Journal of Research, Policy & Practice of Teachers &
Teacher Education (ISSN 2232-0458/ e-ISSN 2550-1771)
Vol. 14, No. 2, October 2024, 78-88

Teaching encounters of digital immigrant faculty members of BASC in the usage of infused technology

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To cite this article (APA): De Guzman, J. M. F., & Hipolito, Y. E. C. (2024). Teaching encounters of digital immigrant faculty members of BASC in the usage of infused technology. *Journal of Research, Policy & Practice of Teachers and Teacher Education*, *14*(2), 78–88. https://doi.org/10.37134/jrpptte.vol14.2.7.2024

Received: 24 September 2023; Revised: 24 November 2024; Accepted: 30 November 2024; Published: 31 December 2024

Abstract

This study examined the teaching experiences of digital immigrant faculty members at Bulacan Agricultural State College (BASC) in the Republic of the Philippines in the context of 21st-century instruction. It focused on their perception of infused technology teaching methods alongside with traditional methods. The study explored the faculty members' perceptions, challenges, and opportunities when incorporating technology in their teaching. Through in-depth interviews, the research aimed to identify potential solutions and enhance their pedagogical prowess in utilizing technology. A descriptive-qualitative research design was employed, utilizing a phenomenological approach to explore the everyday experiences of the participants. Purposive sampling selected ten faculty members aged 40 to 65 for in-depth interviews. Thematic analysis identified recurring patterns and formulated themes capturing the main ideas derived from each question. The findings indicated that digital immigrant faculty members recognize the importance of being technologically knowledgeable and acknowledge the benefits of technology for student learning. However, they preferred a blended teaching approach that combines traditional and technology-infused methods. Challenges they faced include internet connectivity issues and limited technology knowledge for pedagogy. To address these challenges, the study recommends providing regular technology training for faculty, improving facilities, and continuing to use blended learning as a flexible teaching approach. These recommendations aim to support faculty development, enhance technological resources, and meet the needs of modern education.

Keywords: Blended teaching, digital immigrant, faculty development, infused technology, traditional methods

Introduction

As COVID-19 continues to impact the world, including the Philippines, various challenges arise across different domains, particularly in the areas of health and daily life. The educational system of the Philippines has also been significantly affected, with the need to halt traditional forms of learning due to the potential risks posed by in-person gatherings in schools. Organizing such gatherings would require extensive planning, leading to the development of alternative mechanisms to ensure the continuity of education. Among the available options, online distance learning emerged as a viable solution, although it is still considered a partially prepared innovation in the Philippines. To implement this approach effectively, faculty members teaching in the Higher Education Institutions (HEIs) in the country were required to adapt and enhance their skills to meet the demands of the new initiative (Pressley & Ha, 2021). More so, Post-COVID-19 conditions have stabilized with vaccination efforts, allowing for a gradual return to normalcy with ongoing precautions like mask-wearing. Economically, recovery is underway but disparities persist, impacting businesses and education. Internationally, varying vaccination rates contribute to divergent recovery speeds, with some regions still grappling with significant outbreaks and economic setbacks. Overall, while progress is evident, challenges persist both domestically and abroad in the post-COVID-19 landscape.

In the digital age, there are two distinct classifications: digital natives and digital immigrants. It is assumed that digital natives are the generation of young people born in the digital age, who are technologically savvy by nature (Prensky, 2001). Digital immigrants, on the other hand, are those who have learned to use computers at some point in their lives. It is believed that digital immigrants resist or have difficulty accepting new technologies (Vodanovich et al., 2010). According to Howlett and Zainee Waemusa (2018), both digital natives and immigrants agree on the effective use of mobile devices (technology) in their classroom teaching and learning. However, they discovered significant differences in their classifications, with a notable gap between the two. As a result, one should consider the teaching experiences of digital immigrants among faculty members, as well as the integration of infused technology teaching in their classes.

