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Editorial and Preface

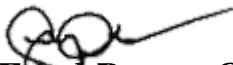
Dear Readers,

*The new edition of the **Asian Research Journal of Education** is presented with great pleasure and excitement. This refereed journal publication is devoted to the advancement of information, instruction, and the development of young minds. It is an honor to bring together educators, researchers, and visionaries from all facets of education as we set out on this thrilling journey to establish a platform that aims to inspire, innovate, and completely transform the learning experience.*

The value of education in a world that is changing quickly cannot be emphasized. It provides a pillar of support for societies and a glimmer of promise for the future. The goal of our publication is to facilitate communication and cooperation between researchers and educators by acting as a link between research and practice. Our goal is to create a forum for the exchange, celebration, and discussion of cutting-edge research results, innovative teaching strategies, and life-changing educational opportunities.

We would like to extend our sincere gratitude to the editorial staff, reviewers, and contributors whose efforts and commitment have made this first issue possible. We also thank our readers, whose participation and support will keep this journal going strong.

With warm regards,



Dr. Ethel Reyes- Chua

Publication Director

ASIAN RESEARCH JOURNAL GUIDELINES

The *Asian Research Journal of Education Guidelines* is produced by EduHeart Book Publishing. This journal is produced quarterly and refereed publication that aims to offer significant and innovative perspectives on education systems, learners, and instructors, to a global readership. This is initially *indexed by Google Scholar* and submitted to different agencies such as: The National Library of the Philippines, Research Gate, and Academia. Edu, ISSN Portal, and others.

AIMS AND SCOPE

The Asian Research Journal of Education is interdependent journals that undergo peer-review and they are classified as refereed journals. The main purpose of these journals is to serve as a platform for sharing high-quality research, and innovative practices, and stimulating discussions in the areas of education within the diverse Asian context. The journals aim to promote collaboration and the sharing of knowledge among researchers, educators, practitioners, and policymakers to tackle the complex challenges and opportunities in these interconnected fields.

ASIAN RESEARCH JOURNAL OF EDUCATION:

Discover innovative studies in educational philosophy, pedagogy, and practice, with a focus on Asian perspectives and situations. Examine novel teaching approaches, the creation of educational programs, and educational regulations that improve learning results and educational systems. Promote dialogues regarding inclusive education, continuous learning, and the integration of emerging technology in educational environments. It also focuses on reflective teaching, motivation, assessments, teaching, and learning processes which are relevant to educators in the 21st century.

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The ARJE welcomes submissions that fit under the following areas:

1. Research articles based on original investigations.

A primary research report is authored by individuals who are directly engaged in the execution of the research investigation. The researchers delineate their work in the report through five principal sections. In addition, it is accompanied by an abstract, a list of cited sources, and tables/figures. The primary components of its fundamental structure should include: The structure of the study includes five main sections:

- a) Introduction
- b) Methods
- c) Results
- d) Discussion
- e) Conclusions

The introduction provides an overview of the pertinent literature, theoretical underpinnings, framework, and importance. The methodology includes the study's framework, individuals involved, tools utilized, processes followed, analysis of data, and maintenance of data. The results section provides a comprehensive presentation of the collected data and findings, while also addressing the study questions. The discussion section analyzes the findings in connection with the theoretical literature and framework. Ultimately, the conclusions section presents the overarching findings and proposed suggestions.

The Original Research Report typically consists of approximately **6,000-8,000 words**, without including references, tables, and figures. The maximum allowable word count for the abstract is 250 words with 5 keywords. Compliance with the *APA 7th edition requirements* are required for formatting, references, and citations.

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A theoretical review is a methodical examination and integration of pertinent literature about a fundamental subject in the field of education. It offers a thorough overview and evaluative examination of scholarly literature, elucidating the current status of research or the specific subject of study. The theoretical review should provide insights for practical application and analyze the consequences for educational practice. It offers insights on the future direction of the field and the corresponding areas of research. The components of the theoretical review include:

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Theoretical Analyses typically consist of approximately **6,000-8,000 words**. It is strongly advised to include at least 15-25 primary research articles in the analysis of the theoretical review. The abstract should have a maximum of 250 words with 5 keywords. The document must be formatted, referenced, and cited by the APA 7th edition criteria.

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Developing a case analysis necessitates a methodical and thorough approach to comprehending and assessing a specific circumstance or problem. When crafting paragraphs for case analysis, it is essential to follow a meticulously organized approach to guarantee lucidity and logical flow.

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The Case Analyses typically consist of approximately 6,000-8,000 words. It is strongly advised to include at least 15-25 primary research articles in the analysis of the theoretical review. The abstract should have a maximum of 250 words with 5 keywords. The document must be formatted, referenced, and cited by the APA 7th edition criteria.

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The Asian Research Journal of Education is committed to maintaining the utmost integrity in research and publication by adhering to the highest ethical standards. Authors, reviewers, and editors are required to follow norms that promote honesty, openness, and responsibility in the scientific publishing process.

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A thorough peer review procedure is implemented, consisting of three stages: adherence to submission requirements, preliminary screening, and a comprehensive evaluation.

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Authors submit their research manuscripts via email at: info@myeduheart.com or myeduheart@gmail.com. Submissions are expected to adhere to the journal's guidelines for manuscript preparation and submission. The submitted articles will be subjected to a rigorous review procedure. The entire procedure will require approximately 8-12 weeks. Authors are required to promptly communicate with the publication team during the entire process.

2. Initial Review:

Upon submission, the editorial team conducts an initial review to check for adherence to the journal's guidelines and to ensure the manuscript's alignment with the journal's scope and focus. Manuscripts that do not meet the journal's basic requirements may be returned to authors for **revision or rejected at this stage**. This will assess the submission for compliance with the requirements of ARJE, as well as for any resemblances to other works and instances of plagiarism through the Turnitin software with a maximum of 15 % similarity index.

3. Peer Review:

Manuscripts that pass the initial review are sent out for a review process. The journal typically engages expert reviewers with relevant expertise in the subject area of the manuscript. **Reviewers evaluate the manuscript for its quality, originality, methodology, significance, and contribution to the field. Please see FORM no. F-EDU-003.** This stage is the initial screening process to assess the suitability of the paper for review as the Reviewers provide a detailed report assessing the strengths and weaknesses of the manuscript. Submitted articles have the possibility of being accepted without revisions, accepted with minor revisions, revised manuscripts with major revisions, or not accepted at any of these stages

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If revisions are required, authors are typically allowed to address the reviewers' comments and make necessary changes to their manuscript.

5. Editorial Team Decision:

The Editorial Team, together with the Publication Director, makes the final decision.

6. Proofreading and Copyediting:

Accepted manuscripts go through proofreading and copyediting to ensure language clarity, style consistency, and proper formatting.

7. Publication:

Once the manuscript is finalized and the author is satisfied with the proofs, the article is published in the specified Asian Research Journal Education in Print and Online.

8. Open Access:

The journal adheres to an open access model, making the published content freely accessible to a global audience.

