



## **Enhancing Student Learning Experience through Gamified Library Instruction: A Perception Analysis of Library Personnel on Gamification**

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# Enhancing Student Learning Experience through Gamified Library Instruction: A Perception Analysis of Library Personnel on Gamification

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## Abstract

**Statement of the Problem.** Librarians have long been diligently working to effectively introduce and educate students about library resources and services through library instruction. However, today's modern students consider library instruction uninteresting. In an attempt to pursue an innovative strategy for delivering library instruction and engaging pedagogy, gamification was recognized as a tool for enhancing students' learning experiences.

**Methods.** This qualitative study explored how the Polytechnic University of the Philippines (PUP) library personnel perceived gamification as a library instruction tool to enhance students' learning experience. It also sought to determine the participants' perceived preparedness and potential challenges they would face should they adopt gamification using a semi-structured interview and thematic analysis. Using a purposive sampling technique and a semi-structured interview with 11 participants who were directly involved in providing library instructions to students. Interviews were conducted face-to-face or online lasting 30-40 minutes with informed consent provided. The interview transcriptions were analyzed to reveal the patterns and themes relevant to the objectives of the study.

**Results.** The study revealed that most PUP University library personnel must familiarize themselves with gamification. However, most perceived it as a potentially effective tool for library instruction that could positively enhance the student learning experience. While perceived positively, participants acknowledged their current unpreparedness of the concept, considering various resources, knowledge, and skills necessary for implementation. The study revealed a spectrum of approaches and strategies proposed by participants to address and mitigate potential challenges while ensuring a prepared and effective gamified library experience. Furthermore, the researchers recommended strategies for integrating gamification into library instruction.

**Originality.** The study is original as this was an initial attempt to explore the perception of personnel at PUP University Library on integrating gamification in library instruction as a tool to enhance students' learning experience. While gamified library instruction is not a new topic in the LIS profession, librarians' perception, familiarity, and perceived challenges of incorporating gamification in library instruction in most Philippine academic libraries has not been fully explored.

**Keywords:** Gamified library instruction; Learning experience; Knowledge transfer

## **Introduction**

Libraries are part of the changing world, and the changes force the profession to rethink and re-examine its practices and thinking, demanding professionals to have an open mind and strive for continuous learning (Rubin & Rubin, 2020). At present, it is a well-known fact that libraries are not the only information sources in the game (Felker, 2014); thus, library personnel are to keep up to justify their significance in their respective communities continuously. Along with more strengthened and accessible library collection and efficient services, the competencies of library personnel should also be enhanced and improved to better serve their patrons.

In the Philippines, among the several academic libraries is the University Library of the known Polytechnic University of the Philippines (PUP), whose mission is to provide quality library services to its various stakeholders, serving and helping its parent institution's mission and vision. They are entrusted with providing relevant and timely resources and services to assist their information consumers' academic and professional needs. One of these various services they offer is library instruction. The PUP University Library primarily conducts library instruction through orientation sessions, especially targeting incoming freshmen. These orientations are typically scheduled before the start of classes and are aimed at familiarizing students with the library services. The library orientation was conducted a month after classes began, but it has since become a traditional practice at the university. The orientation covers information about library services, and website navigation, and encourages student interaction within the library. Currently, the library instruction methods include traditional approaches such as written instructions on the website, personnel stationed at library entrances for queries, and librarians available at different sections for assistance. Additionally, there's an emphasis on using audiovisual instructional materials designed to enhance engagement and compatibility in the interest of modern learners. The instructional approach has evolved from simple narration to incorporating audiovisual elements to better capture the attention of students during library instruction or orientation sessions. This particular service allows end-users to understand how to effectively and efficiently use library resources and information and acquire basic skills to identify, locate, search, retrieve, and exploit information in the library (Omeluzor et al., 2017). While this library instruction has been present to educate, traditional methods such as plain instruction tend to be perceived to be dull for the younger generation (Brull & Finlayson, 2016; Dicheva, 2015), students lack interest (Omeluzor et al., 2017) as well as library anxiety were also experienced (McPherson, 2015), thus, insufficient to turn the students' heads back to the library resources and services, and not as responsive to modern times. Hence, the challenge of making library instruction more engaging, interesting, and fit for modern users further to improve students' practice and learning experience is a relevant and timely conversation. Consequently, several librarians have sought fresh and innovative methods to meet the academy's needs and connect to their users. This is where gamification offers a strategy and enters the game.

