

Impact of PLAI-ZamPen programs on librarians' professional development for technological advancement and management

Benhur A. Asid

Western Mindanao State University, Zamboanga City, Philippines; asid.ben10@gmail.com (B.A.A).

Abstract: The purpose of this study is to assess the impact of the programs initiated by the Philippine Librarians Association, Inc.- Zamboanga Peninsula (PLAI-ZamPen) for the last 5 years on Librarians' Professional Development for Technological Advancement and Management. It highlights librarians' adaptation to technological demands, emphasizing skills in software, systems, and data analysis. Employing a quantitative research design with a descriptive survey method, the study utilizes 86 librarian respondents to evaluate its profiles, program impact, and effectiveness variations based on library types, membership duration, and roles. Using tools like the Kruskal-Wallis H Test and Weighted Mean, the study provides a comprehensive analysis, emphasizing the importance of ongoing professional development for libraries to remain relevant and responsive in hybrid learning environments. The findings revealed a significant positive impact, with programs effectively equipping librarians with essential skills and fostering a culture of innovation. The analysis of membership demographics highlights a predominance of academic librarians and a mix of experienced and novice members, underscoring the inclusivity and effectiveness of PLAI-ZamPen's initiatives. In conclusion, this study affirms that the programs initiated by PLAI-ZamPen significantly enhance librarians' professional development, particularly in the realms of technological advancement and management. The positive impact of the programs extends beyond individual skill enhancement; it also bolsters libraries' abilities to adapt to evolving community needs, thereby ensuring continued relevance and excellence in service delivery. It is recommended that continued innovation and expansion of professional development programs, focusing on emerging technological trends and management strategies be considered. Thus, it will enhance librarians' proficiency in digital tools and foster global collaboration, ensuring that libraries remain essential hubs of knowledge and service excellence.

Keywords: *Librarianship, Library management, PLAI-ZamPen technological advancement, Professional development.*

1. Introduction

The Philippine Librarians Association, Inc. – Zamboanga Peninsula also known as PLAI-ZamPen was formally organized on March 04, 2006 through the effort of R. Dante O. Perez where librarians from Zamboanga Peninsula gathered in an occasion for a seminar. PLAI-ZamPen is under the umbrella organization of the Philippine Librarians Association, Inc. (PLAI), and is the only association recognized by the Professional Regulation Commission. The existence of PLAI-ZamPen for more than a decade as regional council giving training, seminars-workshops, activities for National Book Week- and month-long activities, and outreach programs among others have manifested that librarians are not just in the four corners of the library, but are also equipped themselves in managing their libraries in the advent of technologies and other trends.

As libraries are increasingly becoming entwined with technology, from online catalogs to the merging of computing labs with the library. The main mission of libraries is to offer equality of access to information for every clientele and to provide services that enhance the quest for knowledge and

intellectual activity (White, 2012). Library teams are constantly responding to the needs of their community, investing in technology and ideas to increase accessibility and resources for their patrons.

According to Paraschive (2017), that librarians have always been generalists, required to know a little about many subjects, and it's no different when it applies to technological advancement and management in the library. Public librarians might need to be familiar with a diverse range of software and systems. The storage and analysis of large datasets can be a real advantage for librarians as they have the relevant skills and knowledge to make the best use of these massive sources of information.

Moreover, Gregersen et al., 2020 also stressed that librarians are leaders in increasing online access to scholarly information. The librarians are also keys to accessing scholarly articles available to all readers online. The digitization in libraries has also provided information to people who do not have the resources to travel to a particular library. Through this, the librarians are using the emerging technology of the internet to further the timeless mission of providing better access to information. In this way, librarians mostly in academe help students to learn by accessing and using quality information and resources that help them to enhance their study and research skills and explain how to use the latest technologies to enhance their learning.

Furthermore, librarians coming from different types of libraries may adopt new applications that will allow institutions to “unite across international borders and work towards common goals”. This means we could be seeing further collaboration across the globe, enabling libraries to provide improved access to scholarly material and resources. These innovations could also “help libraries to more effectively preserve and mine their collections online”, thereby improving and redefining access for researchers. At this point, Librarians will be challenged to “learn new skills to be able to implement the new technologies for learning, research, and information for their patrons” (Wenborn, 2018).