Consequently, it is anticipated that digital native faculty members will have limited concerns regarding technology literacy, whereas digital immigrants, on the other hand, may require support to focus on technology literacy and stay abreast in the vast digital landscape (Nikou et al., 2019). Likewise, research has indicated that digital immigrants and digital natives exhibit contrasting patterns in their utilization of digital technologies, influenced by different factors that shape their intentions to use such technologies (Nikou et al., 2019). This body of literature specifies that these two distinct classifications possess divergent knowledge, experiences, and perceptions regarding the use of modern technology for academic or instructional purposes.

As per the challenges of the 21st century, faculty members need to reassess their competency profiles to empower their students. Both teaching strategies, the traditional way and distance-online method and the competencies acquired by students must adapt to meet the needs of 21st-century learners (Caena & Redecker, 2019). This need was further emphasized with the outbreak of COVID-19, which prompted faculty members to employ digital skills in various ways to deliver instruction. Consequently, faculty members must be prepared to implement necessary changes and adapt to the increasingly demanding digital age.

As we approach the post-pandemic era, the college administration and digital immigrant faculty members may need to develop programs to fulfill their responsibilities as educators in helping students adapt to the required 21st-century skills, considering the usage of infused technology as modernized way to cater the learners' needs in the current time. Additionally, for successful learning to take place, faculty members and students should consistently align instructional strategies with learning styles (Autry & Berge, 2011).

Furthermore, administrators can play a crucial role in promoting faculty members' professionalism through digital literacy. Strategies implemented by administrators should include, but not be limited to, the provision of digital literacy-supporting facilities and objectives, the enhancement of literacy through e-Learning, the facilitation of faculty and education personnel attendance at seminars, training sessions, or technical assistance, and the support of teacher working groups or collaborative efforts among administrators (Aprilia Purnama Sari et al. 2020).

Nevertheless, upon reviewing the aforementioned literature, it becomes apparent that a significant portion of previous research has predominantly focused on comparing digital natives and digital immigrants solely in terms of digital literacy, thereby highlighting the dominance of digital natives. However, there exists a gap in investigating the teaching experiences of faculty members who are digital immigrants in Higher Education Institutions (HEIs) in the Philippines, as compared to the broad generalizations drawn from the plethora of research conducted in previous years. Recognizing that digital immigrants may exhibit less confidence in utilizing technology, researchers aim to conduct a localized study within State Universities and Colleges (SUCs) in the Philippines to address this gap and provide valuable insights.

With regard to the specific locality of this study, Bulacan Agricultural State College (BASC) has gained recognition over time for its highly accomplished faculty members who have served as public employees across various academic ranks, including assistant professors, associate professors, and full professors. It is evident that a significant portion of these tenured faculty members falls under the classification of digital immigrants, given their age range of 40 to 65 years (Hoffmann et al., 2014). Conducting a study to assess their proficiency in utilizing infused technology teaching methods as educators could greatly contribute to the improvement of BASC's technological landscape, thereby further enhancing its educational offerings as it strives towards achieving university status.

Digital and internet technologies are gaining popularity in schools, and as educational institutions incorporate these technologies into their classrooms, educators must adapt and evolve accordingly (Starkey, 2020). Whether they are digital natives or immigrants, many teachers have successfully adjusted to using digital technology as a necessity in their teaching practices. Consequently, numerous educators have successfully met the challenges posed by the digital age. However, there are still educators who encounter difficulties and face various teaching-related issues, which can be categorized into personal, instructional, and relational themes (Farmer & West, 2019). To gain a deeper understanding of this prevalent phenomenon, the researcher aims to identify potential solutions through in-depth interviews with digital immigrant faculty members. The objective of this study is to address these issues, which are crucial for the overall development and proficiency of faculty members.