## **Related Literature**

"Gamification" was coined by Nick Pelling in 2002, but the word became widely used in the half of 2010 (Kim, 2015). It is the adaptation of appropriate elements of a game to a non-game context to elicit a gameful experience (Sailer et al., 2017), thus its term

gami-"fy" -ing (Kim, 2015). In the scientific literature, research on gamified learning experiences has shown that gamification is effective for engaging and motivating the learners to drive their behaviors and influence the required outcomes; through it, a student also learns by experiencing a problem directly and finding out the right and wrong answers based on actions that they take (Brigham, 2015). Hence, it enhances the whole learning experience of students. On the other hand, studies also revealed that some librarians experienced challenges with this method regarding effort, workload, and familiarity, while some perceived stress and cognitive load, frustration, and annoyance (Majuri et al., 2018). Although its concept is not as new as it seems (Dicheva, 2015), gamification is undoubtedly a trend (Felker, 2014); it has gained momentum in business, marketing, and wellness initiatives, penetrates the educational 2 setting (Dicheva, 2015), and eventually in the four corners of the libraries. It was the subject of the American Library Association (ALA) annual conferences and reported by the New Media Consortium (NMC) Horizon for higher education for three consecutive issues (Felker, 2014). Consequently, some international academic universities have positively responded to it (Kumbhar, 2014). Some of the well-known academic libraries in the Philippines, University of the Philippines (UP) - Diliman and De La Salle University (DLSU), have already conducted their first-ever library gamification initiatives through their "The Great InfoHunt" (The University Library, 2023) and "IamInfoSMART amazing race" (Yap & Penaflor, 2020), respectively. It was also discussed in the conducted "1st Marina G. Dayrit Lecture Series 2015" of the Philippines Association of Academic and Research Librarians (PAARL) (Vitug, 2015).

Despite the positive notes about gamification, librarians must strive and develop methods to combat current challenges that come with it. To address the issue of dullness and uninteresting instruction, they are to render an exciting and better learning experience for the end-users by incorporating innovative strategies in their library instruction. At the height of the trend and recognition of its positive impact on learning experiences, gamification presents a compelling opportunity worth exploring. This qualitative study aimed to examine the perceptions of selected PUP-University library personnel on applying gamification to their library instruction as a tool to enhance students' learning experience. This study further explored the respondents' perceived preparedness in applying, gamification and the potential challenges that gamified library instruction could bring to PUP-University Library. Should gamification be regarded as a considerable and positive tool in enhancing library instruction, engaging pedagogy, and learning experience, the researchers further explored the library's capability to sustain gamification on the specified library service. Furthermore, this study intends to help more libraries and researchers identify and understand the perspective of librarians on this gamified strategy, along with the reasons behind their perceptions, thus assisting them in recognizing factors that hinder or boost motivation and innovation in library instruction practice and pedagogy. Finally, this study sought to raise awareness about gamification in libraries as a new avenue to explore and may serve as a basis for further improvement.