Today, PLAI-ZamPen has already grown with its increasing number of registered librarians as members, and various programs were conducted to extend their professional development in their respective libraries. Along with this, four (3) research problems were posited to design a training program for librarians from all types of libraries to upgrade their skills and management ability in the hybrid learning environment, to wit: 1.) What is the profile of PLAI-ZamPen librarians in terms of a.) Types of Libraries; b.) Year/s of membership; and c.) Involvement/Role? 2.) What is the impact of PLAI-ZamPen programs on the professional development of librarians in terms of technological advancement and management in libraries? 3.) Is there a significant difference in the impact of programs conducted by PLAI-ZamPen, when data are grouped according to: a.) Types of Libraries; b.) Year/s of membership; c.) Involvement/Role?

To this effect, this study entitled: “PLAI-ZamPen Programs on Librarians’ Professional Development for Technological Advancement and Management” was conceptualized to assess the impact of programs conducted by the Philippine Librarians Association, Inc.-Zamboanga Peninsula in the region. The result of the study will widen the scope of training conducted to enhance the professional and managerial ability of librarians in the advent of technology. As a result, this may benefit not only the librarians and libraries but also to clientele availing the services in the hybrid learning environment.

2. Literature Review and Theory

Researchers have suggested that school librarians are well positioned to assume the role of technology leader (Branch-Mueller & DeGroot, 2011; Everhart & Dresang, 2006; HughesHassell & Hanson-Baldauf, 2008; Johnston, 2012; Mardis & Everhart, 2014; McCracken, 2001; Shannon, 2002; Smith, 2010; Vansickle, 2000). As information technology has become integral in most schools and a vital part of student learning and engagement, the school librarian has an increasingly important role to play in using, facilitating, and embedding this type of learning within the school library and in collaboration with teachers in the school to meet these IT needs. The additional challenge of information literacy is also present, with an abundance of information available to students through access to technology, and a need to be able to sort fact from fiction for educational and personal use.

Current research covers how school librarians are educated pre-service, the importance of IT for students, information literacy related to technology, as well as the need for school librarians to be both educational leaders in their school as well as technology leaders. The following literature review will cover these topics as well as indicate where a need for further research lies, and how this may be addressed.

Lubanga and Mumba (2021) the field of research and development, creativity, and innovation of the library are major points in a technologically driven world and are vital aspects of restructuring library services and products for efficient service delivery and optimum client experience. This study examined the importance of research and development, creativity, and innovation at the University of Livingstonia (UNILIA) library in the 21st century.

Moruf and Dangani (2020) As information technology is becoming increasingly pertinent to academic institutions, librarians and other IT professionals need to master the technology that can be used in academic institutions, as developing digital expertise is fundamental in all academic curriculums. Their study not only discusses the rising trend in library technology particularly in academic libraries but also examines the need to reflect and refocus on how technological developments are influencing their services further.

Shashikumar and et. al. (2019) the authors try to understand the developing trends in technologies to benefit libraries and library professionals. Future changes in the technology of libraries have a full influence on the country in terms of economic, educational, social, environmental, political, and population intelligence. Their study examines the main technological developments highlighted by ALA. Current technology is helping libraries and library professionals improve their quality of services and products. Knowledge of these techniques is more necessary for library professionals to introduce and accept the most recent trends in libraries. In the recent decade, since the latest technologies have been introduced into library systems the advancement in technology has provided numerous library solutions. Library 1.0; Library 2.0; and Library 3.0 have transformed libraries dramatically from traditional library services to new ones. The developments in technology in Library 4.0 provide a blueprint for future libraries and their user services.

Barathi, Loganathan, and Rajan (2017) explained in their paper how technology advancements have enhanced information management and library services. By offering an overview of the difficulties connected to integrating and using emerging technologies and innovative practices inside libraries, this paper fills a gap in the digital library project management literature. Technology that is still developing helps to identify, evaluate, and implement the use of existing and new technology in the management and services of libraries. Challenges arising from library services and management, as well as technological improvements, must be updated regularly to keep up with the fast-paced world.

Mwaniki (2017) study intended to conceive the future of academic libraries in terms of emerging user requirements, new skills for staff, and services provided. The literature of the study demonstrates the development of new technologies and their effects on professionals, library services, and new user requirements. The debates on what library products and services will be in future libraries are gathered in this article. He also examines upcoming research that investigates ways to enhance librarians' professional function. This is a conceptual literature study based on a broad variety of literature theoretically examining professional positions, the library collection, its services, and the evolution of new technologies on the needs of the user. The library will now provide the basis for the future function of the librarian, increasing user requirements and the effect of the provision of services. The development of the library systems and services supplied also influenced technological developments. In the future, how advanced libraries are in the area or country, including Kenya, will rely largely on their developing function. This article provides the skills and services of future librarians with a flexible approach.

