Exploring the Digital Transformation of Teaching-Learning Experiences of the Baby Boomer Generation

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ABSTRACT. Before the coronavirus pandemic, digital transformation of education has been more or less an area of science rather than a widespread practice in the Philippines, most especially in schools in the provinces. However, despite the unpreparedness of educational institutions, the digital transformation of education had to happen overnight, which greatly challenged the digital skills of teachers, especially those of the Baby Boomers. Utilizing a generic qualitative research approach, this study explored the lived experiences of the Baby Boomer generation in the digital transformation of the teaching and learning process. The participants were chosen using the purposive sampling technique. The data were gathered from the six full-time online teachers utilizing the unstructured in-depth interview. The iterative process was observed during the interview until the saturation point was reached. The gathered data were analyzed using Lichtman's 3 Cs, the coding, categorizing, and forming concepts. The study revealed three themes with nine sub-themes. Their experiences on surpassing challenges and difficulties include facing uncertainties and doubts, conquering fears and reservations, and overcoming limitations and frustrations. Their experiences specific to upgrading and recalibrating oneself include learning independently, seeking help from experts, and investing in technology and gadgets. Their realizations of positive outlook include preparedness leads to success, positive attitude creates positive outcomes, and commitment ensures survival.

1.0. Introduction

Digital transformation is a critical process to integrate digital solutions into our everyday lives. It affects different sectors, for example, businesses (Andal-Ancion et al., 2003; Rogers, 2016), industry (Ustundag & Cevikcan, 2017), or health care (Agarwal et al., 2010). However, the digital transformation not just enhances traditional solutions but can lead to innovative approaches. Further, digital technology in the modern world is not only a tool but also a living environment that opens up new opportunities: learning at any convenient time, continuing education, etc. (Bilyalova et al., 2020). There was already a demand to integrate digital solutions into education (Warschauer, 2007; Dede, 2011).

However, digital transformation is a slow process in education which only became an urgent topic due to the COVID-19 pandemic (Ngwacho, 2020). Across the world, governments have brought forth some mitigation measures, such as utilizing remote learning to manage and cope with the crisis. Accordingly, the World Bank is working effectively with many countries to support the efforts implemented by many Ministries of Education to offer remote learning opportunities when schools are closed. Further, many organizations partner with the World Bank to provide mechanisms for providing remote learning using various information communication tools (The World Bank Education Global Practice, 2020).

Before the coronavirus pandemic, e-Learning has been more or less an area of science rather than a widespread practice (Mladenova et al., 2020) in the Philippines. Remote education is not a novel solution, but it is not common, especially in the provinces. With DepEd reiterating that the Philippine educational system is not yet ready for online learning (The News Lens, 2020), it faced both students and teachers with new and unexpected challenges (Bogdandy et al., 2020) just to continue with the teaching and learning process.

The outbreak of COVID-19 came to awaken the education sector in most countries, including the Philippines, for all levels. As the issues of social distancing and other health protocols remain active to avoid the spreading of the virus, it is difficult for the education sector to go back to the old ways of teaching. The lockdown caused discussions on online learning and the use of television and radio for revision among the education. Various organizations have mounted several responses to mitigate against the loss of time because of the lockdown. This pandemic has motivated digital transformation in the education sector including the creation of virtual learning, the use of zero-rated applications and educational websites, the launching of digital schools, and, finally, the sector generally switched to remote learning (online learning) using various 4IR tools (Mhlanga & Moloi, 2020).

In mid-March of 2020, nearly all private schools and universities held online classes (Ngwacho, 2020) as part of their learning continuity plan. However, the survey results revealed that the digital transformation of education due to the COVID-19 was not smooth and without challenges (Bogdandy et al., 2020). COVID-19 presents unique challenges like continuing teaching while maintaining a physical distance. The digital transformation of education had to happen overnight. Higher education has been somehow prepared since students get their teaching materials in electronic format for years. Thus, higher education is more flexible and open for changes than lower levels of education, specifically on Basic Education. The unforeseen circumstances made the transition much faster as expected (Mladenova et al., 2020). Many schools were caught unprepared for the online learning modality.