## **Materials and Methods**

This study employed a qualitative research approach to investigate the perspectives of library personnel at the Polytechnic University of the Philippines (PUP) concerning the application of gamification in library instruction as a tool to enhance the learning

experience. A purposive non-probability sampling was used to determine the participants, focusing on PUP Sta. Mesa library personnel who were involved in planning and implementing library instruction. Eleven (11) participants, predominantly females aged 31 to 60, shared their perceptions of gamification's impact on library instruction, students' learning experiences, as well as the perceived preparedness and challenges faced by PUP library personnel should they implement gamification. The use of 11 participants in this study is aligned to the research's targeted focus and the specific expertise of the participants. A smaller sample is appropriate for qualitative research, where the goal is to gain in-depth insights, and 11 participants were sufficient to reach thematic saturation. Practical constraints, such as time and access to participants, also influenced the sample size. While it may not fully represent all library personnel, the study provides valuable perspectives, particularly from academic library personnel with extensive professional experience and an understanding of both users and library needs. Previous studies, including studies from private institutions and school libraries, have highlighted gamification's potential, but this study offers different insights through the lens of academic libraries, addressing an important gap in the literature. The study sought to include all the library personnel working under users' services and are involved in the planning and implementing library instruction as respondents due to their direct engagement in planning and delivering library instruction to users.

The study used semi-structured interviews to collect data, as open-ended questions were deemed effective in revealing participants' insights. This type of interview was semi-standardized which initially follows a guide allowing for deeper exploration during the interaction. It contends that although the semi-structured interview provides topic guidelines beforehand, it allows the researcher to delve deeper and make discoveries during the interview (Magaldi and Berler, 2020). The interviews were conducted in two parts: the first part focused on participant profiles and suitability for the study, while the second part involved 11 questions exploring perceptions of gamification, preparedness, challenges, and the potential for integrating gamification into library instruction. These guide questions were grounded on the Theory of Gamified Learning by Landers (2014). Face-to-face and online interviews were conducted, with email communication as an alternative for participants expressing discomfort in in-person or voice-recorded interviews. The mode of interview was determined based on participant preference. The interviews, lasting 30 to 40 minutes, took place inside the premises of the PUP University Library. One researcher conducted the interviews, using notes and audio tapes for recording, and was later transcribed for data analysis. Moreover, thematic analysis was employed to analyze data collected through face-to-face and online interviews, as well as email communication. The thematic analysis of the interview transcripts was used to identify key themes, patterns, and insights from the participants' responses.

The researchers obtained approval from the University Research Ethics Committee (UREC) under approval number UREC-2023-0955 to uphold the ethical standards in data collection, ensuring safety, security, and confidentiality for participants. Participation was voluntary and they were allowed to withdraw at any time during the study. Prospective participants received detailed information on the study objectives and a list of questions as part of their informed consent, allowing them to ask questions and seek clarification before officially consenting. Consent forms were completed by participants to document their agreement. Solely the researchers had access to

obtained personal information, keeping the responses confidential, and anonymized to prevent any form of identification. The researchers prioritized participants' comfort during interviews by using appropriate language and protocols, avoiding offensive remarks, judgments, or leading questions throughout the process.

## **Discussion**

### ***Profile of the Participants***

According to the study by Hinzmann et al. (2019), an employee's seniority affects their level of engagement at work. The researchers glanced at their professional years as well as the number of years working in the institution, as it could substantially influence their profound knowledge of the best strategies and tools for better library instruction and learning experience. Out of 11 participants, six (6) of them have around 11-20 years of professional experience. Additionally, a lone participant is a professional with a non-LIS background. The following results show that the participants have been working in the field for many years, hence their engagement with the services and their clients, which gives their perceptions a significant weight.

Guzzo (2022) claimed that the more experienced an employee is, the better their knowledge of the nature of their job. This accumulated experience then weighs on their knowledge about their clients and services. He further stated that experience favorably impacts the unit's operational effectiveness. The researchers found that assessing the participants' years of experience working as library personnel in the PUP University Library was significant. Most participants have been in the PUP University Library for almost a decade, ranging from 1 to 10 years while others have more than two (2) and three (3) decades of service. Through this, the researchers were able to obtain an overview of their knowledge and breadth of experience, which holds a significant weight on their knowledge of the students being served by the PUP University Library, along with how well-versed they are in the best methods and resources fitting and suitable for the students.

The participants' employment status in the PUP University Library was also significant in the study which revolves around two classifications: permanent and casual. Most of the participants were employed on casual status, indicating recruitment on an as-needed basis. In contrast, the latter number of participants hold a permanent status, which refers to regular employees without a set end date for their current position.

