a teacher and evangelist).

Gitwe: A teacher and a clerk in the school office

As mentioned above, Pastor Mpyisi started working and finished his studies in the eighth year. He started his career teaching the fourth and fifth grades at Gitwe. At the school in Gitwe, he not only worked as a teacher but also as a clerk in the office of the school principal and conducted church activities. He could register new students, type student exams, and receive reports from Adventist church members; he knew how to use a typewriter.

Rwamwata: A primary teacher

A year later he was sent to teach at his home village, Rwamwata. There he taught in the fourth and fifth grades. It was then that they brought the fourth and fifth years to Rwamwata. Teachers in the fourth and fifth grades were few because teaching in those years required that you had finished the eighth grade. In the morning, the fourth and fifth-grade students studied. In the evening, the first, second, and third-grade students had their turn. Classes were first taught under the trees, but later, they built classrooms. School buildings were roofed in thatches. The first, second, and third-year students were in the same school. The fourth and fifth grades also studied together. One teacher taught all subjects (reading, writing, mathematics, social studies, history, and the Bible). Mpyisi taught in Rwamwata for about a year before contracting malaria. The white man missionary who ran the center sent him to Ngoma for treatment because there was only one Adventist hospital at that time. It took him a long walk to travel to Ngoma Medical Center in Western Rwanda.

Ngoma: Teacher and office clerk

When Mpyisi arrived in Ngoma, he was accommodated by a man named Jacob Gaparayi, whom he had not known before, but sheltered him and after being treated at the hospital he could return to his home. “He was a good person because he accommodated me and I didn't know him,” explained Pastor Mpyisi. He spent a month in treatment. While in Ngoma, a fourth and fifth-year teacher from Gitwe, Silas Nyamihana, who had to know him while he was studying, applied for a teaching job on his behalf. Ngoma is home to an Adventist hospital and school. The hospital was run by a white man who worked with his wife. Pastor Mpyisi was, later, sent a letter urging him to continue working for Ngoma. This was approved by the Union Committee Meeting held in Gitwe. Three countries (Rwanda, Burundi, and Congo) were represented. Pastor Mpyisi would not deny it because at that time

what the white man was saying was not opposed. “What the white man says is like what the king says,” Pastor Mpyisi explains. This is how Pastor Mpyisi started working at Ngoma School. He taught and worked in the office of the school principal. He had now been given his house on the school premises. Here he did the same thing as he did when he started working in Gitwe. He spent about five years there but went on vacation to his home in Rwamwata. Later, he received a call to go and work in Gitwe.

Gitwe: Chief clerk in the Union office

Pastor Mpyisi served as chief clerk at the Union headquarters in Gitwe. He did the job for about six years and was then asked to go and help the white man who was running the school. It was then that Pastor Mpyisi was asked to return to Gitwe to work in the Union office in 1944. He replaced Mr. Karera Ephraim (now 112 years old), who later became his son’s father-in-law and who was working in the Union office in Gitwe as a clerk, and then was going to be a deputy state chief in Murama. He did it for about six years. He was later transferred to the school as an assistant to the white man’s principal.

Gitwe: Deputy school principal

Pastor Mpyisi was called on to help the principal of Gitwe School run the school. At this point, he would work and study at the same time. Gitwe was now developing. There was the twelfth grade by then. Students were coming from Rwankeri, Ngoma, Burundi, and Congo.

Nyanza: King’s adviser representing the Adventists

From 1957 to 1959, Pastor Mpyisi represented Adventists in the National Council under the King. At that time the King of Rwanda was Mutara III Rudahigwa Charles Leon Pierre, son of Yuhi V Musinga. The latter was named Charles after Charles Voisin, the

Belgian Resident in Rwanda-Urundi, Leon after Bishop Leon Classe, and Pierre after Pierre Rykmans, Congo-Rwanda-Burundi Administrator. King Mutara III Rudahigwa was the first Rwandan monarch to accept the baptism of the new Christian religion, the Roman Catholic Church and dedicated Rwanda to Jesus Christ King (Christ Roi). His father was called King Yuhi V Musinga (born 1883 – deceased 13 January 1944). In fact, the latter was the king of Rwanda who ascended to power in 1896 and collaborated with the German government to strengthen his own kingship. In 1931 he was deposed by the Belgian administration because of his inability to work with subordinate chiefs and his refusal to be baptized a Roman Catholic. In recent years, Pastor Mpyisi was presented with a Certificate of Merit by Mukabayonjo Speciose, King Kigeli Ndahindurwa John the Baptist's sister, thanking him for representing Rwandans at the National Council of the King (see appendix 3). In the National Council, all religions in Rwanda had their representatives and because the monarch did not want to be the King of the Catholic Church constituents only, he nominated a Seventh-day Adventist, Pastor Mpyisi, to also represent Adventist Church constituents.

Kivoga in Burundi: Secondary school teacher

It was in Burundi that the Adventist Secondary School in Kivoga was established. Pastor Mpyisi is the school's first principal. Due to the current regime in Rwanda, it was not easy for Pastor Mpyisi to return to Rwanda. As a result, after graduating from Solusi University, he was sent to work at the Adventist school which was originally located in Burundi. He says it seemed like he was fleeing because otherwise as a first-generation university graduate, he could have come and gotten a better opportunity at Gitwe, but because he was a Tutsi and the current regime that had expelled the Tutsis, it was not easy to return.

Gitwe: Teacher in secondary school

While Pastor Mpyisi had only been in Kivoga, Burundi, for a year, a white man who oversaw Gitwe Secondary School lost his secondary school teachers. Due to the insecurity of the Tutsis in Rwanda at the time, for Pastor Mpyisi to return to Rwanda, it was necessary to first interview the then-white leader of the Union, Werner, who wanted to bring him back to Rwanda, Kayibanda Grégoire, the then President of Rwanda. President Kayibanda Grégoire asked his advisers how they knew Pastor Mpyisi because he had not already known him. They all agreed that Pastor Mpyisi was a good and impartial person. This is how Pastor Mpyisi was allowed to return to Rwanda. He returned to Gitwe as a teacher. The students loved him, but his coworkers hated him so much. They wanted to kill him. Few of them loved him and advised him to flee the country because they knew there were plans to harm him. It was in 1968 that Pastor Mpyisi fled Rwanda and moved to Congo.