Conceptual framework

This study aims to explore and address the experiences of digital immigrant faculty members as they navigate the integration of technology into their teaching practices. The research focuses on three key objectives: understanding faculty perceptions of technology-enhanced pedagogy, identifying the challenges and opportunities they encounter, and developing strategies to improve their technological proficiency and pedagogical effectiveness. By examining these dimensions, the study seeks to provide valuable insights into how digital immigrant educators perceive and adapt the infused technology teaching, highlighting areas for professional development and institutional support. This framework is essential for enhancing the quality of education and ensuring that all faculty members are equipped to meet the demands of 21st-century instruction, ultimately contributing to the advancement of Bulacan Agricultural State College's goals to improve its educational landscape.

Research objectives

As objectives of the study, the researchers sought to investigate the teaching encounters of digital immigrant faculty members of Bulacan Agricultural State College in the midst of 21st Century instruction. Hence, this study specifically aimed to attain the following:

1. describe the perception of the digital immigrant faculty members on use of infused technology teaching as pedagogy;
2. determine the challenges and opportunities that the digital immigrant faculty members face in infused technology teaching;
3. determine ways on how to improve the usage of infused technology teaching by their pedagogical prowess.

Methodology

Research design

In order to investigate the teaching experiences of digital immigrant faculty members at Bulacan Agricultural State College, the researchers employed a descriptive-qualitative research design. This involved conducting thematic analysis of the collected data through interview guide questions, which were selected to align with the nature of the study. The qualitative descriptive approach was chosen as it allows for a comprehensive summarization of specific events experienced by individuals or groups of individuals (Kim et al., 2017).

In line with this, the researchers employed a phenomenological approach in this study, as it aligned with the nature of investigating the teaching experiences of digital immigrant faculty members at BASC. The phenomenological approach is well-suited for this study, as it allowed for the exploration of the everyday experiences of individuals while suspending the researchers' preconceived assumptions about the phenomenon. This approach enabled deeper insights into how people understand and interpret their experiences (Bliss, 2016).

Sources and materials

Regarding the implementation of the qualitative data gathering, the researchers utilized a researcher-made list of interview questions that were aligned with the questions relevant to the qualitative part. To ensure the validity of the interview guide questions, the researchers sought the expertise of Social Science research experts for their validation.

After the deliberation of the researchers in choosing the participants, the researchers formulated a written consent for the chosen participants as part of the protocols before starting an interview (Padgett, 2017). To ensure that the participants would be confident that their answers will be kept confidential, they were briefed by the researchers regarding the procedures of the interview which are based on the Republic Act No. 10173 that pertains to *"Data Privacy Act of 2012"* (National Privacy Commission, 2016).

Data collection techniques

In terms of the data gathering procedure, the researchers initially coordinated with each college/institute at BASC Main Campus to identify the faculty members who would participate in the data gathering process. The researchers specifically focused on faculty members within the age range of 40 to 65 as respondents for the qualitative data gathering, as this age bracket is widely recognized as "digital immigrants" by information and communication technologists (Lay, 2019). Each dean and/or associate dean of the four institutes and one college selected two faculty members to participate in the qualitative data gathering, targeting digital immigrants. To achieve this, the

researchers employed purposive sampling, a type of nonprobability sampling that aims to select a sample that can logically be assumed to represent the population (Lavrakas, 2008).

For the qualitative data collection, the researchers conducted in-depth interviews with ten participants who served as informants. These interviews focused on exploring the participants' teaching experiences in relation to the use of infused technology in higher education. All the interview sessions were conducted in in-person manner (during the free time of those faculty-participants and the researchers) and recorded via cellular phones with consent form.