Sinha and Gautam (2015) in the operation of libraries and information centers, ICT caused revolutionary changes. Everyday life is marked by the effect of ICT, particularly the WWW and the Internet. Academic libraries are facing problems with the increasing price of learning resources

available. Therefore, consortium methods for acquisition and access to electronic resources by colleges and universities are being embraced and explored.

As cited by Matthew and Baby (2012), according to Katz and Macklin (2007) technology is the portal through which we interact with information, but people's ability to handle information to solve problems and think critically about information tells us more about their future success than their knowledge of specific hardware or software. The academic librarian of this decade must possess a portfolio of technology-related skills to complement and support the navigational skills. Such skills help library staff to manage the information more widely and, in turn, transfer these skills to the users as appropriate. These skills include word processing, desktop publishing, use of bibliographic software packages, spreadsheets, graphics, packages, bulletin-board, familiarity with data and file manipulation, maintaining WWW files, familiarity with local automated systems, IT troubleshooting, and familiarity with different operating systems (Morgan, 1996).

Joshi (2016) stated that the major objective of librarians especially in managing libraries in the advent of technology is to retain the image of the library by using innovative information technology wisely and carefully. Librarians cannot become so carried away by information technologies that they are far ahead of their users. That is another good way to lose users. Librarians must remember the influence that changing generations will have on library services.

Cervone (2010) explained in his study which aimed to explore the difficulties surrounding developing technology and innovation in libraries, as well as their influence. The article provides a broad review of emerging technology and innovation, as well as their application to library practices. Librarians must be vigilant when using vocabulary such as emerging technology because what is new in one area may not be new in another, and librarians must understand how those variances may play out within their broader organizations to maintain credibility. Libraries must indeed be open to new experiences and explore different things with their services and processes. However, because technology evolves at a rapid pace, libraries must be flexible in their evaluation and implementation of new technologies. The author also points out in his paper the challenges surrounding the implementation and use of technological advancement and creative library practices.

3. Conceptual Framework

The study intended to evaluate the impact of the PLAI-ZamPen program/s on librarians' professional development of technological and management skills in libraries.

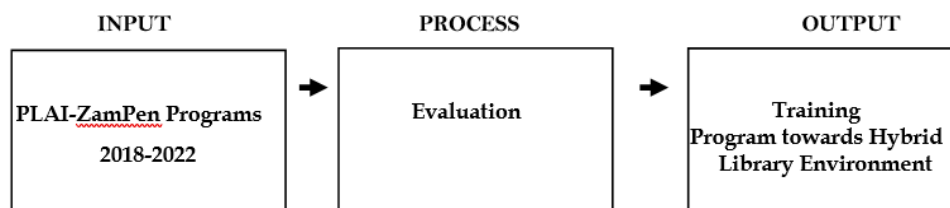


Figure 1.
Conceptual paradigm of the study.

3.1. Showing the Relationship of the Independent and Dependent Variables

The librarian-respondents from the four (4) types of libraries were asked to answer the survey questionnaires via Google form to determine the significant role of PLAI-ZamPen towards the upliftment of the profession in the field of library and information science. The system approach was used to illustrate the flow of the study, and this served as a guide for the researcher in the conduct of the study and will finally design a training program on professional development. The first phase was the *Input*, which includes the PLAI-ZamPen program conducted. The second phase was the *Process* that includes the impact of the programs conducted on library professionals. The last stage is the *Output* or

the expected result of designing the training program for technological advancement and management in libraries.

4. Methodology

This study used a quantitative research design employing a descriptive survey method. It tried to determine the impact of programs conducted by the Philippine Librarians Association, Inc.-Zamboanga Peninsula in the region. This method is considered appropriate since it deals with quantified data to answer questions.

In most studies, the survey is a commonly and widely used design among the different types of descriptive research. Wherein, appropriate studies will be given a big picture or idea of the population under study. It will also help to show the existing conditions of the phenomena or determine the relationships that exist between specific variables or events (Ardales, 2001). Moreover, the collection of data from respondents or informants is also one of the major activities in the descriptive research method. Thereby, survey questionnaires were made to direct contact. Thus, it employed the quantitative method in treating, analyzing, and interpreting the data to provide reliable and valid results.