Lulengele in Congo: Missionary

After Mr. Busi advised the Pastor to return to church service, Pastor Mpyisi gave up his work in Ruhango, where he had started his own private business as a businessman (he had been running it there for 7 months). He was also popular with Deputy Chief Kanimba in Ruhango. He initially rejected Mr. Busi's advice. When he returned to Gitwe, he was another Pastor Mpyisi, for he was transformed. It was then that King Mutara III Rudahigwa requested him to be a member of the Royal National Council. He was able to teach his 7 friends who had been working for 7 months in Ruhango to return to the church because they had insisted on not returning. After praying for them, they shared the juice his wife had cooked for them, and in the morning, they went to pray on the hill and sang together. A certain Gishamagwe Enias was the first to return to the church. Then others came back. Missionary Dever asked them to go and preach in Congo. Some went to

Rwese, others to Kisangani, and Pastor Mpyisi went to Lulengele (Lubumbashi), where he was treated for tuberculosis, and went to Louabourg, Kananga, for treatment. He later returned to Lulengele where he was joined by Mr. Edistrum, who used to hate him and was still working in Gitwe. They met, hugged, cried, and reconciled. This reconciliation was a source of great joy to him, and it was his best time to be transformed. They also came to the Lord's Supper with a feet-washing ceremony as a sign of humility and forgiveness, praying together.

Rwese in Congo: Teacher at the pastoral school

After returning to Gitwe, where he had been working for some time, Pastor Mpyisi got a job in Rwese, Congo, at the Pastoral School. In Rwese, Congo, Pastor Mpyisi did well, with white men who knew him and wanted to appoint him Head of the Education Department in Congo. After discussing this with Pastor Mpyisi, he expressed his thought that he was not happy with the idea of working in Congo because his children were studying in Uganda. He wanted to work close to his children's school and work in a paid environment that would help him pay for their school fees. While Pastor Mpyisi was working in Congo, the money currency there had devalued. As a result, he was unable to pay for his children's education in Bugema, Uganda. It was Pastor Staples who took him to the Union to discuss the issue of his children. After the talk, he was sent to work in Arusha, Tanzania.

Arusha in Tanzania: Secondary school teacher

In Arusha there was a pastoral school of the Seventh-day Adventist Church, where Pastor Mpyisi went to teach. Pastor Robinson, who knew him in Gitwe, was the one who sought him out at the school, called Ikizu Secondary School. Here he worked for a short time before being sent to Bugema in Uganda, where his children were studying.

Bugema in Uganda: Teacher and school principal

Pastor Mpyisi was later sent to Bugema by a white man named Busi. Here he taught and later became the school principal. Shortly afterward, he was again sent to Arusha, Tanzania, to teach at the pastoral school because they had enjoyed his teaching.

Kamagambo in Kenya and Nairobi central church

In Kenya, Pastor Mpyisi worked at Kamagambo and Nairobi Central Church. He asserted that his confession had been obtained through hardships. He was the first black man to be able to lead Nairobi Central Church for a long time. He had been sent by a church leader who was living in Solusi, former Southern Rhodesia, and who knew him well. He was certain Pastor Mpyisi would succeed in leading the Church well. Pastor Mpyisi worked there until he retired.

Pastor Mpyisi's wedding

During Pastor Mpyisi's youth, girls and boys did not meet and talk. In school, Mpyisi had no girlfriend. In the church, girls and women were sitting on one side, and men and boys were sitting on the other. Boys and girls did not greet each other. Girls could run away from boys. The husband and wife also did not sit together in the church. This was the practice for a long time. Parents were usually the ones who dated their children. Boys and girls could not see each other because they were not allowed to meet and talk. They were dating without knowing each other.

Mpyisi married a woman one of his male classmates had referred to him. This friend of his was teaching in Bunyambiriri at Gikonkoro. By that time girls had started going to school. The teacher ended up introducing the girl he had taught. Her name was Mukabatsinda Thamar. When Mpyisi went to visit the girl with the teacher who taught her, they found her sweeping the compound. Mpyisi thanked him and sent his elder brother to ask for

the hand of the girl on his behalf. A few days later they brought her to him, and they got married. The wedding took place in Rwamwata at Pastor Mpyisi's home. The parents of the girl and of the boy were not acquainted. What's more, at that time the wedding took place at night. The bride's parents did not attend the wedding at the time. On the girl's side, the men were the only ones admitted to the wedding ceremony, except for one woman (the girl's aunt) who was the best woman. Mpyisi married that woman while working at Ngoma in western Rwanda. They later moved to Gitwe. When Mpyisi's wife was about to give birth to their first child, Pastor Mpyisi sent her home to have her mother help her as a midwife because there were no midwives in Gitwe. Unfortunately, Mpyisi's wife gave birth to a baby girl, but she did not survive. She died while giving birth. The child was raised by her maternal grandmother. Two years later she was taken into foster care. She was raised by Pastor Mpyisi's parents. Two years after the death of his first wife, Pastor Mpyisi remarried his second wife. She was spotted by a young man who was a relative of the girl. He fell in love with a girl from Nyamagana, near Nyanza. She was called Nyirabakiga Esther. They got married and had eight children. In addition to the eldest daughter, Pastor Mpyisi had nine children. Of the nine children, six are still alive and three are dead. Pastor Mpyisi's second wife died three years ago. Pastor Mpyisi is left alone and cares for the children God has given him, and he continues his ministry.