Sampling procedure

After identifying the respondents from each college/institute, the researchers provided instructions to them regarding the schedule and guidelines for the data gathering process, which encompassed qualitative data collection. Furthermore, during the actual interview, the researchers personally posed the interview guide questions to each respondent. Table 1 table shows the participants' information:

Table 1

Participants' Information

Participants	Age	Sex	Field of specialization	Academic rank
Participant 1	42	Female	Information technology	Instructor II
Participant 2	52	Female	Geodetic engineering	Assistant Professor II
Participant 3	57	Female	Science	Associate Professor III
Participant 4	46	Female	English	Associate Professor III
Participant 5	48	Female	Social Science	Assistant Professor III
Participant 6	55	Female	Mathematics	Associate Professor IV
Participant 7	43	Male	Agriculture	Instructor III
Participant 8	44	Male	Business management	Assistant Professor I
Participant 9	48	Male	Business management	Assistant Professor III
Participant 10	50	Female	Agriculture	Associate Professor III

Data analysis scheme

The researchers employed thematic analysis to analyze the responses of the informants following the qualitative data gathering. Thematic analysis is a method used to examine qualitative data by identifying, analyzing, and reporting recurring patterns within a dataset (Kiger & Varpio, 2020). The researchers transcribed the gathered data to identify codes for each informant's responses and subsequently formulated themes that captured the main ideas derived from each question.

In this matter, Coding will be used as the process of data analysis as defined by Charmaz (2006) and Urquhart (2013) as the process of attaining conceptual labels into data. The researchers based the data analysis procedure on the steps given by Lichtman (2006) as follows:

1. Creating initial coding: The researchers independently read back to the original interview transcriptions and reassigned response codes to different themes that best represent them.
2. Revisiting initial coding: The gained initial codes from each researcher were deliberated to identify the final initial codes for each response. Moreover, in this analysis stage, the researcher now entered one of the two phases of coding; the Cooling Analysis (or Open Coding) pertains to the raw attempt to analyze data through reading and rereading (Forbes, 2022)
3. Developing the list of central ideas: The codes modified in Step 2 were reorganized from one long list of codes into several lists of categories. Then the research team members independently can examine the possible themes from the responses by seeing the initial similarities and differences of the codes.
4. Modifying the initial list: After having the Cooling Analysis, the researchers did the Warm Analysis (or Axial Coding) that comprises the stage where codes may merge (Forbes, 2022). In implementing this stage with the current study, the researchers identified the similarities of the codes' ideas.
5. Moving from codes to themes/concepts: Pursuant to those extracted similarities, the researchers identified the perception of the digital immigrant faculty members on the use of infused technology teaching as pedagogy, The challenges and opportunities that the digital immigrant faculty members face in infused technology teaching, and the ways to improve pedagogical prowess for effective infused technology teaching.

Findings and discussion

This study analyzed the teaching encounters of digital immigrant faculty members of Bulacan Agricultural State College regarding the use of infused technology teaching as pedagogy in the context of 21st-century instruction. Therefore, the following paragraphs present the obtained results and the corresponding discussion, which are aligned with the objectives of this study.

The perception of the digital immigrant faculty members on the use of infused technology teaching as pedagogy

In order to describe the perception of digital immigrant faculty members regarding this technology-driven education, they were asked about their beliefs regarding the use of infused technology teaching as a method of instruction in higher education. A glimpse of their answers is in table 2.

Table 2

Participants' Responses on the Use of Infused Technology Teaching as Pedagogy as a Method of Instruction

Participant	Responses
Participant 4	In this present generation, both the teachers and the students must be knowledgeable in the use of technology to adapt with the demands of Global Education.
Participant 9	Teachers should use infused technology in teaching because we are now in a technology-driven world wherein education requires educators to be equipped with various tools to help students develop a better understanding of the lesson. The use of technology in teaching can enhance the learning experience and provide greater flexibility and access to information.
Participant 10	Integrating technology into classroom instruction shows how to deepen and enhance the learning process.

Based on the responses of the digital immigrant faculty members of BASC, two themes can be identified, (a) the importance of teachers being technologically knowledgeable, and (b) the enhanced learning experiences for students through technology. The participants expressed the belief that teachers should possess technological proficiency with various modern gadgets to effectively implement infused technology teaching. They recognized that this technology-driven approach enhances students' academic experiences in the academe.