Since COVID-19 is a new occurrence, there has been limited work investigating teachers' experiences during the digital transformation of teaching and learning in the education sector during the pandemic (Nelson, 2008; Bond et al., 2018; Suarez-Guerrero et al., 2016). Further, no study was conducted specifically to the lived experiences of teachers who belong to the Baby Boomer generation in private institutions specific to teaching in the digital world. Thus, this study was conducted to fill in the gap in the literature.

This study intends to investigate the lived experiences of the Baby Boomer generation in the digital world of teaching. Further, the findings provided the baseline data for the recommendations intended to the administrators, teachers, and future researchers.

2.0. Methodology

Utilizing a qualitative research design, this study used the generic qualitative approach (Lichtman, 2014) to explore the lived experiences of the Baby Boomer generation in the digital transformation of teaching and learning. A generic qualitative approach is used to explore and understand a phenomenon and the perspectives of the people concerned.

The data were gathered from the six participants chosen using criterion sampling, which is one of the purposeful sampling techniques. The chosen participants are Basic Education full-time teachers who belong to the Baby Boomer generation (ages 55-60) who are still teaching using the online learning modality. They were coded as Participant 1, Participant 2, and so on to ensure anonymity and privacy. The data were gathered through an unstructured in-depth interview adhering to all the minimum health and safety measures. Creswell et al. (2003), cited in Petalla and Madrigal (2017), suggested that an in-depth interview can be conducted with 3 to 10 individuals who have experienced the phenomenon. After the approval of the gatekeeper, the orientation of the participants was then conducted specifically on the background, objective, procedure, potential risks, and benefits of the study. The informed consent was obtained from the participants after all concerns had been clarified and understood.

The data were collected by observing the iterative process. The researcher prepared the primary question by asking the participants to share their lived experiences in the new modality of delivering instruction. The rest of the questions are probing questions depending on the participant's response. The saturation of data signals the researcher to stop until the sixth participant. Saturation point means there is already the repetition of the themes, and no new insights are developed from the participants. The data explication was done using Lichtman's (2014) three Cs, the coding, categorizing, and forming concepts. The three Cs were utilized following the six sub-steps: initial coding, revising initial coding, developing an initial list of categories, modifying the categories based on additional rereading, revising categories, and moving from categories into concepts.

The data were kept confidential and can only be accessed by the researcher and the auditor. The soft and hard copies of the materials will be properly disposed of and be deleted after a given period.

3.0. Results

The paper aims to explore the experiences of the Baby Boomer generation in the digital world of teaching. To present an organized discussion, this section is divided into surpassing challenges and difficulties, upgrading and recalibrating oneself, and realizing a positive outlook.

Surpassing Challenges and Difficulties

Knowing and recognizing the challenges and difficulties is the starting point of teachers in surpassing them. Since the digital transformation of education is something new in the Philippine education system, most of the teachers' experiences are on the challenges and difficulties they encountered during the implementation of online learning and how they overcome them. These cover how they face their doubts, how they conquer their fears, and how they overcome limitations.

Facing uncertainties and doubts. The participants' narratives demonstrated their insights on the challenges they encountered regarding their doubts about their skills and capabilities as teachers in the new modality. They express their uncertainties due to their lack of training and familiarization with the new teaching delivery. Despite the doubts, however, they were able to perform their responsibilities. This was highlighted when one of the participants said:

> "I am not sure If I would be able to easily adapt the new learning modality due to lack of training and exposure perhaps. I am still having doubts that my strategies may not be effective. But, I don't have a choice at the moment. I need to teach my students." (Participant 4)

Conquering fears and reservations. Skills, competence, and sufficient training in the use of technology are some of the reservations that added to the challenges and obstacles the Baby Boomers encountered in their experiences in the digital world of teaching. They fear that their experiences as teachers would not be effective without their competence in using technology. One of the narratives of the participants emphasized their reservations with the online learning modality despite their teaching experience and how they conquered them. One participant expressed:

> "At my age, though I am an experienced teacher, I am not very good at using the technology especially computer which is very important today. But I know there is no harm in trying." (Participant 3)