CONCLUSIONS AND RECOMMENDATIONS

The study was conducted using a narrative inquiry design with one purposefully selected participant. The data was collected through interviews, observations, documents, and a literature review. Reported here is the biography that is the initial product of a narrative inquiry. This biography results from restoring, a procedure used in narrative inquiry where the story is chronologically organized to the purpose of the study. The participant of this study

applied the spiritual gifts and skills that he obtained throughout his training in different fields of his personal and work-life experiences. As a result, he made a vast contribution to the development of the Seventh-day Adventist church and schools that he served.

Pastor Mpyisi studied and worked in Adventist institutions that valued education and had a strong spiritual tradition. These experiences shaped him as an Adventist church member as well as a leader who is rooted in biblical faith and values with a rich spiritual heritage. He testifies that his education and career path were progressively designed by God Himself.

He recommends that Adventist Church leaders and church members should accept God's calling and serve Him, regardless of position, time, place, monetary benefits, or other things.

Pastor Mpyisi's advice

To all those who approach him, Pastor Mpyisi advises them to obey the Word of God. They should eat the Bread of Life carefully and have Jesus in their minds and hearts. Biblical verses he urges them to read include 1 John 3:8: "**He that commits sin is of the devil**; for the devil sins from the beginning. For this purpose, the Son of God was manifested, that he might destroy the works of the devil." The recommendation of this study is that aspiring Adventist Church leaders and church members should accept God's calling and serve Him, regardless of position, time, place, monetary benefits, or other things.

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APPENDICES

Pastor Mpyisi's Progeny

Children	Grand children	Great grand-children	Remarks
Nyirakanyana	-	-	Deceased at the early age of eight. Her name was given after Nyirakanyana whom Pastor Mpyisi had known while working at Ngoma
Ngarambe Esdras Mpyisi	2	-	Deceased. The name was given after his friend Ngarambe. His son lives in Canada. He's married.
Bayingana Gerald Mpyisi	5	1 girl	4 girls and 1 boy. The name comes from Runyankole. The grandchild says she will become a missionary.
Mukarumongi Eunice Mpyisi	2	3 (1 from the son, 2 from the daughter)	Both the mother and the daughter hold a PhD
Rutayisire Esri Mpyisi	4	1 (1 from the daughter)	Name from Runyankole
Rutajoga Paul Mpyisi	2	2	Deceased. Name from Pastor Mpyisi's friend.
Rudasingwa Martin Mpyisi	3	1 from the daughter	Name from Runyankole
Mugabo Jérôme Mpyisi	1	-	Short name from Mugabowakigeli (after King Kigeli V Ndahindurwa J Baptiste). Because the monarch was already deposed, bearing such a name was shameful and dangerous.
Rurangwa Edison Mpyisi	5	-	Named so after a friend. Edison loved E.G. White center and because of the conduct of students there, she wanted to imitate their character. She first studied at Weimer College, North Carolina. Now she is at Loma Linda University, California.

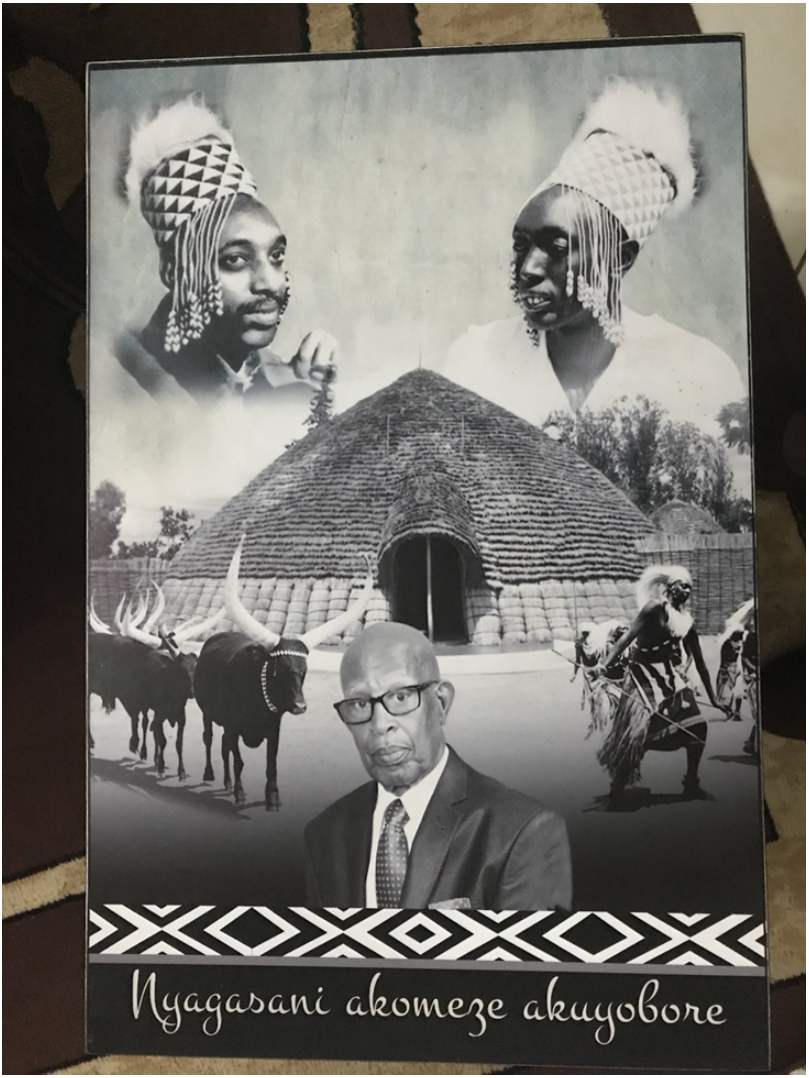
Pastor Mpyisi at the High National Council