According to Gabagambi et al. (2018), short-term employment contracts or casual employment have various adverse effects on employee engagement compared to employees with permanent job status. Given that their employment is temporary, employees with casual job status might find it challenging to start a program or activity that will sustain itself over time. With this in mind, the researchers sought the participants' employment status, which may influence their personnel's ability to sustain this initiative.

### ***Current Library Instruction Practices and their Familiarity with Gamification***

#### ***Current Practices of the PUP University Library on Library Instruction***

Understanding the current library instruction practices of the PUP University Library should be taken into consideration. Most participants noted library orientation as their library instruction which provides information on the library's collections and services. Hence, this also reflects that participants treat library orientation and instruction similarly in the PUP-University Library.

On the other hand, two (2) participants responded that the University Library also conducts library tours to familiarize the students with the library premises and its services. Whereas, other participants responded that the library utilizes traditional methods, which implies the narration of processes and policies. The participants also stated the recent improvement in their ways of delivery; aside from traditional narration, the library also provides instruction using audiovisual (AV) presentations, reflecting their way of reaching students through the use of modern and electronic mediums, which became more suitable during the COVID-19 pandemic and prevalent among modern-age students. However, according to Dicheva (2015) and Brull and Finlayson (2016), younger generations often view these types of instruction methods as dull. Hence, further improvements to instruction approaches are necessary to make them more impactful and fit modern learners.

#### *Participant's Familiarity with Gamification*

The benefits of incorporating gamification in library instruction have been evident in several studies, thus, the familiarity of the library staff with gamification should also be determined to use it effectively. Most participants needed to be fully aware of the application of gamification in education and librarianship practice, wherein they expressed a lack of knowledge of gamification by admitting to having no prior exposure to the concept. This lack of familiarity contributes to the absence of gamification as a tool used for library instruction. On the other hand, four (4) participants expressed their familiarity with gamification, with one participant stating familiarity with the concept by defining gamification as the inclusion of or using games to communicate with clients. With this, the participants' awareness and understanding of gamification in education and librarianship practice were diverse. This suggests that there was a varying range of experiences and levels of exposure to the application of gamification among the participants. These results align with the study of Adeyemi et al. (2021), which found that one of the reasons behind gamification's absence in academic libraries in their home country is the unawareness of participants in gamification.

#### *Words Participants Associated with Gamification*

Given that some of the participants were familiar with gamification, they provided words associated with it. Most think of gamification as integrating game elements, including challenges and competitions, into teaching to enhance engagement and student learning. On the other hand, three (3) participants associated gamification with providing rewards to students in exchange for the work they put into the process. However, three (3) participants stated their lack of knowledge of gamification. They were new to the concept, stating that their lack of familiarity with it relates to not being into academic or teaching matters.

Nevertheless, even with the previously discovered lack of familiarity of some with the entire concept of gamification, non-familiar participants easily linked gamification with

words they associated with its root word, "game." The words they have associated with gamification are aligned with the identified elements of gamification in the studies of Sailer et al. (2017), Seaborn and Fels (2015), and Wang et al. (2022), which also include rewards, challenges, and games. These displays show that even with little awareness, participants can still grasp and identify the type of concept gamification wants to convey. Additionally, as implied in Landers's theory (2014), gamification could positively affect behavioral and learning outcomes by strategically utilizing game elements.

### *Participants' Gamification Experience*

The data indicated that while some participants claimed familiarity with the concept of gamification before the study, the majority admitted to not encountering actual gamification in library services. Only two participants reported experiences with gamification: one encountered it as a chairman for a spoken word poetry event, and the other used it in a celebratory context with library clients. However, these experiences mainly involved the typical insertion of games into specific programs, which deviated from the study's definition of gamification which emphasizes incorporating game elements throughout the entire learning experience or activity to enhance educational objectives (Sailer et al., 2017). According to this definition, gamification aims to provide a whole 'gameful learning experience,' adding an element of fun to the overall service rather than simply installing a game into a specific program.