Overcoming limitations and frustrations. The participants' narratives articulated their insights on the difficulties they encountered relative to their load of work and the restricted schedule for synchronous classes. They usually get frustrated knowing the impossibility of accomplishing things within a limited period. Nevertheless, teachers always find ways to deal with difficult situations. As explained by one participant, she needs sufficient time to get things done, which is expected from her:

> *"Sometimes I felt stressed and frustrated because there are so many lessons that I need to explain and discuss yet there is limited time. I found it difficult and tiring, and I struggled a lot. But I always find a way." (Participant 2)*

Upgrading and Recalibrating Oneself

Accepting the challenges brought about by the digitization of the teaching and learning process, teachers were able to upgrade, recalibrate, and equip themselves with the needed skills and competencies by learning independently, asking help from experts, and investing in technology and gadgets.

Learning independently. Doing things on their own is one of the best ways of learning things. This type of learning would provide the teachers the opportunity to be able to identify what they need to learn to enable them to function as teachers in the digital world. As one of the participants explained:

> "I do research on the things I want to learn. I will not stop until I learn it myself. I have to be innovative by exploring techniques and strategies on my own that would make my lesson more interactive and interesting." (Participant 4)

Asking for help from experts. Asking for help from others reinforces one's growth mindset. There is a bigger chance of learning and making progress when they ask for help from those with the right knowledge, skills, and resources. Asking for help is not a sign of weakness but rather gives chances for learning to happen. One participant explained the reason why asking help from experts is necessary:

> "I struggle a lot, especially on uploading my lessons and activities from my modules to the LMS. I asked for help from my subject area coordinator, who is an expert in computers. I even asked help from my niece every time I have problems with technicalities."(Participant 2)

Investing in technology and gadgets. The digital transformation of teaching and learning requires upgraded technology and strong internet connectivity. The success of one's synchronous class depends on these. To be ready for the online learning modality, teachers need to invest in technology that the institution cannot fully provide. Notably, one of the participant's concerns is on the internet connectivity and compatibility of her gadgets for online classes, claiming that:

> "I find online learning challenging because of the internet connection at home. My laptop is quite old, which is not compatible with the demands of my work at present. So, I personally pay for the improvement of the internet connection at home. I availed of the upgrade and paid the additional fee." (Participant 1)

Realizing Positive Outlook

Surpassing all the challenges, the teachers appreciate more and value their realizations from their experiences. These realizations are preparedness leads to success, a positive attitude creates positive outcomes, and commitment ensures survival.

Preparedness leads to success. The participants' accounts revealed their insights on the importance of preparedness specific to content, pedagogy, and assessment. In all aspects of life, preparedness lessens all possible hindrances to success. Preparing for every day's responsibilities as a teacher would help reduce fear, anxiety, and worries about what is in store for them. One of the participants emphasized the importance of being prepared when she mentioned:

> "I usually have my week planned out ahead of time to make sure that my activities are flexible for the students to learn what is there to learn. I think that makes it work. I made it work. And I liked it." (Participant 5)

Positive attitude creates positive outcomes. The participants' narratives demonstrated their insights on realizing how important a positive attitude is. The one thing needed in achieving the desired outcome is having a positive attitude towards one's goal. This was highlighted when one of the participants said:

> "I have accepted the challenge during this time of virtual classes by being flexible and adaptable. That's what's important. I am well-adjusted to my work now since everything becomes a routine. I do not worry anymore." (Participant 2)

Commitment ensures survival. Work commitment brings ownership in an organization that usually makes the person hurdle challenges along the way, no matter how complicated. When there is commitment, all challenges can be turned into something meaningful worthy of surpassing. In one of the narratives of the participants, she emphasized her realization of the importance of commitment when she expressed:

> "It is difficult, but I know I am not the only one in this situation. Teaching must go on for the sake of the students and for the sake of the school. I am retiring. This cannot be a hindrance for completing my journey as a teacher." (Participant 6)