Certificate of appreciation awarded to Pastor Mpyisi by King Kigeri V Ndahindurwa Jean Baptiste's sister



Certificate of appreciation awarded to pastor Mpyisi by King Kigeri V Ndahindurwa Jean Baptiste's sister



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DIGITAL NATIVES, DIGITAL IMMIGRANTS, AND TOTAL ENGAGEMENT: BRIDGING THE GAP

Tembinkosi Sibanda[1]

Abstract
The goal of every organization is to take advantage of the innovations that come with the technology change to ensure maximum performance. Therefore, hiring personnel who are well-informed and equipped with 21st-century skills is vital. However, total engagement remains a dilemma in most organizations. Studies have been done on promoting total engagement. Nevertheless, not much has been covered on bridging the gap between the technology-oriented employees—digital natives, and the pre-technology supervisors—digital immigrants. This paper discusses ways to help bring the digital natives and the digital immigrants to an understanding toward ensuring maximum engagement for effectiveness and efficiency in learning institutions. A systematic review was employed, and the analysis and synthesis of the literature indicated the need for considering the digital natives' characteristics as crucial to total engagement in the 21st-century workforce toward effective teaching and learning because it is their needs that determine the needs of the prevalent digital culture.

Keywords
Total engagement, digital natives, digital immigrants, digital culture

INTRODUCTION

According to Joyner, Rouse, and Glatthorn (2013), there are three ways of organizing a literature review in a study, chronological, opposing camps, or conceptual analysis. The nature of this

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study determined the adoption of two of the suggested ways, conceptual analysis, and opposing camps. The conceptual organization guided the identification of major concepts in related literature: digital natives, digital immigrants, and total engagement. The opposing camps organization helped organize, analyze, and synthesize studies on the two opposing groups of people that are the key features in the phenomenon of this study, the digital natives, and the digital immigrants. The literature review section begins with a general discussion in the form of a conceptual analysis. Then, key concepts and how they relate to each other are introduced and defined. In the rest of the literature review sections, opposing camps analysis was employed in analyzing and synthesizing the literature on challenges of total engagement, bridging the gap, and the characteristics of the digital natives compared to the characteristics of the digital immigrants.

REVIEW OF LITERATURE

Rationale

Total engagement is key to maximizing production and retaining customers (Schullery, 2013). It is, therefore, one of the managerial roles to foster and monitor engagement toward meeting the organizational goals (Dessler, 2013; Wiseto, Hubeis, & Sukandar, 2016). Thus, it is imperative to cogitate the differences in the mind-sets of the digital natives and the digital immigrants (Hannay & Fretwell, 2010; Schullery, 2013; Strycharczyk & Elvin, 2014), and how the gap can be bridged to ensure successful total engagement without causing any conflicts (Colbert, Yee, & George, 2016). To understand the two different age-era groups, it is important to recognize their respective characteristics (Hannay & Fretwell, 2010; Kivunja, 2014; Schullery, 2013). Knowing how each group thinks and perceives matters can help address the problem.

An understanding of who the digital natives are, and their characteristics leads to the question: do they think and operate in the

same way with the digital immigrants? The current workforce is gradually getting entirely occupied with digital natives (Schullery, 2013; Strycharczyk & Elvin, 2014). The digital immigrants are slowly phasing out with the passage of time (Hannay & Fretwell, 2010).

However, in some organizations the digital immigrants are in the top positions, leading the digital natives who are in lower positions (Hannay & Fretwell, 2010; Strycharczyk & Elvin, 2014). In schools or learning institutions, from elementary level to tertiary education, the teaching and non-teaching staff is a mixture of digital natives and digital immigrants, whereas the students' body in all levels of education is composed of digital natives, and of course some digital immigrants at tertiary level. The challenge is that with this assortment of these groups with different cultures, whose mindset is totally different, total engagement is compromised.

The digital immigrant teacher (with a pre-technology culture) teaching a grade one class of digital natives must make sure that there is total engagement in the class. On the other hand, the digital immigrant head of the school supervising either a digital native teacher or a digital immigrant teacher also needs to ensure total engagement. Sometimes it is the other way round both the school head and the students' body are digital natives; but amongst the teaching and non-teaching staff there are digital immigrants. Thus, the supervisor and the students are operating within the same mindset and the digital immigrant staff is operating within a different mindset.

The two different cultures conflict each other in many ways, making it difficult for people defined with these different cultures to work together, totally engaged toward meeting the organizational goals. There is a huge gap between their mindsets. Hence, the need to bridge the gap between the two groups to ensure success in performance.

A good repertoire of studies has been done on the characteristics of digital natives (Firat, 2013; Kivunja, 2014) and the

definitions of digital natives and digital immigrants (Firat, 2013; Gallardo-Echenique, Marques-Molias, Bullen, & Strijbos, 2015; Kivunja, 2014; Schullery, 2013; Strycharczyk & Elvin, 2014; Thomas & Willis, 2013). Total engagement has also received a great attention in research (Dessler, 2013; Strycharczyk & Elvin, 2014; Wiseto, et al., 2016). However, little, or close to none has been done on the working relationships between digital natives and digital immigrants with a special concern to employees and students' engagement in a school setting. This study addressed the definitions and characteristics of both digital natives and digital immigrants and tried to provide ways of closing the gap of relationships as a means of ensuring digital natives and digital immigrants' total engagement under the supervision of either the digital immigrants or the digital natives, respectively. Thus, ensuring effectiveness and efficiency in learning institutions toward the desired goals.

Definitions

Digital natives, digital immigrants, and total engagement defined in the organizational context helps explain the current situation at workplaces, which includes learning institutions. The definitions of the three bring to light why it is critical to consider them if organizational goals are to be achieved. The three terms are inevitable and key to organizational success in the 21st century.