Further analysis indicates that these educators, despite being immigrants in the Computer Age, recognized the benefits of using infused technology teaching in higher education pedagogy for the 21st century. They understood that technology plays a crucial role in shaping the way students learn and engage with information. These digital immigrant faculty members came to appreciate the value of infused technology teaching in enhancing the teaching and learning process. By embracing infused technology teaching, these educators demonstrated their commitment to leveraging technological advancements to create effective learning experiences for their students.

The result complies with the study of Stošić (2015), wherein educational technology offers benefits beyond convenience in teaching. Both teachers and students can gain from its implementation. Firstly, teachers can use educational technology to improve their teaching methods, making learning more interactive and engaging. They can utilize multimedia tools, simulations, and online collaboration platforms to create immersive learning experiences that cater to different learning styles. Secondly, students themselves find advantages in educational technology. It promotes student-centered learning by encouraging active participation and self-directed exploration. Students can access a wide array of online resources, educational apps, and multimedia content, enabling them to reinforce their understanding and delve deeper into subjects they find interesting.

For further enrichment of the interview, the participants were asked during the data collection if infused technology teaching differs from traditional teaching. Their responses are as in the table 3.

Table 3

Participants' Responses on the Difference of Infused Technology Teaching on Traditional Teaching

Participant	Responses
Participant 1	The inclusion of technology in delivering the lesson such as the use of power points, projector, Smart TV, PDF, videos and movies and other applications, whereas in traditional education, the teacher only needs chalk, marker, whiteboard or blackboard, printed and handwritten visual aids. In digitizing education, we use modern technologies that will help our institution be more effective and meaningful.

continued

Participant 3	Infused technology teaching provides richer context, a larger access to perspective and more motivating activities than traditional educational approaches. It is more interactive and memorable than lengthy textbooks or one-sided lectures.
Participant 5	Traditional education is limited only to resources being provided by the teachers, while digital ones are somehow unlimited and easy-access that also offers various forms that can be learned by the students at their own pace.

Drawing from the participants' responses, two themes can be identified, (a) the distinction between infused technology teaching and traditional education in terms of using modern technology versus old materials, and (b) the interactive nature of infused technology teaching compared to the resource-based nature of traditional education. Furthermore, all of these educators expressed agreement that modern technology emphasizes the integration of contemporary tools and techniques in instructional delivery. They also acknowledged the benefits of technology-infused teaching, as it fosters more interactive classes compared to the traditional approach.

Further analysis suggests that digital immigrant faculty members of BASC perceived a significant difference between infused technology teaching and traditional teaching, notably as they experienced both approaches during the latter stages of the COVID-19 pandemic. This unique circumstance provided them with valuable insights into the strengths and limitations of each method. They recognized that infused technology teaching offers unprecedented opportunities for interactive and engaging learning experiences, while traditional teaching methods foster face-to-face interactions and personal connections. By having experienced the challenges and benefits of both approaches, these faculty members possessed a nuanced understanding of the diverse instructional strategies available to them. Their experiences during the pandemic highlighted the importance of adaptability and flexibility in teaching and the necessity of continuously evolving their pedagogical approaches to meet the demands of the ever-changing educational landscape.

Over and above that, Ragad Tawafak et al. (2020) stated that e-learning systems have become increasingly prevalent in the 21st century. These systems have been developed based on original models and aim to improve academic performance and satisfaction among learners in higher education institutions. The use of e-learning systems has demonstrated a positive impact on students' continuous intention to use such platforms, leading to improvements in their perception levels and academic performance.

Moreover, the researchers also wanted to know the perceptions of the digital immigrant faculty members if they were to choose between traditional teaching and infused technology teaching, which they would prefer. Gist of their answers are as in table 4.

Table 4

Participants' Preference between Traditional Teaching and Infused Technology Teaching

Participant	Responses
Participant 2	I will choose both because I want to use the Blended style of teaching. In fact, that traditional way of teaching cannot stand alone without the presence and the benefits that we can gain through technology-laden teaching.
Participant 7	Ultimately, the best approach is often a blend of both traditional and infused technology teaching, where the strengths of each approach can be learned to create a comprehensive and effective learning experience, "Blended learning or hybrid learning
Participant 8	I still have to combine the two especially when the digital ones are still impractical to afford.