4.0. Discussion

Baby Boomers were able to identify challenges they encountered in the digitization of the teaching and learning process. Difficulties like the inadequacy of teacher ICT competencies (Ballena & Feranil, 2021; Stoffregen et al., 2016; Ferri et al., 2020) and the difficulty to adapt to a flexible learning environment and situations due to the sudden change from a traditional model to a technology-mediated instruction (Géring & Király, 2020; Lagat, 2020) were some of the identified causes of uncertainty and discomfort in the teaching experiences of the Baby Boomers. Added to their frustrations are the amount of time needed, the development and implementation of course materials, the ability to meet the needs of a diverse group of students (Archambault, 2010), the lack of structured content versus the abundance of online resources, and lack of interactivity between the learners and teachers (Ferri et al., 2020).

However, despite these challenges, teachers were able to identify ways to overcome them. Training teachers in the use of technology has been identified as the key to the success of the technology adoption process in education (Aldunate & Nussbaum, 2013). There are more opportunities to explore innovative solutions to overcome limitations, including designing effective online curricula and properly planning and scheduling activities based on observable learning experiences and outcomes (Zayapragassarazan, 2020).

Aside from the training needs the teachers identified, they also believed that they could improve themselves on their own and through the help of other people. Teachers engaging in independent learning modes (Jones & Dexter, 2016) made highly efficient use of their time and allowed them to bring their own new and creative ideas into the school as they researched specific areas of interest (Jones & Dexter, 2014). Furthermore, since the experience is on the delivery of online instructions, they acknowledge the importance of online facilities and equipment. This limitation is not entirely referring to the available number of online facilities but is also associated with their quality. Thus, they have to invest in good-quality gadgets and other technologies that can be utilized in the online teaching and learning process (Dashtestani, 2014; Shin & Son, 2007). Similarly, learning from others means accepting sufficient support and assistance from those who are more knowledgeable to enhance capabilities (Petalla & Madrigal, 2017) and increase teaching enthusiasm and performance (Sutrisno et al., 2016). In this case, Baby Boomers need assistance from experts in technology utilization and integration to education.

The whole experience of engaging in a new learning modality makes Baby Boomers develop a positive outlook as teachers. A teacher can attain success in the classroom if and when equipped with the theoretical and practical skills required to implement online learning. Teachers need interactive techniques and procedures during online instruction (Dashtestani, 2014). A positive attitude is needed in achieving the desired educational outcome. Since teachers occupy pivotal roles in motivating students to learn, the positive perspectives of teachers on the implementation of online instruction would motivate students to learn (Dashtestani, 2014). Successful online instruction requires teachers' positive attitudes (Jones, 2001; Dashtestani, 2012). Making students learn despite the challenges of the online learning modality is one step to self-fulfillment among teachers. Self-fulfilled teachers are highly motivated, committed individuals who can translate, adapt, and develop their teaching skills to the online environment and are willing to learn to continue improving their practice for the next challenges to come (Archambault, 2010).

5.0. Conclusion

Teaching in any learning modality and any generation or age range is a continuous process of winning over challenges and obstacles to achieve success in effective teaching and learning. Despite the challenges and difficulties in the digital transformation of the teaching and learning process brought about by the pandemic, the teachers were able to upgrade and equip themselves with the needed knowledge, skills, and attitude to achieve educational goals in the new mode of teaching delivery. The demands of the digitization of the teaching and learning process may be overwhelming to the Baby Boomer generation. However, the teachers were able to continuously adjust to the newness and unfamiliarity of the new teaching modality because of positivity and commitment to success.

To aid teachers with the demands of the new learning modality, the following recommendations were suggested: (a) the administrators may provide teachers the opportunities for further training and even support them with the needed technology and internet connectivity; (b) teachers may

evaluate their experiences in the online learning modality to identify areas for further improvement; (c) future researchers may conduct a similar study to the same generation of teachers at the tertiary and graduate levels to also check on their experiences to look into the possible support the university can give to the teaching force; (d) the same study may be conducted to the young generation of teachers to have a comparative data as to their lived experiences in the new learning modality; and (e) future researchers may also conduct more comprehensive research on the lived experiences of students in the digital transformation of the learning process.

6.0. Declaration of Conflicting Interests

7.0. Funding

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