Digital natives. Digital is defined as computerized technology (Digital, 1978b). Another dictionary definition says digital is the use of a system where information is recorded and electronically transferred (Digital, 1978a). Native is defined as an association to or of indigenous origin or growth (Digital, 1978a). According to the two dictionary definitions, digital native has much to do with originating and growing in or association to electronic systems.

Consequently, digital natives are people who have used digital equipment since they were young (Digital, 1978a). They learn the language of technology naturally; it is native to them. Kivunja

(2014) asserts that digital natives are a product of a new culture that emerged with the deep penetration of young people in digital technology. He further states that they are, therefore, native speakers of the digital language. This definition describes the young teachers and support staff that just attained their professional qualifications and the entire student body that they deal with in schools, from elementary to first degree levels. A question then arises; how then do these digital natives fair in a workplace in the presence of digital immigrants? The other question that arises is: what can be done to ensure coherence between the two groups toward achieving desired results in schools?

Digital immigrants. Kivunja (2014) says digital immigrants are people born before the aggressive concentration of the digital technology and are therefore in the process of learning the new language—digital language. Therefore, since the digital era defines a certain new culture (Firat, 2013), the digital immigrants are also defined by their own culture, which they adopted as they were growing up and learning to work (Schullery, 2013). They are fluent in pre-digital skills as much as the digital natives have the skills for digital fluency (Colbert, et al., 2016; Kivunja, 2014). These are teachers and support staff who embrace traditional methods of teaching and operations; and they find it difficult to adopt the new strategies that embrace technology. Yet on the other hand the students that are digital natives learn better through current technology strategies.

The digital immigrants—mostly in the management posts (Strycharczyk & Elvin, 2014), are supposed to supervise the digital natives and ensure total employee and learner engagement. However, the digital immigrants are in the process of adopting the digital culture and learning the digital language (Gallardo-Echenique, et al., 2015), whilst the digital natives are getting more and more engaged in the aggressive digital technology, which is developing with every day. One wonders how best they can strike a balance

and keep the boat floating—maintaining total engagement, both on the side of the teacher and the side of the learner.

Total engagement. Dessler (2013) refers to engagement as being involved psychologically and being fully connected with much commitment toward getting the job done. It has much to do with being motivated to contribute to the achievement of the organizational goals by giving all it takes for the employee as an individual to get their job done. Therefore, total engagement is all about having a bound sense to the organization (Wiseto, et al., 2016). It entails being loyal to the organization requirements and having the zeal to do the best and engage the most toward meeting the organizational goals. The organizational goal for learning institutions is to achieve the desired results for the students. Hence, the definition above means the desired results can only be attained through total engagement of the crucial stakeholders: school administration, the teacher, the support staff, and the student.

Importance of engagement. From a business perspective, engaged employees boost customer satisfaction. Every business's success is determined by the satisfaction of customers, which guarantees return business (Schullery, 2013). If employees are totally engaged, they unanimously push toward organizational success. With a bound sense to the organization, they all target meeting the organizational goals, which entail quality services, leading to customer satisfaction, which ensures increased sales and higher profits (Schullery, 2013). As a result, the company realizes higher shareholder returns. Thus, engaged employees are more goal-oriented than salary/benefit-oriented; they are loyal to the organization and do all it takes to succeed (Schullery, 2013). They have neither time nor duty limits, doing all to position everything in place.

In a school setting, the client is the student. The satisfaction of the students determines the success of the school. When the students are satisfied and happy with the services, they will comply with the codes of conduct that are set for the smooth running of the school toward achieving desired results by totally engaging

themselves in all school operations as presented to them. However, the provision of quality and efficient services takes total engagement of the school administration, the teachers, and the support staff. That can only be achieved when these three groups (formed of both digital natives and digital immigrants) are working in harmony to meet the needs of the digital native students.

Fostering engagement. Since the success of the organization highly depends on all parties' total engagement, it is therefore, the duty of every manager or head of department to make sure all the personnel and students in their department are fully engaged. Dessler (2013) suggests that it is crucial to make sure all the employees understand how their department contributes to the company's success. When they realize the importance of their department, they will also realize the importance of their individual efforts, and hence, develop a sense of achievement by being part of the success of the company (Schullery, 2013).

Wiseto, et al. (2016) emphasize that the employees need to have self-initiative. They need to find ways of engaging their talents for the success of the organization. Thus, the management has a duty to induce such behavior from the employees as a way of ensuring total engagement. The traditional team players, the digital immigrants come with some skills that are still useful in the technology era. Their experience is also vital in the successful operations in a school setting. The digital natives also come with their technology skills that are also vital for survival in the technology era, which is determined by a technology culture. It is a management duty to identify these skills from each team player (teachers, support staff, students) in their departments to make sure that each team player whether digital immigrant or digital native is placed at the right place and provided with the needed resources for total engagement. Ensuring balance is key to success and harmonious performance. There is, therefore, a need for the provision of a harmonious environment for digital natives and digital immigrants.

Total engagement challenges in the 21st century

According to research, only about 21% of the global workforce is engaged (Dessler, 2013). Dessler (2013) further asserts that if the company is to have 83% chance performing above its median, there must be high levels of engagement; lowest levels of engagement result to 17% chance of performing above the company median. Hence, high level of engagement is a desire for every company, yet the research statistics indicate a very low level of engagement globally.

It is noteworthy that the current global workforce is a combination of digital natives and digital immigrants (Hannay & Fretwell, 2010; Schullery, 2013; Strycharczyk & Elvin, 2014). In some cases—that emphasize experience, the digital immigrants are in the leadership positions leading the digital natives (Strycharczyk & Elvin, 2014), yet in other cases—that emphasize qualification and skill, it is vice versa; digital natives are leading the digital immigrants. In school settings it is a common norm that school presidents, associate presidents and even a significant percentage of the teaching and non-teaching staff are digital immigrants versus a good percentage of teaching and non-teaching staff and the entire student body that are digital natives. It is, therefore, imperative to assert that the difference in cultures between the two differently oriented subsets of the work-force swimming in the same pool must be one of the major reasons behind the lack of employee engagement at workplace (Hannay & Fretwell, 2010; Schullery, 2013; Strycharczyk & Elvin, 2014).