9. Author Recognition:

All Authors will receive two certificates: **(1) a Certificate of Publication and (2) Certificate of Achievement** to recognize their scholarly works and possibility to be chosen as Best Paper Award.

SUBMISSION GUIDELINES

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1. The Asian Research Journals for Education accept papers written in English.
2. Use bold Times New Roman font with **a font size of 12 for the title**. Apply capitalization to all proper nouns and omit the use of a period after the title.
3. The authors of the manuscript should have made significant contributions to the intellectual content of the work, including the conception, design, development, analysis, and critical writing. Upon submission of the manuscript, all co-authors are expected to take responsibility for their contributions and have given their consent to the final version of the manuscript and its submission to the ARJE.
4. All headings must be formatted in **Times New Roman with a font size of 12**. Apply capitalization to the initial letter of proper nouns. To differentiate between the various levels of headers, adhere to the following instructions:
5. The abstract, acknowledgments, and main body of the essay should be formatted using Times New Roman font, size 12, and double spacing.
6. **The abstract** should be placed on a distinct page and must not **exceed 250 words** with five **(5) Keywords**.
7. It is necessary to adhere to the **APA 7th edition** requirements when it comes to referencing and citations, as well as the formatting of tables and figures. **Apply Times New Roman typeface with a font size of 12 for them as well.**

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8. The manuscript should adhere to a consistent *single-column layout* across the entire document.
 9. Tables and figures by the APA 7th edition style guide should be added accordingly into the paper. *The titles in the table should be written on top* while the **figure** should be written **below it**.
 10. The *acknowledgment section* is optional.
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The Research Articles

Generation X Instructors and Digital Competency: A Higher Education Perspective

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ABSTRACT

In the rapidly evolving realm of higher education, the integration of digital technology into teaching has become essential. This study seeks to assess the digital technology competencies and related challenges encountered by Generation X instructors at Pangasinan. A total of 183 instructors, selected by purposive sampling, participated in both in-person and online surveys. Descriptive statistics and categorization means were used to analyze the data. Competency levels were evaluated across all areas based on the DigCom Framework: information and literacy skills, communication and interaction skills, production skills, safety skills, and problem-solving and innovation skills. The results indicated that instructors exhibit competence in all domains. Further, a positive link was identified between skill levels and characteristics such as age, civil status, teaching experience, and training attended. In contrast, negative relationships were identified with educational attainment, academic rank, income, and length of service; however, no significant correlation was observed with sex. Challenges encountered by the instructors include excessive workload, inadequate internet connectivity, and the ever-changing expectations and preferences of students. A capability enhancement program is suggested to improve instructor competence.

Keywords: - *information and literacy skills, communication and interaction skills, production skills, safety skills, and problem-solving and innovation skills*

INTRODUCTION

The 21st century is witnessing a transformation in higher education due to digital innovation, technology integration, and a growing desire for flexible, learner-centered pedagogies. The digital transformation has been expedited by worldwide issues, notably the pandemic, which compelled educational institutions to quickly put in online learning systems and redesign instructional delivery (Dhawan, 2020). In this changing academic landscape, instructors from different generational backgrounds must effectively manage a diverse range of digital tools and strategies to maintain instructional efficacy and student involvement.

The current situation necessitates enhanced competitiveness and a full curriculum and method revamp. As such, the instructors recognize that this requires a distinct skill set that differs from traditional in-person tactics. They also use digital technologies to give students vital materials. Faculty need specific human traits to meet the demands of their job, which is called teacher competency. Successful instructors comprehend activities and instructional methods that help learners build conceptual comprehension. Teaching quality and student academic performance can be improved by teacher competency (Fauth et al., 2019).

The competency-based approach expanded at the advent of the 21st century in connection with way the of modernizing education. Clearly defining and expressing the

necessary skills and abilities is essential for restructuring higher education in order to align with students' interests and accommodate their professional and personal requirements (Brauer, 2021). Possessing skills in areas, namely learning and innovation skills, life and career skills, and information, media and technology skills may help a person become valuable and desirable in the workplace (Indeed, 2023). With the expansion of ICT and United Nations Educational, Scientific, and Cultural Organization's (UNESCO) goals, more individuals are using digital or e-Learning. Technology has improved education by revolutionizing teaching and learning (Dutta and Nessa, 2022). Technology improvements will make it possible for a big change in the future of education toward visual learning methods.

Digital competence has emerged as a crucial skill for instructors to promote active learning, integrate various digital resources, and connect efficiently with students in online environments. Multiple factors affect the improvement of digital competence. Institutional infrastructure, resource accessibility, and professional development opportunities are essential external elements. Internally, self-efficacy, motivation to learn, and perceived significance of digital tools substantially influence adoption. Instructors who acknowledge the practical advantages of utilizing learning management systems or collaboration tools are more inclined to incorporate them into their instruction. The DigComp framework for a customized evaluation of these competencies, directing the development of training programs that address actual requirements.

Additionally, DigComp was published in 2013 as a reference framework to help Europeans achieve digital competence. This highlights the skills that today's citizens need to confidently, critically, collaboratively, and creatively use digital technology to fulfill employment, learning, leisure, inclusion, and participation goals in our digital society. DigComp is developed by the European Commission's Joint Research Centre (JRC) for all UNESCO members. The framework emphasizes information and data literacy skills, communication and collaboration skills, digital content creation skills, safety skills, and problem-solving skills (UNESCO, 2023).

Generation X instructors, born between 1965 and 1980, hold a unique status within the academic field. Numerous individuals occupy roles as department chairs, program coordinators, or senior academics, rendering their digital competency not only a personal advantage but an essential requirement for institutional development.

Generation X instructors, despite their extensive expertise, are frequently digital immigrants—individuals who encountered technology later in life (Shofiana et al. 2024). Their digital preparedness significantly differs based on factors such as previous exposure, institutional support, and personal motivation. Consequently, focused initiatives to evaluate and enhance digital competency within this age group are essential for closing the generational digital divide in university. They, possessing decades of expertise and grounded in conventional instructional methods, frequently find themselves in a dilemma between the digital competency of their younger counterparts and the swiftly evolving demands of digitally savvy students according to UNESCO (2021).

One of the obstacles encountered by Generation X instructors in the current educational landscape were centered around effectively utilizing technological devices and mobile applications to meet the diverse needs and expectations of their students. An investigation by Alomari (2023) in determining the competencies in the field of education during the pandemic

revealed that faculty's ability to use e-learning effectively in online learning is poor and there are deficiencies in digital readiness at all educational levels. The faculty's personal knowledge, professional abilities, and competences may also not be adequate for the entirety of their pedagogical career.

While some colleges and universities have modified or expanded their curriculum to meet the growing demand for digital know-how, instructors still struggle and experience a heightened sense of responsibility in their roles as educators and researchers. There is also a concern regarding the potential impact of stagnation as it is related to the quality of university education (Blaskova, 2014). Due to the skills needed to teach online and the roles and responsibilities of faculty in distance learning, they may have limited awareness regarding the integration of the digital environment in their teaching practices and feel nervous about teaching online courses (Alomari, 2023).