4.1. Respondents and Locale

In this study, 86 librarian-respondents are members of PLAI-ZamPen wherein a total of 110 members are actively involved in different programs and activities of the said association. These librarian-respondents came from different types of libraries in Zamboanga Peninsula which consists of three provinces (Zamboanga del Norte, Zamboanga Sibugay, and Zamboanga del Sur) including four cities (Dapitan, Dipolog, Pagadian, Isabela) and the highly urbanized City of Zamboanga. The region was previously known as Western Mindanao before the signing of Executive Order No. 36 of 2001. The types of libraries in the region that deliver quality services to different library patrons are: Academic Library which are composed of libraries from Higher Education Institutions (HEIs), School Library which are composed of libraries from basic education, the Public Libraries where it cater to stakeholders from all walks of life and it's under the local government unit, and the last is Special Library, a library that caters researchers with a specialized field of concentration, be it from private or government agency.

4.2. Research Instrument and Validation

The major phase of this study is crafting the right research instrument for gathering the desired data. The construction of a survey questionnaire was made by the researcher using the four-point Likert scale guided by the problem stated to answer. There are fifteen (15) statements as indicators where respondents indicate their extent of agreement and disagreement with each statement. Statements were made by adopting the concepts as reflected in the association's vision, mission, goals, and objectives. More so, the questionnaire used was validated by a competent, research expert and full-fledged Professor of a renowned university.

Table 1 shows the scales used in determining the impact and effectiveness of PLAI-ZamPen Programs conducted.

Table 1.

Scales used in determining the impact and effectiveness of PLAI-ZamPen programs.

Numerical rating	Adjectival rating	Interpretation
3.26 - 4.00	Strongly Agree	Very effective and conducted excellently
2.51 - 3.25	Agree	Moderately effective and conducted very well
1.76 - 2.51	Disagree	Effective and conducted well
1.00 - 1.75	Strongly Disagree	Not effective and conducted poorly

4.3. Sampling Procedure

To determine the sample size, the Sample Calculation formula for the known population was employed illustrated herein as:

4.4 Sample Calculation

$$n = \frac{\frac{z^2 \cdot p(1-p)}{e^2}}{1 + \left(\frac{z^2 \cdot p(1-p)}{e^2 N}\right)} = \frac{\frac{(1.96)^2(0.5)(0.5)}{(0.05)^2}}{1 + \frac{(1.96)^2(0.5)(0.5)}{(0.05)^2(14,786)}} =$$

Were,

e = margin of error

z = z-value for 95% confidence

p = proportion

N = population

n = sample

Table 2 shows the population and sample distribution.

Table 2.
Population and sample distribution.

Type of respondents	Frequency (N= total population)	Total enumeration/ (n= sampling size)
Registered librarians (PLAI-ZamPen members)	110	86
Total	110	86

This study also employed systematic random sampling in selecting the librarians. Whereby, obtaining an interval for each type of respondent has been made as the starting point for selection. For instance, the interval of 5 was utilized for librarian-respondents. In that case, respondents' names are in 5, 10, 15, 20, and so on until such desired number of respondents is obtained. Likewise, the selection of other types of respondents was similarly observed.

4.5. Data Gathering Procedure and Delimitations

In administering and gathering the data, the online survey questionnaires were made via Google form and were employed with the approval of the PLAI-ZamPen President. As facilitated by an online form via Google, the retrieval of the questionnaires was easy and automatically done. The gathered responses were properly tabulated, encoded, computed, analyzed, and interpreted according to the order of questions presented in the study.

Moreover, the study dealt primarily with the PLAI-ZamPen Programs for technological advancement and management in libraries by registered librarians. PLAI-ZamPen Programs conducted consider the period within the last five (5) years from 2018 – 2022.

Further, variables like types of libraries, years of membership, and involvement/role of PLAI-ZamPen librarians play a significant role in determining the impact of the programs conducted by the association. Wherein, types of libraries are categorized as Academic, Public, Special, and School libraries. In terms of years of membership, it describes how long PLAI-ZamPen librarians are with the association such as: 5 years and below, 6-10 years, 11-15 years, and above 15 years. Lastly, in terms of involvement/role with PLAI-ZamPen, it refers to the current level of engagement of members in support of the upliftment of the profession like Council Board of Trustees – Board of Directors (CBOT-BOD), Active Members, Members, and Support Members.