These overall results revealed that most library personnel participants had not experienced gamification in library services. This contrasts with the findings of Haasio and Madge (2020), who discovered the potential of gamification in Finnish libraries through ongoing gamified activities and programs promoting knowledge on the subject. This disparity highlights a divergence in the exposure and awareness of gamification practices between the studied group and the Finnish librarians observed by Haasio and Madge (2020)<sup>2</sup>.

### ***Perceived Gamification's Impact on Library Instruction***

#### *Librarians' Views on Incorporating Gamification in Library Instruction*

Participants' perspectives on integrating gamification into library instruction varied, with a majority expressing optimism about its potential to significantly enhance learning, engage students, and foster better communication between library personnel and students. This positive outlook aligns with findings from Alsawaier (2018) and Nurtanto et al. (2021), who suggest that gamification has the transformative power to reshape traditional library interactions. Some participants even envisioned gamification as a strategic tool for promoting the library, expanding student perspectives, and establishing a novel branding for library services, ushering in a fresh and exciting experience for both students and the library.

However, three participants underscored the critical necessity of having knowledgeable staff for the successful implementation of gamification, echoing concerns raised by (Felker, 2014) regarding librarians lacking essential game development skills. These participants also emphasized resource-related challenges, particularly the need for adequate human and financial resources. Additionally,



another three participants stressed the significance of the students' adaptability, suggesting that students' openness and familiarity with this gamification as an instructional method play crucial roles in its success. Furthermore, concerns were raised about the potential limitations of gamification for mature clients in graduate school, where a more direct approach might be preferred due to time constraints and additional responsibilities. These findings underscored the nuanced considerations and challenges associated with incorporating gamification into library instruction, emphasizing the need for a thoughtful and informed approach.

### *Implication of Applying Gamification in Library Instruction*

Most respondents believed that gamification could enhance learning accessibility, ignite student curiosity, and effectively promote library services, resulting in heightened student engagement. This aligns with the positive impact of integrating gamification into education highlighted in the studies of Nurtanto et al. (2021), Dominguez et al. (2013), and Barata et al. (2013), however, the studies also emphasized the need for careful implementation and attention from implementers to achieve the following perceived outcomes.

Despite the overall positive sentiment, three participants expressed concerns about challenges and constraints faced by staff, including issues related to internet access, necessary devices, staff expertise, readiness, and potential workforce and budget constraints. This echoes findings from Felker's study (2014), which argues that librarians may lack the technical expertise required for designing and developing gamified activities. Additionally, two participants adopted a neutral stance, acknowledging both the potential benefits and drawbacks of gamifying library instruction. They saw gamification as a valuable tool for students and an opportunity for institutions to modernize service promotion, yet recognize potential hurdles such as dependency on electricity and internet access. Overall, despite acknowledged challenges, the participants emphasized the positive potential of gamification in library instruction, including increased student engagement, improved service promotion, and enhanced information accessibility.

### ***Perceived Gamification's Impact on Student's Learning Experience***

Gamification in library instruction was perceived to be an effective strategy to enhance student learning experiences, as noted by six (6) participants. They perceived gamification as having the potential to enhance accessibility and engagement in library instruction services, allowing students to derive educational experiences from games. Similar findings from Reed and Miller (2020) and Kim (2015) supported the effectiveness of gamification in helping students understand crucial library functions and encouraging continued use of libraries. Furthermore, participants viewed gamification as a motivating tool that stimulates participation and promotes social interaction, fostering a sense of community.

However, concerns were raised about the practicality of its application, emphasizing the need for skilled staff to ensure the successful integration and motivation of students. Two participants who lack experience or observation in this area chose not to provide an answer, emphasizing the need for exposure to gamification to form an informed perception. Despite differences, there was a shared viewpoint among

participants that, if appropriately implemented, gamification can positively impact students' learning experiences during library instruction, while also emphasizing the significance of competent staff and sufficient resources.