Further, there is a lack of digital skills among faculty in European universities, especially when it comes to evaluating their own teaching. It was uncovered that instructors experienced a sense of being swamped and ill-equipped to employ online or remote instructional approaches. They encountered difficulties in adjusting their teaching methods to address issues such as students' unreliable internet connectivity, evolving personal requirements, and ambiguous or fluctuating educational or governmental guidelines (Basilotta-Gómez-Pablos et al., 2022).

In addition, Generation X instructors expressed difficulties in using MS Excel, Powerpoint, video programs, PDF, graphic designs and coding in a computer environment because of lack of hardware, difficulties in following the technology and using smartboards, preparing programs and animations. Instructors may also worry about privacy and data security because more and more personal information is being stored digitally, and social media is so popular (Norton, 2021). They are more likely to share private information on social media, which makes them easy to trick. It is also harder for them to spot phishing attacks on social media before it's too late because they have little knowledge about these platforms (Fortra Terranova Security, 2023).

Insufficient digital skills constantly emerge as the primary obstacle for faculty to properly utilize technology for education, regardless of a country's level of development (UNESCO, 2021). Specifically, faculty have not been given assistance and chances to enhance their ICT and pedagogical skills that are necessary. For example, in Thailand and Singapore, nearly all faculty had fundamental digital abilities. However, in countries like Kyrgyzstan, Malaysia, and the Philippines, less than 5 percent of faculty members reported having the same level of digital skills.

Ballano et al. (2022) emphasized that the challenges faced during the pandemic include insufficient logistical assistance for instructors and students, such as unreliable internet connection and limited access to digital devices and instructional tools. Additionally, there is a need to boost institutional support for information communication technology (ICT) infrastructure at colleges and universities, as well as provide instructors with training in ICT to improve their pedagogical digital competence and attitude towards online and long-distance learning. Rosales (2021) said that administrators must also be aware of the current availability of resources that the institution can provide.

Further, one problem is that Technical Livelihood Education (TLE) faculty in Nueva Ecija is that they are not proficient in the use of information and communication technology (ICT) in teaching (Zabala and Adelante, 2018). Correspondingly, Batan et al. (2022) stated that faculty have a basic level of skill in showing what they know and can do in information and data management, as well as knowing how to use the internet, network applications, and resources effectively.

Undoubtedly, the pandemic in the Philippines has served as a transformative catalyst for the incorporation of technology for several reasons. The causes encompass the revelation of inadequate usage of education technology before the pandemic, as well as the accelerated acceptance and implementation of practical educational technology applications in schools and universities across the country. The sudden emergence of a pandemic and the subsequent difficulties and vulnerabilities it exposed should motivate the country to use technology in the realm of education. Education stakeholders have made efforts to incorporate technology into education, although the extent of these efforts vary. The variation in education technology implementation is influenced by various factors, including the endorsement of education technology by influential leaders and education stakeholders, the presence of adequate infrastructure and devices, the proficiency of key individuals involved in education technology (such as instructors, school personnel, and technical specialists), and their willingness to embrace the use of technology in education (Espinosa et al., 2023; Chao and Pe Symaco, 2021).

Statement of the Problem

This research study aims to assess the digital competencies of Generation X instructors in higher education institutions/

Specifically, it seeks to answer the following questions:

1. What is the current level of digital competence among Generation X instructors in higher education institution?
2. Is there a relationship between profile and their digital competence?
3. What are the challenges encountered by Generation X instructors?

Scope and Delimitations

This study was conducted to assess the competency level of Generation X instructors in teaching higher education courses in Pangasinan. The respondents were instructors teaching in higher education belonging to Generation X whose age ranges from 45 to 60 years old. The inclusion criteria of the respondents are the following: a. must be born within the years 1965 to 1980, b. must have taught in higher education institution with a minimum of one (1) year, and c. with a minimum rank of Instructor I.

Review of Related Literatures

The rapid digital revolution in higher education has highlighted the need for instructors to develop digital competencies to improve teaching efficiency, foster student involvement, and adjust to changing educational demands. Spante et al. (2022) indicate that a considerable

number of university instructors exhibit merely fundamental digital competency, with established frameworks such as the European Commission's DigComp (2013) commonly employed to evaluate and enhance digital skills development. The DigComp framework delineates five principal competence domains—information and data literacy, communication and collaboration, digital content production, safety, and problem-solving—functioning as a complete framework for assessing digital competencies in educational settings.

DigComp (2013) is extensively utilized to evaluate and facilitate the enhancement of digital competencies. The DigComp framework delineates five principal competence domains – information and data literacy, communication and collaboration, digital content production, safety, and problem-solving—functioning as a comprehensive framework for assessing digital competencies in educational contexts.

Information and data literacy encompasses the capacity to identify, locate, retrieve, store, organize, and critically and ethically assess digital information. Research conducted by Spante et al. (2022) and Ferrari (2013) indicates that although the majority of instructors excel in information retrieval, numerous individuals continue to have challenges in assessing data reliability and utilizing academic digital databases efficiently.

The effective utilization of digital tools for professional communication and online collaboration is crucial for modern learning environments. Redecker (2017) indicates that instructors are gradually utilizing tools such as email, LMS discussion boards, and video conferencing. Generational differences influence accessibility and frequency, with younger instructors engaging more actively with collaborative tools than their older peers (Villalba-Condori et al., 2021).

Production skills involve the creation, modification, and dissemination of digital material, such as presentations, infographics, and online course modules. Studies indicate that instructors frequently depend on fundamental technologies such as PowerPoint or Word, whereas more sophisticated content generation methods (e.g., interactive media or Open Educational Resources) are largely underutilized (Rashid et al., 2022).

Safety includes the safeguarding of personal data, the administration of digital identity, and the assurance of cybersecurity. Although institutions offer general recommendations, the understanding and implementation of digital safety policies among instructors differ significantly. Research conducted by Gudmundsdottir & Hatlevik (2018) indicates that instructors often place educational tasks over cybersecurity considerations.

Problem-solving and innovation skills involve recognizing digital requirements, resolving technological problems, and adjusting to innovative digital contexts. Studies demonstrate that digital natives exhibit higher levels of trust in using new tools and addressing technological challenges, whereas digital immigrants frequently depend on IT support or coworkers (Tondeur et al., 2017).

Despite these problems, Generation X instructors occupy essential leadership and mentorship positions throughout university. Their empowerment via specialized digital skills training is essential for both personal development and institutional advancement, as well as for enhancing educational quality. Research by Ab Rashid et al. (2022) emphasizes the strong connection between instructors' digital competence and student learning results, highlighting

the necessity for ongoing professional development. Additionally, the DigCompEdu framework (European Commission, 2017) enhances DigComp by especially focusing on the digital pedagogical competencies necessary for instructors, facilitating the efficient incorporation of technology into teaching and learning methodologies.