4.6. Treatment of Data

Different tools were used to organize, analyze, and treat the data that were obtained from the responses. To note, the data were treated with utmost confidentiality. The following statistical tools are used:

Frequency count and Percentage were used for problem no. 1 to determine the profile of PLAI-ZamPen members in terms of the three (3) variables.

Weighted Mean with corresponding equivalent description was utilized for problem no. 2 to calculate and to indicate the impact and effectiveness of PLAI-ZamPen programs towards librarians' technological advancement and management skills in libraries.

Kruskal-Wallis H Test was utilized for problem no. 3 to determine the significant difference in the impact of programs conducted by PLAI-ZamPen, when data are grouped according to types of libraries, year/s of membership, and involvement/role.

5. Results and Discussions

The results and discussions are presented from the data collected according to the research problems posited in this study. In this discussion, the first problem that this study sought to answer was, "What is the profile of PLAI-ZamPen librarians in terms of a.) types of libraries; b.) Year/s of membership; and c.) Involvement/Role?"

Table 3 shows the profile of PLAI-ZamPen Librarians in terms of the types of libraries, years of membership, and involvement or role with PLAI-ZamPen.

Table 3.
Profile of PLAI-ZamPen Librarians.

Types of libraries			Years of membership			Involvement/Role		
Academic	59	68%	5 years and below	28	32.5%	CBOT-BOD (Officers)	10	12%
Public	4	5%	6 - 11	28	32.5%	Active members	38	44%
School	19	22%	11 - 15	17	20%	Members	28	32%
Special	4	5%	Above 15	13	15%	Support members	10	12%
N = 86								

As gleaned from Table 3, librarians coming from academic libraries have the highest percentage of 68%, followed by librarians from school libraries at 22%, while librarians from public and special libraries have the lowest percentage of 4% in terms of membership with PLAI-ZamPen. This simply implies that PLAI-ZamPen is composed mostly of Academic Libraries or libraries from Higher Education Institutions. Further, it shows that opportunities to be a librarian are displayed in Higher Education Institutions (HEIs) where these HEIs strictly follow CHED standards to secure a certificate of compliance (COPC) and even to subject their programs for accreditation to maintain their level of status for higher education. In this activity, the library has a significant role in achieving excellence and to such recognition of curricular offerings in higher education institutions.

In terms of affiliation with PLAI-ZamPen, it shows that 5 years and below, and 6 – 11 years of membership with PLAI-ZamPen has the highest percentage of 32.5% followed by 11 -1 5 years with 20%, and above 15 years has the lowest percentage of 15% in terms of the number of years in the upliftment of librarianship as a profession. This also implies that most of our librarians in Zamboanga Peninsula are well-experienced in library management, operation, and service delivery to promote the love for reading.

In terms of involvement or role, active members have a great percentage of 44%, followed by members with 32%, while officers and support members have a percentage of 10%. This means that members of PLAI-ZamPen are actively involved in the programs and activities conducted by the

association. Yet, promising members are already visible considering the number of years of membership and the geographic location of its members in the peninsula. It can be noted that members who are out of the country, non-practicing librarians, and even retired librarians have considered themselves as support members for they have been consistently continuing their commitment, support, and concern towards professional upgrading of librarians in the region.

The second problem that this study sought to answer was, “What is the impact of PLAI-ZamPen programs on the professional development of librarians in terms of technological advancement and management?”:

On the impact of PLAI-ZamPen programs on the professional development of librarians in terms of technological advancement and management in libraries, as can be seen in Table 4, the mean ranges from 4.22 to 4.59 with a standard deviation of 0.72 to 0.86, which is low, and indicates the data is clustered around the mean. Among the indicators, "ensure professional development" and "help upgrade professionally" prevailed, with the highest mean of 4.59. This implies that through the PLAI-ZamPen programs, these indicators impact the librarian the most. Overall, a rating of 3.45 is described as “Strongly Agree.” This implies that PLAI-ZamPen programs are “very effective and conducted excellently.”

Table 4.

Impact of PLAI-ZamPen programs on librarians' professional development for technological advancement and management (N=86).