### ***Library's Preparedness to Adopt Gamification***

#### ***Preparedness of Library Personnel to Implement Gamification Initiatives***

Most of the participants stated the unpreparedness of library personnel to incorporate gamification in library instruction. Three (3) of these participants expressed that gamification is indeed a welcoming idea; however, there is said to be a need for the library to have preparation before incorporating gamification in terms of budget allocation for resources and equipment and allowing library personnel to attend relevant seminars or training to attain clear guidelines on how to utilize and implement it. Whereas the other four (4) participants stated that they were not prepared to incorporate gamification since they were not entirely familiar with it, they explained that familiarity and knowledge about gamification were essential because they must first fully understand its functions, how to use it, and how it works before incorporating it into their library instruction. Indeed, their familiarity with and knowledge of gamification enabled them to properly implement and design gamified library instruction that was appropriate and effective for their clients. These results presented similar findings found in the study of Bundang and Rama (2019), who have also discovered that even with the positive perceptions earned by most participants, gamification also presents pressing factors that may hinder its use, such as the lack of training of the employees.

On the other hand, three (3) participants said that since librarians can adapt to change and innovation, they are prepared to implement gamification. They explained that librarians are often the first to adapt to changes, such as those brought about by technological advancement, and were always ready for anything. With this, they were confident that library personnel were prepared to incorporate gamification into their library instruction.

#### ***Factors Influencing Preparedness***

Several factors influencing participants' views on the library's preparedness with gamification were explored in light of the above-discussed preparedness responses. Most participants emphasized the need for training and seminars to educate library personnel about gamification, noting that staying informed about new trends is a common goal among librarians. They believed that conducting such sessions positively influences readiness as it equips staff with broader knowledge about gamification. Additionally, two participants highlighted the influential role of top management in fostering readiness, emphasizing the importance of management support and recognition of the positive effects of gamification. This aligns with Adeyemi et al. (2021), who underscored the significance of management and institutional support for successful implementation.

Apart from these key themes, two other participants mentioned that student openness and librarian interest in gamification also impact readiness. One participant emphasized that students' knowledge and interest in new technologies motivate

librarians to embrace change, while another participant highlighted the importance of librarians overcoming resistance and being open to new concepts. Despite some librarians being resistant, others were eager to learn and practice; with this, a participant called for the need for new and young librarians to take the initiative in introducing new approaches such as gamification. Finally, one participant mentioned that observing how other libraries approach gamification can influence readiness, especially from libraries that were more trained, knowledgeable, and experienced in the subject.

### *Participation in Formal Discussions Focused on Gamification*

In light of the preparedness responses, all participants stated that they had never participated in seminars or webinars focused on incorporating gamification into libraries. While one participant mentioned that librarians regularly attend seminars, they have not received one specific for gamification. The participant explained that the choice of seminars or webinars depends on the library unit's assignment, ensuring relevance to their functions. This targeted approach aims for practical and immediately applicable training, utilizing resources efficiently. Another participant, unaware of gamification, highlighted the importance of the first-time inquiry about it. On the other hand, one participant mentioned experiencing gamification in an icebreaker during a seminar and expressed excitement about integrating gamification into library services to engage students.

Most participants have previously admitted limited familiarity with gamification, while exposure to the concept varied. Some had gained familiarity through experience in different educational settings, while others had no prior exposure. To enhance understanding and potential implementation of gamification, it was suggested that seminars or webinars be organized to provide information and training, especially for those less familiar with the concept. This approach ensures a shared understanding and opens up possibilities for incorporating gamification into relevant activities or practices where gamification could be effective and beneficial.