This research underscores the increasing significance of digital competence in higher education, although it also highlights a distinct inadequacy in catering to the specific demands and experiences of Generation X instructors. This study addresses the gap by employing the DigComp framework to evaluate and empower Generation X instructors, assuring their preparedness to succeed in digitally enriched learning environments.

Theoretical Framework

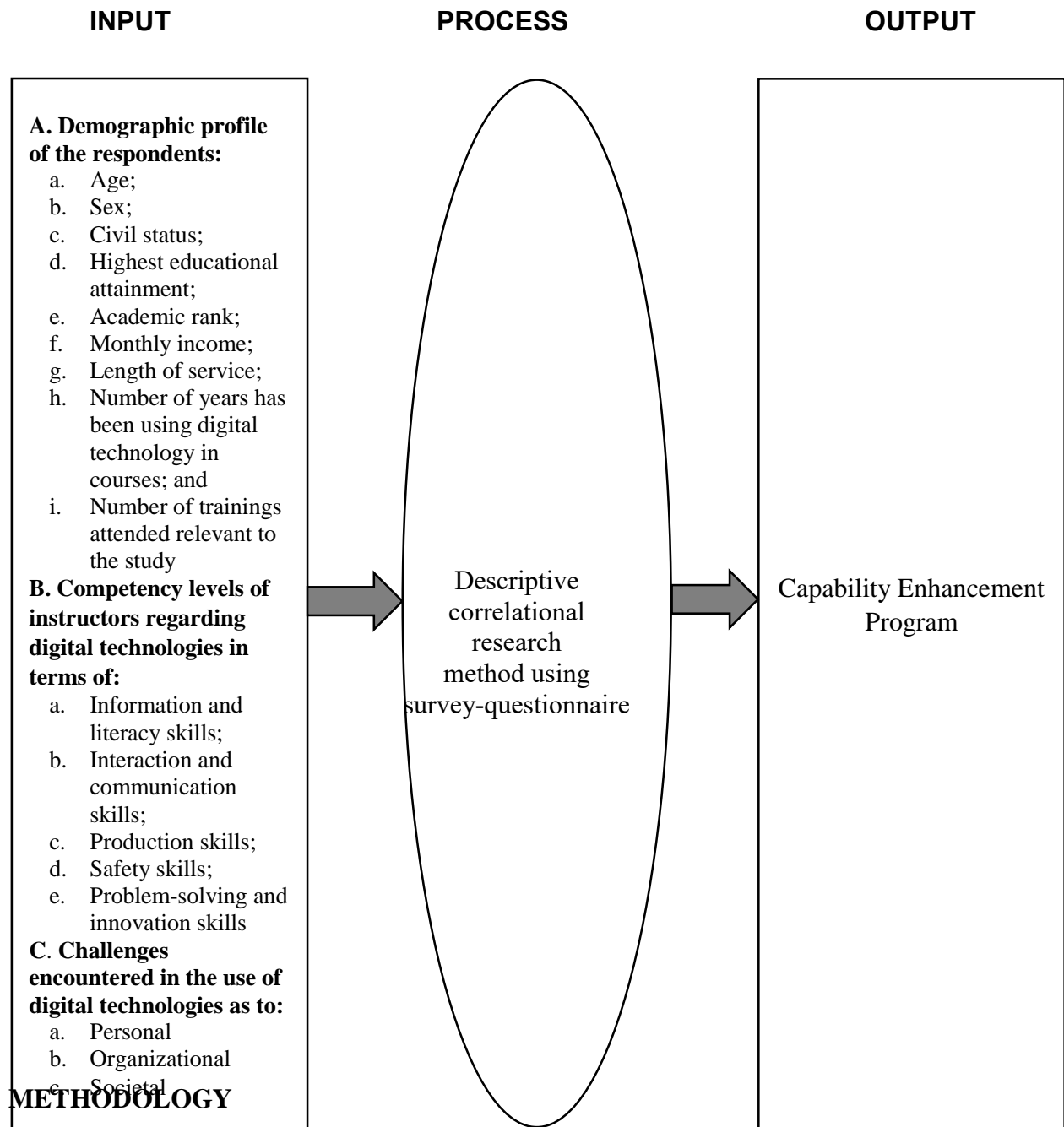
The **DigComp Framework**, served several functions, encompassing the development of competence assessment instruments, the design of training programs and resources, and the identification of digital profiles of training programs and resources, and the identification of digital profiles relevant to professional contexts within employment, education, training, and social inclusion. Additionally, DigComp serves as a tool for the advancement and evaluation of digital competence. Competences encompass a synthesis of knowledge, skills, and attitudes. Specifically, they consist of conceptual understanding and factual knowledge, descriptions of practical abilities such as process execution, and the cultivation of appropriate mindsets and dispositions for action. To have digital competence means to be able to utilize digital technologies with self-assurance, critical thinking, and responsibility while also engaging with them to further one's education, one's career, and one's participation in society. It includes information and data literacy, communication and collaboration, media literacy, digital content creation (including programming), safety (including digital well-being and competences related to cybersecurity), intellectual property related questions, problem-solving and critical thinking as stated by Council Recommendation on Key Competences for Life-long Learning in 2018 (Vuorikari, R., Kluzer, S. and Punie, Y., 2022).

Bawane and Spector's Model of Eight Competency Behavior explains the professional, educational, evaluator, social, administrative, technological, advisor/counselor, and researcher functions of teachers in online education, this model was utilized as a starting point. Within each of these roles, there are a few smaller occupations that collectively meet all the responsibilities. They consider being an instructional designer, the author of a course, a subject matter expert, a tutor, an organizer, a facilitator, and a professional to be secondary positions within the pedagogical function.

Conceptual Framework

The input on the first box contained the profile of the respondents (age, sex, civil status, highest educational attainment, academic rank, monthly income, length of service, years has been using digital technology in the courses, and trainings attended relevant to the study). Likewise, the second box comprised of parameters on the level of competency (information and literacy skills, communication skills, production skills, safety skills, and problem solving and innovation skills). Further, the third box was composed of the challenges encountered in the use of digital technologies as to: personal, organizational and societal. For the process, it

contained the design (descriptive correlational) and the data gathering tool used. Lastly, for the output, this study proposed a capability enhancement program which aims to improve or sustain the competency level of the instructors in higher education institutions.



This research study assessed the digital competency of Generation X instructors in Higher Education institutions in Pangasinan.

Research Design

The research employed a quantitative research method through descriptive correlation design. It is descriptive in nature since the researcher determined the demographic of the respondents, determined the competency level of the Generation X instructors in teaching

higher education courses and their challenges encountered. It also assessed the relationship between the profile of the respondents and their level of competency along with the information and literacy skills, communication skills, production skills, safety skills, problem solving and innovation skills.

Research Steps

This research began with a comprehensive literature review to establish a thorough understanding of the digital competencies of higher education instructors. This involved examining previous studies, and theoretical frameworks. Following a comprehensive review of the current literature, the research design was carefully formulated to align with the objectives of the study. This research included data collection methods, including an online survey questionnaire and in-person administration, directed at instructors from higher education institutions.