That same difference determined by the pre-technology era culture and the digital culture affects the teacher–student relationship in a school setting. It may also affect the teaching effectiveness of a digital immigrant teacher. The mindset of the digital immigrant teacher is totally different from the mindset of the digital immigrant student. Hence, the teacher's engagement may be affected by frustration and on the other hand the students may

also disengage themselves from their schoolwork if they are not happy with the teacher that does not meet their needs.

Lack of total engagement compromises production quantity. When teachers and non-teaching staff are not totally engaged, it becomes difficult to achieve the goals of a learning institution. That means the students are not fully attended to, and their needs are not met, which leads to a lack of engagement on the part of the students; hence, they cannot perform well in school. When on the other hand, school students are not totally usually engaged in indiscipline results. Young people always find something to occupy themselves. Their culture, the digital culture, drives them to keep busy. Hence, if they are not totally engaged in their schoolwork, they find other ways of keeping themselves busy. Unfortunately, in most cases, they get into what always leads them to indisciplinary cases; as a result, their school performance is affected, or they even drop out of school. The difference between the digital immigrants' culture and the digital natives' culture is inevitable, yet it affects performance in organizations, leading to failure or challenges in achieving organizational goals. Consequently, to defeat the challenges, there is a need to find ways of bridging the gap between the two different age-era groups to reach a consensus and achieve high engagement.

Bridging the gap

The sudden shift to the online era brings about a lot of changes that organizations need to keep in pace with, to succeed. However, most organizations whilst doing well in the updating of electronic equipment, still lag in the management of human capital. The change in technology brings about irrelevance of some orthodox skills (Kivunja, 2014), yet organizations still hold on to the bearers of such skills as their stronghold, when they have become irrelevant. Thus, the digital immigrants without upgrading and adopting the digital culture become irrelevant, though considered

experienced and loyal. The digital natives are relevant though their loyalty and experience is still questionable in most cases.

Fullan (2014) introduces the concept of right drivers and wrong drivers. According to Fullan (2014), these drivers are policies and strategies that are employed to initiate successful reform in education systems. This reformation is what is needed as we transit toward bridging the gap between the digital immigrants and the digital natives to ensure total engagement that enforces the achievement of organizational goals. Fullan (2014) states that education systems that are doing well in this transformation are those that adopt the right drivers; and those that are still struggling are those that are rigid to adopt the right drivers, hence, they are stuck with the wrong drivers. He further asserts that the right drivers emphasize "intrinsic motivation, instructional improvement, teamwork, and 'allness'" (p. 3) as crucial elements of educational systems reformation. Thus, the right drivers work directly toward changing the culture (Fullan, 2014).

In presenting the drivers, Fullan (2014) begins with the aspect of accountability versus capacity building. Accountability is the wrong driver, and capacity building is the right driver. Accountability focuses on setting standards that need to be met; and designing instruments that will be used for assessment to ensure that everyone is meeting the standards. Punishment and rewards are then enforced accordingly. However, these standards and forms of assessment are demotivators to teachers, non-teaching staff, and students. Besides, their preparation and implementation take a lot of time, distract work time; and are also significantly costly financially. Capacity building entails equipping the personnel with the right skills that they need to perform effectively (Fullan, 2014). It embraces providing opportunities for further studies and skills development that help the individuals to stay abreast in the dynamic digital era. Twenty-first century teachers need to be equipped with the 21st century teaching strategies and skills (Fullan, 2014; Trilling & Fadel, 2009) that help them to be relevant to

the 21st century learners, who are digital natives. The support staff like the information technology (IT) staff, the library staff, and all other departments also need the 21st century skills to work well with the 21st century students and give them the best service. The digital language must be learnt by everyone living in the digital era, especially those serving at institutions that are saturated with digital natives. Hence, there is a need for workshops, seminars, and any other form of learning that can be used to furnish the personnel with the desired skills. Well-equipped personnel is motivated to work, love, and enjoy their work. Hence, efficiency and effectiveness can be realized. Intrinsic motivation is guaranteed when the workers know what they are doing, and they realize the fruits of their labor; thus, accountability results.

On the other hand, when students are providing with enough facilities for learning, they tend to enjoy their schoolwork. Thus, when the teachers and non-teaching staff are well equipped, they will provide the best service to the students and good learning out comes will be achieved. Personnel that is abreast with the 21st century skills are creative and innovative (Trilling & Fadel, 2009). Such teachers, working together with non-teaching staff will provide an ideal environment for the digital natives; and when they are happy, they will be ready to learn. When students are enjoying learning they become motivated; and consequently, accountability is assured. Once capacity building is opted for instead of accountability, then accountability is be guaranteed. Pursuing accountability and putting in place measures that ensure accountability leads to demotivation, no accountability, and failure as the result. However, pursuing capacity building and ensuring everything is put in place toward the training of personnel and provision of the right equipment leads to motivation, accountability, and success. Thus, when the right drivers are employed what is sought for but never achieved when choosing to use the wrong drivers is ensured (Fullan, 2014).

What leads to failure in many organizations, especially learning institutions is the lack of foresight to develop and nurture capacity building. This observation by Fullan (2014) is even more relevant now when technology is more complex.

Since technology is here to stay and keeps advancing every day, there is a need to come to terms with the fact that the digital immigrants are the ones to adjust and adopt the new digital culture and learn to work with, under, and through the digital natives, who are the natives of the digital era and the culture (Strycharczyk & Elvin, 2014). Instead of investing in accountability measures that frustrate and demotivate the digital natives, at the same time being a contrast and irrelevant to the digital era, investment must be focused in equipping the digital immigrants with skills that will help them cope with the digital culture. Capacity building fosters intrinsic motivation. When people are motivated, they get engaged willingly, without any measures set to ensure that everyone is at the right place at the right time; hence, motivation is an important step toward accountability, which in turn leads to the accomplishment of organizational goals, good performance and achievement by students.