### *Ability to Sustain Gamification and Key Factors Affecting its Capacity*

Despite expressed challenges to gamification, most participants agreed that should the University Library decide to adopt a gamified library instruction approach, it exhibited substantial capacity to support and maintain gamification initiatives effectively within its instructional framework. One participant expressed optimism, stating:

*We should have a positive outlook on this, and it can be pushed through. When someone takes the initiative, it can happen. That's possible; it can be included in other services or in other projects.*

On the other hand, two (2) participants expressed disagreement with this initiative. They highlighted potential challenges librarians might encounter if gamification were implemented in library services, such as recruitment difficulties and teaching improvements. This finding was also noted in the study of Majuri et al. (2018), NCSU Library (2014), and Felker (2014), emphasizing the importance of addressing issues related to knowledge, funding, commitment, and a willingness to learn in adopting the

service. Despite this, they recognized the potential value of gamification as a viable strategy within library services.

Furthermore, the participants pinpointed key factors affecting more of their capacity to sustain gamification in service. Six participants emphasized the significance of leadership or top management's influence – highlighting their crucial role in successfully integrating gamification through guidance and directives. Five participants also stressed the pivotal role of training and seminars in equipping librarians and staff with the necessary knowledge and skills for effective gamification. Above all, it was a critical factor that librarians live their profession with a proactive attitude towards continuous learning.

Furthermore, the importance of essential competencies was highlighted by three participants, who pointed out skills like technical proficiency, computer and information literacy, adaptability, flexibility, and openness to modern technology as crucial for maintaining practices like gamification. Additionally, financial resources were acknowledged as essential for initiating and applying gamification in library services. As it was seen from the perspectives of Ohio State University, Reed and Miller (2020), North Carolina State University, the University of Arizona, and a few Philippine academic libraries, the implementation of gamified library service calls for a contextual understanding of both challenges and opportunities.

### ***Library's Potential Challenges and Strategies vs. Gamification***

#### ***Potential challenges to face in adopting gamification***

Each participant identified several potential challenges that university library personnel might encounter should they implement gamified library instruction. The researchers found seven themes within the given responses. *Adapting to technology* emerges as a challenge for gamification, with five participants highlighting the necessity of information technology skills for library personnel. This aligns with Fullerton's perspective (2018), emphasizing the importance of technologically related skills in designing gamified activities. However, Felker (2014) noted that this skill becomes a challenge as library personnel are not necessarily trained in the area. In light of this, despite participants perceiving gamification as technology-driven, reports by Yap and Penaflor (2020) and Kim (2015) presented gamified library instruction can occur with minimal digital necessities, suggesting alternative and less complex approaches.

Moreover, the *lack of staff training and seminars* poses a challenge, as noted by five participants, with three acknowledging a *deficiency in knowledge and understanding of the gamification concept*. *Financial resources* are also deemed as anticipated challenges by four participants, however, a lone participant argued against this particular challenge, suggesting the library can develop its own game within existing resources. Whereas, *sound planning and preparation* are deemed necessary by three participants, echoing the words of Felker (2014) stating that designing a gamified program with engaging experiences is not an easy stunt, thus preparation for various measures and strategies is necessary. Two participants further emphasized the significance of aligning gamification with educational objectives and balancing fun and instruction – highlighting the importance of careful preparation. Additional potential challenges include *insufficient human resources* and *staff openness to gamification*.

### *Strategies to Combat Potential Challenges*

Given the challenges, numerous themes arose when asked to suggest how the University Library may address the previously identified potential challenges. Six participants, again, emphasized the crucial role of *training and seminars* in enhancing the knowledge and skills of library personnel for the effective implementation of gamification. They suggested inviting speakers with expertise in gamification could introduce the concept among PUP library personnel, highlighting the need for continuous learning. Three participants stressed that the initiative to bring gamification into practice rests with library personnel, hence the significance of building further knowledge was seen, enough to prompt them to bring gamification to the table. Moreover, two participants emphasized the significance of teamwork in planning and preparing for gamification, stating *collaboration among library personnel* generates diverse ideas and strategies. Alongside this, recommended strategies to overcome potential gamification challenges include benchmarking with experienced libraries, advertising gamification among students, and budget allocation.