Data Collection and Sample Selection

The data collection tool that was used in this study is a survey questionnaire. The survey instrument employed in this research is self-administered and custom-designed. The survey instrument employed in this research was adapted from various sources and was subjected to content validation. Specifically, the Digital Competence (DigComp) Framework of the European Commission served as the foundation for the questionnaire. The questionnaire was administered to the Generation X instructors at higher education institutions through purposive sampling.

Data Analysis Methods

Descriptive statistics, including frequency counts, weighted means, and linear regression analysis, were employed in the study's analysis. The survey responses from the participants were analyzed using categorical treatment.

Study Limitations and ethical considerations

The study adhered to ethical guidelines by obtaining informed consent from all participants, ensuring anonymity and confidentiality in accordance with data privacy act, and allowing participants the option to withdraw from the research at any time.

RESULTS AND DISCUSSION

Most of the Generation X faculty members at Pangasinan State University are female, married, and within the age range of 43 to 47 years old. They typically hold doctorate degrees and have an academic rank of Assistant Professor IV, with a monthly income ranging from ₱36,619 to ₱46,725. These faculty members have rendered 21 to 25 years of service, have been using digital technology for 11 to 20 years, and have attended fewer than 5 to as many as 16 to 20 training courses relevant to the study.

Level of Digital Competency of Generation X Instructors

The faculty in Higher Education Institution are competent with the use of digital technologies. Safety skills gained the highest mean of followed by interaction and communication skills, information and literacy skills, problem-solving and innovation skills, and production skills.

In terms of information and literacy skills, it is observed that the faculty are competent with an average total weighted average of 2.90. Self-service has the highest mean, followed by critical evaluation, storage and sharing and search. This means that in terms of information and literacy skills, Generation X can manage personal data in online platforms without the help of others while they have the lowest ability to utilize information using search engines, filters, and open educational resources.

The result is congruent to the findings of the study of Vishnu et al. (2022) found that postgraduate and doctoral students have a satisfactory level of competence in most of the aspects of digital competence. In addition, Zhao et al. (2021) mentioned that faculty have a basic level of digital competence. In a local context, the study conducted by Batan et al. (2022) confirms that faculty members possess a fundamental competency in comprehending and proficiently utilizing internet and network applications and resources. Bucad and Galicia (2021) demonstrated that individuals possess a high degree of confidence in their digital literacy skills.

In terms of interaction and communication skills, Generation X instructors showed high competency on social awareness, media choice, collaboration and active participation as the lowest. They are able to choose the most appropriate media platforms based on their needs but are not so active in participating via professional and social networking.

This implies that the degree to which a teacher performs their responsibilities is strongly impacted by the level of their communication skills. The literature and studies evaluation indicated that a faculty's job cannot be just to teach, but also to adapt lessons to different learning styles, keep students motivated, build relationships with them through kindness and support, keep the classroom running smoothly, and give helpful comments. To do all of these things, you need to be able to communicate clearly (Hanifan, 2022). Further, according to the National University (2023), educators are required to exhibit great communication skills and the capacity to actively connect with persons from varied backgrounds in order to effectively carry out their professional obligations. However, the research of Martin et al. (2020) stated that faculty rated social media as the lowest in terms of competency.

On production skills, the respondents are competent in terms of evaluation of digital content, followed by automation, digital exploration and lastly, production and sharing. This shows that faculty can collaborate and elicit opinions and responses online however find lacking in creating output using various applications and variety of software.

The findings are related to the study of Martin et al. (2020) affirmed that faculty rated the use of learning management system as the highest in terms of importance and competence. Further, the research of Gayeta (2021) mentioned that there is a high degree of proficiency shown by a faculty computer skill list indicates that using technology and training materials will raise the standard of higher education. Faculty acknowledge their limited or moderate level

of digital proficiency, along with the lack of specific abilities, particularly those pertaining to the evaluation of educational methodologies. Thus, teachers need to learn how to effectively use digital media in their lessons, which will make the digitization of their teaching methods easier. This means that teachers plan how to use media in their lessons, use digital media in a useful and suitable way, and explore new digital formats and methods (Wurffel and Baliuk, 2023).

In terms of safety skills, instructors possess the necessary skills to assess safety through the utilization of digital technology. Online behavior has the highest competency as to safety skills; however, data protection has the lowest competency of all sub-indicators. The faculty can demonstrate appropriate online behavior and recognize unlawful actions while not so competent is keeping their accounts protected.

The findings of this study are comparable with the results reported by Escobar (2021) showed that the respondents exhibit a high degree of beneficial cybersecurity behaviors across five dimensions: Malware, Password Usage, Online Scam Phishing, and Social Engineering. Additionally, it is mentioned in the study of Bojukrapan et al. (2023) stated that digital competencies for higher education faculty consists of competencies which includes ethical behavior, morality and technological safety. This involves interactions with fellow faculty, school personnel, and community members. The research by Fouad (2021) showed that the repeated and growing number of cyberattacks on universities is proof that normal, everyday cybersecurity risks can cause a sense of urgency and can have more negative effects than just the problems they cause right away.

Lastly, on problem-solving and innovation skills, continuous learning gained the highest competency, followed by innovation and development and configuration as the last. This goes to show that faculty members are engaging themselves in activities related to the use of digital technologies. On the contrary, they are not well-versed in troubleshooting technological problems.

The current study is anchored on the study of Bojukrapan et al. (2023) stated that faculty competencies include solving problems and using digital technology and organizing virtual environments. Furthermore, it was reported in the study of Batan et al. (2022) mentioned that faculty reported being proficient in demonstrating knowledge and skills in basic computer operation and other information devices, including basic troubleshooting and maintenance and the use of office and teaching productivity tools. On the other hand, Tokovska et al.'s research from 2022 found that both the survey and the lecturers' personal stories gave information about three things: (1) The return of motivational factors; (2) The possible improvement of digital competencies; and (3) Making innovation easier in higher education.

Relationship of Profile and Digital Competence

The number of years and ages have a weak positive relationship with the competency level of the faculty members belonging to Generation X whereas the number of trainings attended relevant to the study and civil status have a strong positive relationship. On the other hand, academic rank and income have a very weak negative relationship whilst the highest educational attainment has strong negative correlation. Further, sex has no correlation.

Challenges Encountered

The Generation X instructors oftentimes faced several challenges pertaining to personal, organizational, and societal dimensions. The primary obstacle in the personal domain pertains to an overwhelming workload, while the organizational dimension involves the issue of slow internet access. Additionally, the social dimension encompasses the transformation of students' expectations and preferences.