Statement	Weighted mean	Descriptor	Interpretation
1. Ensure professional development.	3.59	Strongly agree	Very effective and conducted excellently
2. Develop capacities for quality library and information service.	3.51	Strongly agree	Very effective and conducted excellently
3. Helpful in the regular functions of a librarian.	3.56	Strongly agree	Very effective and conducted excellently
4. Relevant to the present needs towards technological advancement.	3.47	Strongly agree	Very effective and conducted excellently
5. Improve library management ability.	3.55	Strongly agree	Very effective and conducted excellently
6. Help upgrade professionally.	3.59	Strongly agree	Very effective and conducted excellently
7. Create opportunities to strengthen partnerships, collaboration, and linkages.	3.36	Strongly agree	Very effective and conducted excellently
8. Discuss problems, issues, and concerns affecting the practice of librarianship.	3.43	Strongly agree	Very effective and conducted excellently
9. Encourage and capacitate research skills.	3.24	Agree	Moderately effective and conducted very well
10. Provide follow-through programs.	3.22	Agree	Moderately effective and conducted very well
11. Facilitate in meeting the challenges towards service delivery in the hybrid learning environment.	3.38	Strongly agree	Very effective and conducted excellently
12. Promote the interest and welfare of the librarians.	3.48	Strongly agree	Very effective and conducted excellently
13. Committed to the advancement of the practice of librarianship towards national development.	3.50	Strongly agree	Very effective and conducted excellently

Statement	Weighted mean	Descriptor	Interpretation
14. Aligned with the mission, vision, goals, and objectives of the umbrella organization, the Philippine Librarians Association, Inc. (PLAI).	3.51	Strongly agree	Very effective and conducted excellently
15. Overall, the program/s undertaken has had a great impact on librarians' technological and management skills in libraries.	3.38	Strongly agree	Very effective and conducted excellently
Over-all mean	3.45	Strongly agree	Very effective and conducted excellently

Legend: 1.0-1.75 – Strongly Disagree; 1.76-2.50 – Disagree; 2.51 – 3.25 – Agree; 3.26 - 4.00 – Strongly Agree. Raju (2017) discusses how Library and Information Science (LIS) strategically positions itself by embracing its "interstitial" nature and "fractal distinctions in time." These characteristics allow LIS to expand its intellectual influence into the realm of technological advancements, redefining its scope, methodologies, and societal contributions. LIS professionals lead in integrating new technologies while ensuring ethical information management in a digital era.

In contemporary academic libraries, according to Dube (2021), information technology (IT) is crucial for enhancing operational efficiency and meeting diverse user needs. Library staff must possess strong IT skills to facilitate access to resources for teaching, learning, and research. As technology evolves, IT proficiency becomes increasingly essential for managing digital resources effectively, providing technical support, and innovating services aligned with educational and scholarly goals. Equipping library staff with IT expertise enables them to play a pivotal role in advancing the institution's academic mission, fostering an environment where information is accessible and maximally utilized.

The third problem that this study sought to answer was, "Is there a significant difference in the impact of programs conducted by PLAI-ZamPen, when data are grouped according to a.) Types of Libraries; b.) Year/s of membership; c.) Involvement/Role?"

As for the result if there is a significant difference in the impact of programs conducted by PLAI-ZamPen when data are grouped according to types of libraries, years of membership, and involvement or role:

Table 5 shows a significant value of 0.988, which is greater than the alpha level of 0.05; thus, there is no statistically significant difference when data are grouped according to *types of libraries*. This implies that even though the respondents are from different types of libraries, their level of impact from programs conducted by PLAI-ZamPen does not differ.

Table 5.

Kruskal-Wallis H test result on significant difference when data are grouped according to types of libraries.

Variable	Significant value	Interpretation
Types of libraries	0.988	Not significant

Note: *Significant @ $\alpha = 0.05$

In terms of *years of membership*, table 6 shows a significant value of 0.006, which is less than the alpha level of 0.05; thus, there is a statistically significant difference when data are grouped according to years as a member. This implies that as respondents' years as PLAI-ZamPen members vary, so does their level of impact from PLAI-ZamPen programs.

Table 6.

Kruskal-Wallis H test result on significant difference when data are grouped according to years as member.

Variable	Significant Value	Interpretation
Years as a member of PLAI-ZamPen	0.006	Significant

Note: *Significant @ $\alpha = 0.05$.

In terms of *involvement or role*, table 7 shows a significant value of 0.649, which is greater than the alpha level of 0.05; thus, there is no statistically significant difference when data are grouped according to their involvement. This implies that the respondents' involvement in PLAI does not vary their level of impact on PLAI-ZamPen programs.

Table 7.

Kruskal-Wallis H test result on significant difference when data are grouped according to Involvement.

Variable	Significant value	Interpretation
Involvement in PLAI-ZamPen	0.649	Not significant

Note: *Significant @ $\alpha = 0.05$.