On the other hand, if the wrong driver (accountability) is used, people (teachers, non-teaching staff, and students) become demotivated, thus, inefficiency and ineffectiveness are manifested. In fear of punishment, they opt for dishonest ways, manufacturing results that are not true, when work and learning did not take place in the way it was supposed to. When that happens the goal of education that has much to do with character building is not achieved. The aspect of character building as an important facet of education is compromised. Students that are produced from such systems may not perform well at their workplaces, they may have learnt or adopted wrong values form their leaders while they were at school. Hence, the effects are seen in the collapse of economies. A poor education system has a negative economic impact.

Both digital immigrants and digital natives need to work together and be committed in total engagement; but only that can be possible if the gap between the two groups is grouped. Since the digital culture and the digital language are dominating the digital era (Strycharczyk & Elvin, 2014); and the digital natives are quickly flooding the workplaces whilst at the same time the digital immigrants are phasing out, the best ways toward bridging the gap are those that accommodate the digital natives. The first step toward accommodating them is learning about them, getting to understand them.

Kivunja (2014) states that the only way of understanding something new and be able to work with it is to understand its characteristics first. Hence, the only way to understand the digital natives and be able to work with them and ensure they are totally engaged, is to understand how they think, how they want things done, and their general nature (Schullery, 2013; Wiseto, et al., 2016). When their characteristics are understood, effort must be put to meet their needs (Strycharczyk & Elvin, 2014). When their needs are met, they will become loyal to their employers and develop a bound sense to their organizations—total engagement (Hannay & Fretwell, 2010; Schullery, 2013).

Characteristics of the digital natives

Digital natives are used to a lot of social media, they are so connected and, hence, they are natural collaborators (Colbert, et al., 2016; Gallardo-Echenique, et al., 2015; Schullery, 2013; Strycharczyk & Elvin, 2014). Even at work they want to share their ideas within and without the organization. Whereas digital immigrants believe in competition (Hannay & Fretwell, 2010), they also believe that company privacy is key to competitive advantage. Digital immigrants therefore need to realize that collaboration is a digital value, derived from the digital culture that they need to adopt if they are to stand the digital age market competition by keeping the digital natives engaged.

According to Fullan (2014)'s right and wrong drivers, groups achieve better than individuals. He states this set of drivers as group quality versus individual quality. Group quality is the right driver, and individual quality is the wrong driver. Fullan (2014) suggests that if success is to be achieved in 21st-century schools, teachers must work in groups and achieve as a group. Team teaching or co-teaching needs to be embraced by both teachers and students. Students also need to engage in study groups to attain higher achievements. Joyce and Showers (2002), in their training model, assert that study groups are key to success in training teachers for any innovation. Whenever there is a new skill or strategy that teachers need to master, according to Joyce and Showers (2002), mastery is at its best only when teachers have helped each other by working together toward achieving the skill or strategy.

Consequently, Fullan (2014) and Joyce and Showers (2002) agree that collaboration is one of the key characteristics in the 21st century digital culture. Since Colbert et al. (2016), Gallardo-Echenique et al. (2015), Schullery (2013), and Strycharczyk and Elvin (2014) have also identified collaboration as one of the digital natives' characteristics, it goes without saying that what has been suggested by Fullan (2014) and Joyce and Showers (2002) needs to put into consideration for best achievements in schools. Teachers must share their skills and strategies within their schools and other schools and districts instead of competing. By so doing, they will appreciate and adopt the culture of collaboration. When they have adopted that culture, they will, in turn, enforce it in their teaching practice through strategies like cooperative learning; thus, the needs of the digital natives will be met. Teachers must achieve as a team, and students also must achieve as a group.

Collaboration comes with fun. Digital natives love fun, compared to digital immigrants who live for work and no leisure (Hannay & Fretwell, 2010). If workplaces are to be conducive for the digital natives, the digital immigrants must understand that fun is part of life to the digital natives, hence, fun and work cannot be

separated (Schullery, 2013). Where there is no fun less engagement result. There is a need for teachers to bring fun into the classroom. When capacity building is ensured, teachers will understand that collaboration is key in the digital era, and when collaboration is embraces and enforced teaching strategies will bring a lot of fun into the classroom. Policy makers need to adjust the curriculum so that it is flexible enough to accommodate fun, then the digital natives will be fully engaged in their learning.

Critical thinking forms the mind-set of the digital natives. They do not accept and adopt just as given (Strycharczyk & Elvin, 2014), they can analyze and criticize openly. When their opinions are respected or given a chance to be tested, they enjoy the sense of achievement and fill accepted (Hannay & Fretwell, 2010; Wiseto, et al., 2016). They will then want to achieve more for the good of the organization, hence, they will be engaged. Gone are the days when the teacher was referred to as all knowing. Now knowledge is everywhere, hence, teachers need to embrace teaching strategies that promote independent learning. The teacher is now viewed as a fellow leaner in the classroom (Trilling & Fadel, 2009). Learners must be allowed room to share what they discovered on their own. When they are denied that opportunity, learning becomes boring to them, and they disengage themselves. Research and presentations must be promoted.