As to personal aspect, encountered obstacles were consistent with the findings of Oludayo et al. (2018) which indicate that an excessive workload has a negative impact on both the commitment and quality of teaching. Polly et al. (2020) also agreed that time constraints is also a challenge. Taylor and Frechette (2022) emphasized that educators encountered a moderate degree of burnout. This burnout was found to be caused by the demands of research and teaching responsibilities, as well as interactions with students. The study of Hammoudi Halat et al. (2023) observed a high incidence of anxiety, sadness, stress, and burnout among faculty members across different academic domains and throughout the whole academic hierarchy

The problems relating to organizational aspect are connected to the study of Alhubaishy and Alljuhani's (2021) stated that an educational institution faces problems with the availability of required resources. The study of Mhlanga (2022) also noted in his study that lack infrastructure and weak capital, and technology ecosystems are challenges associated with digital inclusion. According to Marasigan (2023) of Business Mirror, absence of an open access policy for internet connectivity remains a barrier. Further, Timotheou et al., (2023) highlighted that in the digital transformation process by the institution, connectivity, infrastructure, and government support as well as administration and data management practices are interconnected and play a vital role.

In societal context, Kaputa et al. (2022) highlighted that digital transformation enhances some of the most in-demand abilities in the new knowledge society, such as text manipulation, digital communication and sociability, and information seeking and processing. Similarly, it plays a significant part in cutting down on education-related expenses, but it also deteriorates interpersonal communication skills. According to Marasigan (2023) of Business Mirror, there is a lack of radio spectrum for new services especially that mobile technology continues to advance, hence, legal, and regulatory frameworks should be updated to keep up with the demands of time. Eom and Lee (2022) stated that as governments strive to address these crises, digital transformation is not a choice but an imperative.

SUMMARY

The rapid technological changes affected the Generation X faculty, especially when it comes to learning new important skills and competencies, since the group grew up with personal computers are used to traditional teaching methods and face-to-face interactions. They are used to using old-fashioned methods instead of modern ones that fit the needs of today. Because of this, it is important to look at their digital skills and the difficulties they face when teaching academic courses at higher education institutions.

The study determined the demographic profile of Generation X instructors in terms of age, sex, civil status, highest educational attainment, academic rank, monthly income, length

of service, number of years has been using digital technology and number of trainings attended relevant to the study. The competency of faculty was determined in terms of information and literacy skills, interaction and communication skills, production skills, safety skills, and problem-solving and innovation skills. Moreover, the challenges encountered via personal, organizational, and societal were identified. The output of the study is the capability enhancement program which can be proposed to enhance the competency level and address the challenges encountered by the Generation X faculty teaching higher education courses.

The research employed a quantitative methodology, specifically utilizing a descriptive correlation design, and was carried out across Pangasinan. The researchers utilized a purposive selection technique to select a total of 183 faculty members from Generation X. The respondents were provided with a survey-questionnaire using both face-to-face interactions and online platforms using Google Form. The obtained data was then evaluated using suitable statistical methods.

CONCLUSIONS

The instructors demonstrated competence in the use of digital technology, particularly in the areas of information and literacy skills, interaction and communication skills, production skills, safety skills, and problem-solving and innovation skills. Furthermore, findings showed that age, civil status, number of years courses are taught, and the number of trainings attended are positively correlated with their level of digital competency. Despite these strengths, the faculty often encounter challenges such as excessive workload, slow internet connectivity, and the constantly evolving expectations and preferences of students.

RECOMMENDATIONS

Based on the findings and conclusions of the study, the following recommendations are suggested:

To further support the professional growth of faculty members at Pangasinan, it is proposed that a Capability Enhancement Program be implemented and included in the institution's faculty development plan to improve their digital competencies and address the specific challenges they encounter in higher education instruction. The activities are domain-specific which includes any of the following: series of training-workshops, collaborative learning, classroom/faculty observation, online courses and modules, research projects. Interactive lecture and peer review activities. One of the key objectives of the program is to develop the digital competencies of Generation X instructors, elevating them from competent to highly competent levels through targeted training and continuous professional development. Finally, the study may be further enhanced by integrating additional variables, expanding the scope across campuses, or applying longitudinal data to deepen the analysis and generate more comprehensive insights.

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Internship Experiences and their Influence on the Career Readiness of Hospitality Management Students

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ABSTRACT

This study examines at how internships influence the career readiness of hospitality management students at Pangasinan State University – San Carlos Campus for the school year 2023–2024. The study used a descriptive quantitative method to look at the satisfaction of 90 students with their internships, the influence of stakeholders, and the overall role of internships in preparing graduates ready for employment. The results showed that students were very satisfied, particularly with the hands-on training, mentorship, and development of technical skills. Collaboration between stakeholders, especially between schools and internship hosts training establishments, was also found to have significant impact on the satisfied students were. Internship also had a significant connection to increased professional confidence, clearer career goals, and enhanced skills that make you more employable. Despite the program has some positive aspects, it needs to do better in areas like giving students more international exposure as well as monitoring on them while they are interning. The study concludes that well-structured internships are instrumental in bridging the gap between theoretical learning and industry practice. It recommends strengthening stakeholder collaboration, enhancing international internship linkages, and implementing strategies to support student career development and global competitiveness in hospitality.

Keywords: *internship experience, career readiness, employability skills, stakeholder influence, internship satisfaction*

INTRODUCTION

The hospitality and tourism industry is known for its dynamic and volatile nature, which necessitates a workforce that is equipped with practical skills, knowledge, and positive attitudes. Avenues of internships are crucial as they enable students in hospitality management to gain experience from the industry first hand as well as apply what they have taught in class (Pusiran, et.al. 2020). This practical exposure is important for the development of competencies necessary to succeed in the hospitality business. According to Sari and Abrian (2020), internships account for 52.3% of work readiness influence thus emphasizing their significance in student professional growth.

Therefore, industry participation in program design and implementation would ensure that these experiences are balanced and effective. Well-structured internships offer students insight into how this industry actually operates, this has positive implications on their career decision-making self-efficacy. Wang (2021) noted that self-efficacy resulting from internship experiences significantly affects student's intentions to remain within the hospitality sector.

It is essential for industry to be involved in the preparation and execution of internship programs to make sure they are fair and useful. Internships that are well-planned help students learn about the real-world aspects of their field, which makes it easier for them to choose the right career. Self-efficacy, influenced by internships, was found by Wang (2021) to be directly related to hotel's intention of keeping a student in it. Internship satisfaction and career commitment further mediate this relationship which implies that constructive internship experiences can lead to long-term commitments towards an industry.

Internship satisfaction is a key factor affecting students' career intentions. According to Marinakou (2021), satisfaction with real work conditions and learning experiences during internships positively affects job intentions regardless of problems such as long working hours or inadequate reward systems. This finding highlights the importance of experiential internships that provide real-world job experiences to improve knowledge and readiness for future careers in hospitality.

Internships help hospitality management students prepare for their careers by providing valuable practical experience and industry exposure. This study emphasizes how crucial it is to have internship programs that are well-designed, to engage with industry, and to integrate curricula with current trends. These factors combine to enhance job readiness, career-decision self-efficacy and long-term pursuit of hospitality careers among student graduates. Hence, this research seeks to investigate the effect of internship experiences and its influence in relation with career readiness among hospitality management students that would contribute towards a better understanding from which institution can enhance their grooming process for potential future professionals.