With the results and answers taken from the interview questions, suggestions, and recommendations provided by PLAI-ZamPen librarians, a training program entitled "Innovative Technologies for Reshaping Library Services (Virtual Reference)" for technological advancement and management across the four (4) types of libraries is designed.

In conceptualizing this training program, the components and descriptions are specified as follows.

5.1. Rationale

In the rapidly evolving landscape of information technology, libraries must adapt to meet the changing needs and expectations of their users. Innovative technologies have the potential to reshape library services, making them more accessible, efficient, and user-friendly. Virtual reference services, in particular, offer a way for libraries to extend their reach and provide support to patrons beyond the physical confines of the library. This training program, "Innovative Technologies for Reshaping Library Services (Virtual Reference)," is designed to equip library professionals with the knowledge and skills necessary to implement and manage cutting-edge virtual reference services effectively. By embracing these technologies, libraries can enhance their role as crucial information hubs, support lifelong learning, and ensure they remain relevant in the digital age.

5.2. Objectives

1. Understand the Importance and benefits of Virtual Reference Services
2. Explore Innovative Technologies and evaluate its pros and cons.
3. Develop Technical Proficiency by providing hands-on training on the use of specific virtual reference tools and software.
4. Implement best practices by teaching and sharing successful case studies from other libraries.
5. Develop strategies to create user-friendly virtual reference services. - Understand how to tailor services to meet the diverse needs of library patrons.
6. Learn effective methods for marketing virtual reference services to library users. - Discuss ways to integrate virtual reference services with other library offerings and community programs.
7. Introduce methods for assessing the impact and effectiveness of virtual reference services.

5.3. General Descriptions

This comprehensive training program is a three-day activity that aims to empower library professionals to harness the power of innovative technologies, ensuring they can provide robust and

responsive virtual reference services that meet the demands of a digitally connected world. Thus, this led to higher job satisfaction and career progression among participants.

In the training venue, a well-ventilated with adequate facilities and equipment should be made available. The program encouraged a proactive approach with librarians as participants in technology adoption, making libraries more dynamic and responsive to user needs.

Grants will be sought from funders as capability enhancement to augment the expenses during the conduct of the training.

6. Conclusions

The findings from this study affirm that the programs initiated by PLAI-ZamPen significantly enhance librarians' professional development, particularly in the realms of technological advancement and management. The high mean scores and strong agreement ratings across various indicators indicate that these programs effectively contribute to equipping librarians with essential skills and fostering a culture of innovation. This positive impact extends beyond individual skill enhancement; it also bolsters libraries' abilities to adapt to evolving community needs, thereby ensuring continued relevance and excellence in service delivery.

The analysis of membership demographics reveals that PLAI-ZamPen predominantly comprises librarians from academic libraries, highlighting a concentration of involvement from higher education institutions. This underscores the pivotal role of libraries within these institutions in achieving academic excellence and recognition. Moreover, the distribution of membership years indicates a blend of experienced librarians and promising newcomers, reflecting a dynamic mix of expertise and fresh perspectives crucial for sustaining professional growth in Zamboanga Peninsula's library sector. Furthermore, the absence of statistically significant differences in program impact based on library types and membership involvement, suggests that regardless of the library setting or role within the association, all participants benefit equally from these developmental programs.

Based on these conclusions, it is recommended that PLAI-ZamPen continues to innovate and expand its professional development initiatives, focusing on targeted training programs that address emerging technological trends and management strategies applicable across all types of libraries. In addition, PLAI-ZamPen should consider diversifying its program offerings to include specialized tracks catering to specific library roles and emerging challenges, such as digital preservation, data management, and information literacy in virtual environments. Such tailored approaches would ensure comprehensive support for librarians at different career stages and across diverse library settings.

Moreover, fostering partnerships with educational institutions and industry stakeholders could enrich program content and resource accessibility, thereby enhancing the breadth and depth of professional development opportunities available to members. Collaborative efforts can also facilitate knowledge exchange and best practice sharing, further strengthening the library community's collective capacity to meet evolving information needs.

In conclusion, by sustaining its commitment to continuous learning, innovation, and inclusivity, PLAI-ZamPen can effectively nurture a vibrant community of librarians equipped to lead and adapt in a rapidly evolving information landscape. This proactive approach will not only elevate individual professional growth but also ensure that libraries in Zamboanga Peninsula remain indispensable hubs of knowledge and service excellence for years to come.