Based on the responses of these digital immigrant faculty members of BASC, the participants expressed that they prefer a combination of traditional teaching and infused technology teaching, commonly known as "Blended or Hybrid Learning." They appreciated the integrated features of both approaches, as the choice between traditional instruction and infused technology teaching depends on several factors, such as instructional goals, learner needs and preferences, and the subject matter being taught. Their responses highlighted the importance of infused technology teaching in adapting to the needs of the 21st century. However, they also acknowledged the effectiveness of traditional instruction, especially in situations where challenges in technology usage arise and hinder the teaching process.

Further analysis suggests that the participants' preference for Blended Learning styles revealed their recognition of the advantages and value that traditional and technology-infused teaching methods bring to education. They understood that by combining these two approaches, educators can capitalize on the strengths of each and create a more dynamic and captivating learning environment. Blended learning integrated face-to-face interactions and digital tools, resulting in a well-rounded and flexible learning experience. It acknowledged the importance of direct teacher-student engagement, classroom discussions, and hands-on activities characteristic of

traditional teaching. At the same time, it harnesses the power of technology to enhance learning through multimedia resources, interactive online platforms, and collaborative tools. The participants' inclination towards Blended or Hybrid Learning reflected their awareness of the changing educational landscape and the evolving needs of students in the 21st century. They recognized that technology has become an integral part of students' lives and incorporating it into the learning process can foster increased student engagement, active participation, and the acquisition of essential digital skills. However, the participants also stressed the significance of not dismissing the effectiveness of traditional instruction, particularly in situations where technological challenges or limitations arise. They acknowledged that certain subjects or topics may necessitate a more traditional approach, or there may be instances where in-person interactions and physical resources are crucial for optimal learning outcomes.

The above result was justified by Lochner et al. (2016) from their study in which they investigated how students perceived their learning experience through the combination of traditional anatomy lectures and preparatory e-learning activities, such as fill-in-the-blank assignments, videos, and multiple-choice quizzes. The modification of existing resources enables classes to integrate efficiently and cost-effectively with preliminary e-learning activities. The inclusion of online components promotes well-structured courses, reduces student passivity typically observed in lectures, and assists students in effectively managing their study time throughout the term, thus suggesting improved learning outcomes.

The challenges and opportunities that the digital immigrant faculty members face in infused technology teaching

To identify the obstacles and potential advantages experienced by faculty members unfamiliar with digital tools in their teaching endeavors, they were questioned about the challenges and opportunities they've encountered while incorporating technology into higher education instruction. A summary of their responses regarding the challenges they face is provided in table 5.

Table 5

Participants' Experienced Challenges in Using Infused Technology Teaching

Participant	Responses
Participant 2	Typically, the challenges that I have encountered in using these infused technologies are in the part on how to utilize them properly.
Participant 4	This has limitations in terms of accessibility for everybody, and it demands proficiency and literacy in technology to attain both teaching and learning success.
Participant 5	I usually experience poor internet connection. I usually encounter poor internet connectivity while I'm teaching online.

It can be inferred from the participants' responses that they encounter two significant challenges when using infused technology teaching, (a) internet-related issues and (b) limited knowledge among teachers regarding technology use. The participants expressed difficulties in accessing various internet sites due to poor connectivity within the school premises while attending to school tasks. Additionally, some educators find it challenging to effectively utilize these technologies due to their limited knowledge and familiarity with them. These challenges highlight the need for improved internet infrastructure and increased training and support for teachers to enhance their technological proficiency.

On the other hand, in the aspect of opportunities in the use of infused technology teaching, a glimpse of their answers is in table 6.