Critical thinking comes with innovation. Digital natives are exposed to a lot of information (Strycharczyk & Elvin, 2014). Thus, they quickly learn new ways of doing things or even inventing new things (Strycharczyk & Elvin, 2014). Being allowed that opportunity to exercise their maximum innovative potential makes them enjoy work and find it fun. When they think work is fun they stay at work. They become motivated and they feel wanted, hence, they become loyal to the organization and give all their time and skill to working toward the organizational goals (Wiseto, at al., 2016). Participation is also part of their nature. When their innovation is accepted and put into use, they feel as effective

participators in the success of the organization. In learning institutions policy makers and implementers must enforce a curriculum that allows for innovation. Students must be engaged in projects that bring solutions to the problems in the community or society. When they see that their projects are appreciated and accepted, they will be motivated to learn, and hence, become engaged. Teachers and learning institutions must provide guidance in such projects (Trilling and Fadel, 2009).

As much as they are always ready to learn, they only want to learn what they must learn. They have no time for learning stuff they feel they do not need there and there. Digital immigrants also need to accept that digital natives are well-informed, they learn a lot from the net (Strycharczyk & Elvin, 2014). Their attention span is limited. They also learn fast. Hence, they do not want to be bored with what they already know or with what they can learn on their own from the net.

When their characteristics are identified, they need to be embraced. When they are embraced by the 21st century systems, digital natives will be totally engaged. On the other hand, the systems need to make sure that the right drivers are adopted instead of the wrong drivers. When that is done, total engagement by both the digital natives and the digital immigrants will be ensured; and thus, the gap between the two groups will be bridged and totally engagement by teachers (either digital natives or digital immigrants) and students that are digital natives will be certain.

METHODOLOGY

The literature review integrative methodology was adopted. In integrative approach to literature review different perspectives related to the phenomenon are combined toward established a theoretical model (Snyder, 2019). Scholarly books and journal articles related to the phenomenon in question were surveyed, analyzed, and synthesized. The analysis and synthesis of related literature resulted in the findings presented in this article as a

contribution to the board of knowledge in addressing the 21st Century challenges. General literature review can be defined as a "systematic way of collecting and synthesizing previous research" (Snyder, 2019:333). According to Snyder (2019). Literature review is a building block for all informed research studies because all research studies are built on or related to knowledge that is already existing. Employing literature review as a methodology allows for a more effective exhaustion of the flooded literature in any given field (Snyder, 2019). Therefore, literature review methodology in research provides a firm foundation in the process of advancing knowledge in any field. It also facilitates the development of a theory that can be adopted and implemented for better practices.

In this study a wide pool of recent literature was reviewed. Because of the nature of the phenomenon in question, only recent studies were reviewed to promote relevance in findings. Literature review methodology allows for a vigorous review of literature, thus, the analysis and synthesis of literature in this study provided findings that make up a theory that can be adopted by 21st century learning institutions as a way of closing the gap between the digital natives and the digital immigrants.

Ethical considerations

The work that contributed to the results of this study was credited to the original authors through in-text citations and a provision of a reference list. This paper represents the original work of the author, it is not a copy of any work published before, neither does the author consider publishing it through any other platform.

RESULTS

Serrat (2017) defines culture as the "totality of a society' distinctive ideas, beliefs, values, and knowledge" (p. 31). As noted in earlier sections, the digital natives are a product of a new culture, the digital culture. Culture is a manifestation of how humans make

sense of their environment (Serrat, 2017). Therefore, since the digital culture is the prevailing culture in the 21st century organizations, it means that the digital natives are the ones determining the prevailing environment in organizations. Consequently, the characteristics of the digital natives suggest the values of the digital culture and digital language. The digital immigrants must, therefore, adopt these values if they are to work well with the digital natives (Hannay & Fretwell, 2010; Strycharczyk & Elvin, 2014; Wiseto, et al., 2016); since the digital natives are the product of the digital culture, which is here to stay. By so doing the workplace, including learning institutions will be characterized with high level of employee engagement; and the students, who are digital natives will be totally engaged in their schoolwork and positive outcomes will be realized.

Serrat (2017) asserts that culture has a significant contribution in the development of organizations where different groups are working together in harmony. This assertion agrees with Schullery's (2013) assertion that total engagement is key to maximizing production. When the gap between the digital natives and the digital immigrants is bridged, the two groups will work together in harmony; and total engagement will be assured; and that promotes development toward attaining desired outcomes.

As highlighted in the literature review, both groups need each other for improved practices. The cultural theory that pays attention to common needs in a society affirms the importance of focusing on the organization as a whole; but at the same time not ignoring the parts that make up the whole (Serrat, 2017). Thus, focusing on the characteristics of both groups and their relationship with the environment that is determined by the digital culture may assist in coming up with strategies that may lead to the implementation of better practices toward fostering total engagement. By so doing, proper contextualization will be ensured, and positive results will be yielded.

The cultural theory also affirms that the survival of organizations depends on the fact that they are comprised of social beings with unique ideas that, when pooled together, provide an informed whole (Serrat, 2017). The digital natives and digital immigrants with vast differences in their mindsets can successfully work together, but only when best practices that bridge the gap between them are implemented. Therefore, open-minded leadership will recognize the characteristics of the two groups, understands them, and put in place best practices to bridge the gap between them; then, total engagement will be ensured.

CONCLUSIONS

It is imperative to note that the key to total engagement in the 21st century systems is meeting the needs of the digital natives (Strycharczyk & Elvin, 2014), because they determine the needs of the digital culture. Administrators must promote a well-balanced working environment conducive for the satisfaction of the digital natives and when they are satisfied, they will become self-motivated and engagement will be maximized; characterized with employee retention, good attendance, psychological involvement, and commitment to work (Dessler, 2013; Schullery, 2013). They will also develop a spirit of accountability and loyalty to their organizations (Wiseto, et al., 2016).

When they are dissatisfied, there will be less engagement characterized with poor attendance to duties, high and voluntary turnover, psychological withdrawal, and no commitment to work—eventually they leave in search for satisfaction (Schullery, 2013), in case of learners in learning institutions they may even drop out of school. Digital immigrants must make sure they treat the adoption to the digital culture as a matter of urgency. Adoption of digital culture and digital language entails upgrading themselves with the digital skills.

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