Copyright:

© 2024 by the authors. This article is an open access article distributed under the terms and conditions of the Creative Commons Attribution (CC BY) license (<https://creativecommons.org/licenses/by/4.0/>).

References

- [1] American Library Association (2019). "Professional development for librarians: A
- [2] framework for action." ALA Annual Report.

- [3] Anja Merčun and Mateja Goršič (2018). (n.d.). Digital Competence of Library Staff: An Analysis of Job Advertisements [Review of Digital Competence of Library Staff: An Analysis of Job Advertisements]
- [4] [5] [6] 3. Aslam, M. (2022), "Adapting to change in academic libraries", Global Knowledge, Memory and Communication, Vol. 71 No. 8/9, pp. 672-685. <https://doi.org/10.1108/GKMC-04-2020-0053>
- [7] Barathi, S., Loganathan, T., & Rajan, A. (2017). Library Automation and Networking. New Delhi: New Century Publications.
- [8] 5. Branch-Mueller, J., & DeGroot, J. M. (2011). Library Spaces for 21st-Century Learners: A Planning Guide for Creating New School Library Concepts. Santa Barbara, CA: Libraries Unlimited.
- [9] 6. Connaway, L.S., Lanclos, D.M., & Hood, E.M. (2019). "I Find Google a Lot Easier than Going to the Library Website." Library Trends.
- [10] Dube, T.V. (2021). Information Technology Skills and Competencies for Academic Library Staff. <https://massteacher.org/employment-and-licensure/mta-school-library-task-force/research-on-the-positive-impact-of-librarians> <https://plai.org.ph/>
- [11] Joacim Hansson and Jenny Lindberg (2017). (n.d.). Competencies for Information Professionals in Learning Organizations [Review of Competencies for Information Professionals in Learning Organizations].
- [12] Kont, K. R., & Jantson, S. (2018). "Librarians' work-related learning and self-development: Trends in Estonian University Libraries." American Journal of Educational Research, 3(3), 366-376. Educational Research, 3(3), 366-376
- [13] Kumar, S. (2019). "Professional development of librarians: A study of library associations." Journal of Librarianship and Information Science, 51(1), 45-56
- [14] Mardis, M. A., & Everhart, N. (2014). Technology in the Library: Tools for Planning, Technology, and Communications. Santa Barbara, CA: Libraries Unlimited.
- [15] Matthew, L., & Baby, X.Y. (2012). Library Management: Theory and Practice. London: Facet Publishing.
- [16] McCracken, M. (2001). The Big Book of Library Science. New York: Neal-Schuman Publishers.
- [17] Moruf, S.O., & Dangani, S.K. (2020). Digital Transformation in Libraries: Challenges and Opportunities. Lagos: African Books Collective.
- [18] Mwaniki, A. M. (2017). Emerging Trends in Library and Information Science. Nairobi: East African Educational Publishers.
- [19] Paraschive, D. (2017). The role of librarians in managing technological advancements in libraries. Journal of Library Innovation, 15(2), 45-56.
- [20] Raju, Jaya. (2017). Information Professional or IT Professional? The Knowledge and Skills Required by Academic Librarians in the Digital Library Environment. portal: Libraries and the Academy. 17. 739-757. 10.1353/pla.2017.0044.
- [21] Shannon, D. M. (2002). The Dynamic Library: A Study of Change in the Information Age. Westport, CT: Libraries Unlimited.
- [22] Sinha, M. K., & Gautam, A. S. (2015). Use of electronic resources among teachers and scholars in Banaras Hindu University., Varanasi, Uttar Pradesh (Bharat): A survey. Library Progress (International),
- [23] Smith, L. C. (2010). Library Services in Theory and Context. New York: Routledge.
- [24] SA Journal of Libraries and Information Science (2018). "Continuing Professional Development opportunities in Information and Communication Technology for academic librarians at the Durban University of Technology." 84(1), 54-55.
- [25] Vansickle, J. (2000). Modern Library Management: Principles and Techniques. Chicago: ALA Editions.
- [26] Varlejs, J., & Walton, G. (2019). "Continuing Professional Development: Principles and Best Practices." IFLA Publications Series.
- [27] Wenborn, N. (2018). Challenges and opportunities for librarians in adopting new technologies. Library Trends, 66(1), 18-29.
- [28] White, H. (2012). The mission of libraries in the digital age. Journal of Library Management, 30(4), 512-525.