Table 6

Opportunities that Participants' Experiences in Using Infused Technology Teaching

Participant	Responses
Participant 7	The convenience in looking for materials and references in preparing power points and in constructing test questions.
Participant 8	Information is more readily available, is easier to remember, is stored in greater quantities, is presented more effectively, teaching has become more participatory, knowledge can be shared easily, and enthusiasm in learning has increased.
Participant 9	Infused technology provides me an easy access to knowledge that I could easily share also to my students.
Participant 10	Enhanced learning outcomes, infused technology can help students to learn better by providing them with interactive and engaging context.

It can be observed from the participants' responses that infused technology teaching offers opportunities in terms of convenience and accessibility. All the digital immigrant faculty members of BASC agreed on the benefits of convenient and easy access to materials and references when preparing learning materials. They further emphasized that infused technology could enhance student learning by providing interactive and engaging contexts. According to the participants, this approach ensures that students can enjoy the learning process and remain interested in the subject matter while acquiring knowledge.

Further analysis reveals that the usage of infused technology teaching, as perceived by the digital immigrant faculty members of BASC, presents notable advantages due to its convenience and accessibility. The participants unanimously agreed that one of its key benefits lies in the ease and convenience of accessing a wide range of materials and references for creating engaging learning materials. By leveraging technology, educators can effortlessly gather relevant resources, multimedia content, and interactive tools to enhance the learning experience for their students.

Despite these advantages, the participants also acknowledged certain challenges associated with the use of infused technology teaching. Internet-related issues emerged as a significant concern, particularly in schools with limited internet connectivity. The participants noted that this could hinder their ability to access online resources, conduct research, and engage in online learning activities. Additionally, some educators expressed their limited knowledge and skills in effectively utilizing technology, which posed a challenge in fully leveraging its potential for teaching and learning.

The analysis results aligned with the findings of Foulger et al. (2017) who emphasized the integration of a dedicated technology integration course in the teacher preparation programs of various colleges of education. In contrast, Arizona State University has implemented a distinctive approach known as "technology infusion," which involves the comprehensive integration of technology across the entire program, focusing on content and pedagogy. Over seven years, it has become evident that successful technology infusion necessitates a thorough understanding of technology integration from both conceptual and developmental perspectives. Additionally, careful consideration of organizational factors is crucial for achieving positive outcomes.

Perception on the ways to improve pedagogical prowess for effective infused technology teaching

In order to identify strategies for enhancing the effectiveness of infused technology teaching in 21st-century education, the participants were asked during the in-depth interview to provide their suggestions. A glimpse of their answers is as in table 7.

Table 7

Participants' Suggestions on How to Improve the Use of Infused Technology in Teaching

Participant	Responses
Participant 1	We should continue attending seminars (Face-to-face or hybrid) in relation to the use of infused technology in presenting the lesson.
Participant 5	I can suggest that the faculty must possess the skills in using these technologies though capitalizing themselves on seminars and training.
Participant 6	We should be updated to the offerings that infused technology teaching provides, and we should use the most out of it to leverage the quality of education our students deserve.
Participant 10	Don't be hesitant to invest in learning a core complex yet effective method of integrating technology in education.

Based on the suggestions provided by the digital immigrant faculty members, it is noticeable that teachers should actively engage in seminars and training programs focused on technology integration in education. They emphasize the importance of continuous learning and motivation to explore and utilize technology as an integral part of their teaching responsibilities. The participants believe educators in Higher Education Institutions (HEIs) nationwide should actively seek opportunities to acquire new skills and knowledge related to these emerging technologies. By doing so, they can stay abreast of the evolving requirements of the global society in the 21st century.

It is worth noting that the participants acknowledge the potential areas for improvement in using infused technology teaching in higher education institutions. However, they firmly assert that despite these deficiencies and flaws, there are numerous ways to enhance technology integration into the teaching process. Their suggestions and insights reflect their commitment to adapting to the demands of the digital age and their desire to provide the best possible educational experience for students in the 21st century.