Statement of the Problem

The study's primary objective is to assess the influence of internship experiences on the career readiness of hospitality management students.

Specifically, it seeks to answer the following questions:

1. What is the level of satisfaction of students with their internship experience?
2. How do the stakeholders influence students' satisfaction with their internship?
3. What is the role of internship in shaping the career readiness of hospitality management students?

Scope and Delimitations

This study examines the result of internship experiences on the professional preparedness of Bachelor of Science in Hospitality Management graduates from Pangasinan State University – San Carlos Campus for the academic year 2023–2024. The objective is to assess student satisfaction with their internships, the influence of different stakeholders (educational institutions, private sector, students) on these experiences, and the impact of such experiences on professional decision-making and preparedness.

The scope is confined to graduates who have fulfilled their internship programs within the specified timeframe and who were assigned to Host Training Establishments (HTEs) as

stipulated by CHED Memorandum Order 104, s. 2017. Employer or faculty perspectives are not included in the survey, nor are hospitality students from other campuses or academic years.

The study is limited to how internship experiences impact perceived satisfaction, skill development, and career readiness. This study does not address factors that affect employability, such as extracurricular involvement and academic achievement.

Review of Related Literatures

In order to prepare students for professions in hospitality management industry, internship experiences are essential. According to the Commission on Higher Education (CHED) Memorandum Order 104 S. 2017, Article III, defines internship as the practical application of classroom learning to the actual in a regular work environment. As a result, the goal of these programs is to enable the students to obtain work in identified Host Training Establishments (HTEs) so as to enhance their knowledge and add practical skills. This thus gives students opportunities that will develop essential skills that are highly needed by employers like communication, teamwork and adaptability (Fauzan et al., 2023).

The satisfaction derived from internships significantly influences students' career intentions, as shown by research implying that good internship experiences raise confidence levels on choosing profession (Wang, 2021) and intentions of working in the hotel industry (Marinakou & Giousmpasoglou, 2021). Additionally, strategic planning and involvement of industrial players according to Shetu & Sayedas (2020) are important in designing suitable internship programs for their students' professional paths.

Furthermore, research by Bawica (2021) and Ocampo et al. (2020) found out how internship programs are effective in improving student's employability skills and adaptability to career transition which can make them more likely to gain success in employment. Consequently, communication barriers and long working hours should be addressed (Vo, Le, & Lam, 2021), as this would facilitate a satisfactory internship experience among hospitality management students, hence enhancing their overall career readiness.

Students' employability and career flexibility are significantly affected by the perceived skills they acquire during internships. According to Tavitiyaman, Tsui, and Ng (2023), internship-developed soft skills such as communication and problem-solving have a positive effect on career adaptability and perceived employability. Technical skills, however, did not exhibit the same effect, highlighting the necessity of striking a balance between classroom instruction and real-world internship experiences.

According to Ramaprasad et al. (2021), internship satisfaction plays a significant role in improving students' decision-making self-efficacy and career adaptability. The significance of self-regulatory mechanisms in career development was highlighted by their study, which revealed that the relationship between internship satisfaction and career outcomes is moderated by students' core self-evaluation.

The importance of internships in hospitality management education is supported by Kolb's Experiential Learning Theory. Students can create meaning, grow personally and

professionally, and apply their knowledge to real-world situations through internships (Smith et al., 2024). These encounters have a significant effect on students' self-efficacy in making career decisions, which in turn affects their intention to stay in the hospitality sector. This relationship is mediated by career commitment and internship satisfaction, and moderated by intrinsic motivation (Wang, 2021). The curriculum of hospitality management programs plays a crucial role in developing students' perceived career readiness (Lee et al., 2021). Furthermore, internship satisfaction enhances career adaptability and affects career decision self-efficacy, conditional on students' core self-evaluation levels (Ramaprasad et al., 2021).

Savickas' Career Construction Theory is applied to understand how internships influence hospitality management students' career readiness and decisions. Internships provide opportunities for students to examine their abilities, interests, and career choices in a workplace context (Wang, 2021). The internship experience, including preparation, cultural adaptation, and post-internship reflection, plays a crucial role in shaping students' career paths (J. Zhu et al., 2023). Internships help students develop their career decision-making self-efficacy, which has an immediate influence on their intention to remain in the hospitality sector (Wang, 2021). Students' self-efficacy, which mediates the relationship between work experience and career expectations, is strengthened by work experiences (Liu et al., 2022). Collaboration between educational institutions and industry is crucial to enhancing career readiness because it guarantees that curricula align with industry trends and provide students the skills and knowledge they need (Lee et al., 2021).

Furthermore, despite challenges, Vocal's (2023) research shows that internships play a significant role in both professional and personal development by offering guidance and real-world experience. The study also highlights a knowledge gap that needs to be filled by more research on the various training programs and factors affecting intern experiences across various organizations, institutions, educational levels, and cultural contexts.

In order to better understand and enhance these hands-on learning opportunities for future professionals, it is crucial to look into how internship experiences affect the career readiness of hospitality management students. Therefore, looking into these elements will provide important information about how to improve internship programs and future professionals' readiness in the hospitality sector.

Theoretical Framework

Kolb's Experiential Learning Theory (1984) and Savickas' Career Construction Theory (2005), which both emphasize the importance of experience in both professional and personal development, are cited in this study. According to Kolb's experiential learning theory, learning is a cyclical process that includes active investigation, abstract thought, reflective observation, and concrete experience. This concept highlights how practical experiences help develop professional competencies and practical skills during internships in the hospitality industry.

Furthermore, according to Savickas' CCT, people develop their careers by determining

lessons from their previous experiences and adapting to shifting demands in the workplace. It emphasizes how important vocational adaptability—control, curiosity, concern, and confidence—is in determining career readiness. When taken as a whole, these theories provide a comprehensive framework for understanding how internships influence hotel management students' professional preparedness in terms of both skill development and independent career advancement.

Conceptual Framework

The Input-Process-Output (IPO) model, which demonstrates the logical order of how internship experiences impact students' career readiness in hospitality management, serves as the foundation for this investigation. Variables pertaining to internship experiences, such as student satisfaction, stakeholder influence on how well internships prepare students for careers, and the internship's role in influencing students' career readiness, are included in this model's input. The process reflects the methodical actions done to evaluate these inputs by gathering, analyzing, and interpreting data. Lastly, a policy brief to enhance internship programs for better career preparation is included in the output.