In addition, gamification tools can play a crucial role in promoting inclusivity within library services by catering to the diverse needs of all users, including those with disabilities. Studies indicate that gamification not only enhances user engagement and motivation but can also be adapted to ensure accessibility for individuals with various abilities. For instance, digital and audio-based games offer support for users with visual impairments, while simplified rules and flexible gameplay options can assist those with learning disabilities (Kim, 2015; Reed & Miller, 2020). The adaptable nature of gamified systems allows users to progress at their own pace, making the experience accessible to individuals of varying abilities (Fullerton, 2018). Additionally, gamification fosters social interaction and community building, which are essential for inclusivity. By creating opportunities for users to collaborate or compete in a game-based setting, libraries can reduce social barriers, enabling differently-abled users to feel empowered and connected (Felker, 2014). In this way, gamified library services, when thoughtfully designed, can provide an equitable and engaging learning environment for all, ensuring that each user has an opportunity to participate meaningfully.

Overall, despite the varying viewpoints and foreseen challenges, the study reflected a shared understanding among most participants that, if appropriately planned and implemented, gamification may hold the opportunity to shape better library instruction and learning experiences for 21st-century learners including those with special needs. This aligns with Bundang and Rama's (2019) findings, indicating that while librarians perceive gamification as a fresh and captivating method, recognizing challenges necessitates prudent measures for successful implementation.

### **Results**

This study delved into the demographics, experiences, and perspectives of library personnel at the PUP University Library, explicitly focusing on their awareness and perceptions of gamification in library instruction. The following points convey a brief discussion of the findings in response to the statements of the problem:

1. Most participants were in casual employment while some were permanent. All participants are professional librarians, aside from a lone participant classified as library staff. Nonetheless, every participant in the study works under user services and/or is involved in the implementation and planning of library instructions.
2. There were a variety of existing delivery methods for library instruction including traditional narration of policies, orientations, AV presentations, and library tours. With this, the study found a lack of gamification integration in current library instruction. Consequently, it has also been uncovered that most participants have limited awareness of gamification in libraries and instruction.
3. Furthermore, positive perceptions of gamified library instruction persisted, with them viewing gamification as a tool that could be effective in capturing the curiosity and attention of learners, and one that could provide a new outlook for the library. Whereas, some participants expressed neutrality, considering potential challenges like resource limitation and staff abilities.
4. There was also a positive reception from most of the participants with gamification's effect on the learning experience of students. They viewed it as advantageous and recognized its potential as a means to stimulate participation, engagement, and interaction, hence producing a positive impact on the student learning experience.
5. The preparedness of personnel to adapt to gamification was predominantly met with negative responses, emphasizing the importance of addressing concerns, such as budget constraints, resource limitations, and the need for relevant training sessions, through top management support, leadership, team effort, and financial backing.
6. Challenges like budget constraints, resource limitations, and the need for relevant training sessions were identified through this study. Despite this, the majority expressed confidence in their ability to sustain and encourage gamification efforts through different supports such as leadership guidance, relevant training, and financial support.

## **Conclusions**

The willingness, commitment, and proactive attitude of librarians toward continuous learning and capacity building were identified as critical components for the successful incorporation of gamification into library instruction and pedagogy. The study revealed that the PUP University Library personnel positively perceived gamification as a useful tool to enhance students' learning experience. Though challenges in its implementation have been identified and the preparedness of the staff should be developed, they recognized its potential as a means to promote student engagement resulting in a positive impact on their learning experience. This research provided a foundation for further exploration and implementation of gamification strategies in the context of the PUP University Library, with potential implications for enhancing the overall experience for students.

## ***Limitations***

The research solely sought the perspectives of one state university; although previous research and reports on gamification are present, the data on public colleges and universities in the Philippines about the use of gamification is insufficient. This

research seeks to provide further understanding on the matter, however, should one seek a much larger picture, the researchers further recommend in-depth research on a larger sample size which will include the views of other university librarians, in the Philippines, especially in public and rural colleges and universities. Furthermore, the conduct of an actual gamification experiment for the students could be an effective research for further understanding of what gamification is all about. This may also assess the perspective of students on a new library instruction pedagogy.

### Notes

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