The findings of Williams (2017) support the idea that teacher education programs should establish an effective training system. This system is necessary to equip teachers with updated skills in response to the presence

and introduction of new technology in the classroom. According to the study, teachers regard acquiring technology skills as directly relevant to their teaching discipline. It is crucial to align teachers' skills with the expectations of technology integration, particularly concerning technology tools adopted by schools. Hence, ensuring the applicability of technology in teaching across diverse academic subjects becomes of utmost importance.

Conclusions and recommendations

Based on the investigation into the teaching encounters of digital immigrant faculty members at Bulacan Agricultural State College in the context of 21st-century instruction, the researchers drawn the conclusion that the perception of digital immigrant faculty members regarding infused technology teaching as pedagogy emphasizes the importance of teachers being technologically knowledgeable and recognizes that students have enhanced learning experiences through technology. Further conclusion indicates that the challenges faced by digital immigrant faculty members in implementing infused technology teaching include issues related to internet connectivity and limited knowledge of technology among teachers. On the other hand, they recognize the convenience and accessibility that infused technology teaching offers. Another conclusion justified that to enhance their pedagogical prowess in infused technology teaching, it is suggested that digital immigrant faculty members should actively participate in seminars and training sessions focused on technology integration in education.

Likewise, the researchers proposed recommendations that all colleges and universities should organize regular seminars and training sessions for digital immigrant faculty members to ensure their continuous development and proficiency in utilizing technology as a learning tool. Researchers also recommends that all colleges and universities should enhance its facilities and resources to align with the demands of infused technology teaching in the 21st century. Moreover, the researchers saw that all colleges and universities should continue to embrace the Blended Learning Modality as a teaching approach, even as the COVID-19 pandemic nears its end. Blended learning offers academic flexibility to both students and teachers, allowing for a combination of face-to-face interactions and technology-enabled instruction.

Conflict of interest

In conducting the study, *"Teaching Encounters of Digital Immigrant Faculty Members of BASC in the Usage of Infused Technology,"* the researchers encountered a few potential conflicts of interest. As researchers, they recognize that their own experiences and perspectives with technology could have influenced their observations and interpretations. For instance, their familiarity with digital tools might have shaped the way they interacted with and assessed the faculty members' experiences.

To mitigate these biases, the researchers made a conscious effort to approach the study with an open mind and actively sought feedback from a diverse team of colleagues. The researchers also ensured that the findings were reviewed by external experts to maintain objectivity and credibility. The researchers are committed to transparency and believe that acknowledging these challenges strengthens the integrity of the research.

Author contribution

In the study, *"Teaching Encounters of Digital Immigrant Faculty Members of BASC in the Usage of Infused Technology,"* each author played a crucial role. Mr. Jose Marie F. De Guzman led the research design and data collection, while Mr. Yosef Eric C. Hipolito handled the data analysis and interpretation. Hence, they both contributed valuable insights through literature review and helped shape the manuscript. All authors collaborated on drafting and revising the paper, ensuring that each perspective was reflected in the final publication. Their combined efforts aimed to provide a comprehensive view of the challenges and successes faced by faculty members integrating technology into their teaching.

Data availability statement

The researchers are committed to transparency and the sharing of knowledge to advance research in the field of educational technology. In the study, *"Teaching Encounters of Digital Immigrant Faculty Members of BASC in the Usage of Infused Technology,"* the researchers have gathered qualitative data through interviews, surveys, and classroom observations to explore the experiences of faculty members as they integrate digital tools into their teaching practices.

To ensure that our findings are accessible and reproducible, the researchers have made the data available to the research community. All relevant data are can be accessed upon request. Please contact us at frjmdeguzman@gmail.com or yosefhipolito19@gmail.com to request access to the data or for any additional information about the study.

The researchers believe that by sharing this data, we can foster collaboration and contribute to a broader understanding of how technology can be effectively infused into teaching practices. Thank you for your interest in this research.

Acknowledgement

The author expresses gratitude to the Bulacan Agricultural State College for their financial support, guidance, and valuable analysis of the study's results. Additionally, the author extends appreciation to the faculty who actively participated in the study.

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