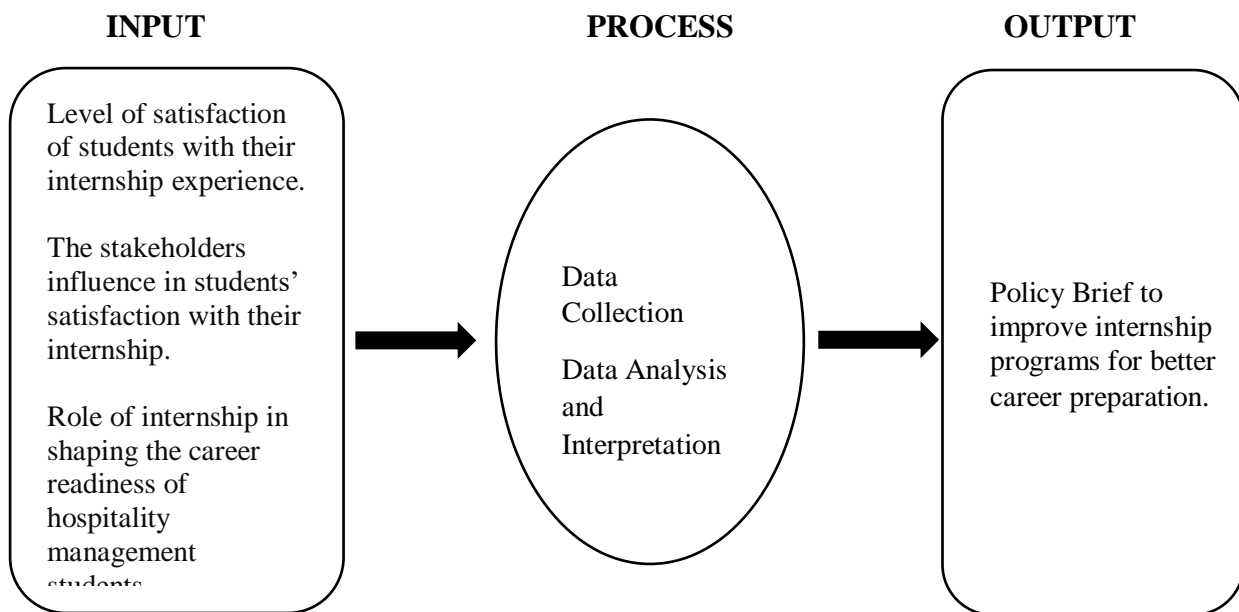


Figure 1. Research Paradigm of the Study

METHODOLOGY

This study utilized a quantitative research approach, specifically the descriptive method, to examine the influence of internship experiences on the career readiness of hospitality management students. By using a quantitative approach, the researchers were able to collect quantifiable and statistical information about the perceived career readiness, stakeholder influences, and student satisfaction levels. Studies that intent to observe, characterize, and record elements of a situation as it naturally arises without changing any variables can benefit from descriptive research.

Research Design

The study used descriptive method of research to assess the influence of internship experiences on the career readiness of hospitality management students. According to Creswell (2018) descriptive research design is categorized as a quantitative research design that is used to quantify the problem by way of generating numerical data that can be transformed into usable statistics. Under quantitative design, descriptive research design seeks to describe the present state of a variable or phenomenon by using quantifiable data to establish facts and identify trends.

Research Steps

The research started with a thorough review of the relevant literature to build a solid theoretical foundation and identify gaps where existing studies were insufficient. After that, the researchers made a structured survey questionnaire that was aligned with the objectives of the study. Five experts looked at the instrument and made suggestions for how to make it better to make sure it was valid and reliable. Once validated, Google Forms were used to distribute the questionnaire online. The researchers made sure that the people they chose to respond were not biased by using a simple random sampling method. After gathering the data, the responses were sorted, counted, and subjected to the appropriate statistical tests to look for patterns, relationships, and results. Lastly, the results were analyzed and summarized to obtain useful information that was relevant to the study's goals.

Data Collection and Sample Selection

The researchers used a survey questionnaire as the primary tool for data collection. The developed questionnaire was submitted to five experts for validation. The study employed a simple random sampling technique in selecting the respondents.

A structured questionnaire with two parts was used to gather data. The first part asked respondents about their demographics profile. The second part focused on three main variables: how satisfied they were with their internship experience, how much influence stakeholders (schools, private sector, students) had on them, and how internships helped them to prepare for a career. The target respondents were Bachelor of Science in Hospitality Management students from Pangasinan State University – San Carlos Campus who completed their internship during the academic year 2023–2024. Data collection was conducted through online via goggle form and then the data are tallied and subjected to appropriate statistical treatments.

Data Analysis Methods

The data collected from the survey questionnaires were analyzed using descriptive statistical methods, particularly frequency distribution, percentage, weighted mean (WM), and descriptive equivalent (DE) to determine the influence of internship experiences on the career readiness of hospitality management students. A 5-point Likert scale was used to measure each item on the questionnaire. We found the overall trend of responses by calculating the weighted

mean (WM) for each statement. The average scores were analyzed using the descriptive equivalent (DE). The study's main objectives were: to measure how satisfied students were with their internships, examine the influenced of stakeholders like schools, industry partners, and students themselves, and assess how internship experiences prepared students for careers in the hospitality industry.

Study Limitations and ethical considerations

The study followed ethical standards by obtaining informed consent from participants, ensuring confidentiality and anonymity, and granting participants the right to withdraw at any time. The researchers ensured the respectful representation of participant perspectives in the final report. Ethical approval was assumed to be granted in accordance with university policies on student research.

RESULTS AND DISCUSSION

SOP 1. What is the level of satisfaction of students with their internship experience?

Table 1: Level of Satisfaction with Internship Experience
n = 90

Indicators	SD	D	N	A	SA	WM	DE
1. The internship program met my expectations.	1	2	6	27	54	4.46	A
	1.1%	2.2%	6.7%	30.0%	60.0%		
2. The tasks assigned were relevant to my field of study.	1	2	6	21	60	4.52	SA
	1.1%	2.2%	6.7%	23.3%	66.7%		
3. I received adequate supervision and mentorship during my internship.	1	3	7	25	54	4.42	A
	1.1%	3.3%	7.8%	27.8%	60.0%		
4. The working environment was professional and conducive to learning.	2	3	11	26	48	4.28	A
	2.2%	3.3%	12.2%	28.9%	53.3%		
5. My internship allowed me to develop technical skills applicable to the hospitality industry.	1	1	7	23	58	4.51	SA
	1.1%	1.1%	7.8%	25.6%	64.4%		
6. I had opportunities to engage in hands-on training during my internship.	0	1	5	19	65	4.64	SA
	0.0%	1.1%	5.6%	21.1%	72.2%		
7. My internship experience has positively influenced my perception of the hospitality industry.	1	1	4	24	60	4.57	SA
	1.1%	1.1%	4.4%	26.7%	66.7%		
8. The workload during my internship was appropriate and manageable.	1	1	4	32	52	4.48	A
	1.1%	1.1%	4.4%	35.6%	57.8%		
9. I was given responsibilities that allowed me to grow professionally.	1	1	3	21	64	4.62	SA
	1.1%	1.1%	3.3%	23.3%	71.1%		
10. I received timely and constructive feedback from my supervisors.	1	1	6	21	61	4.56	SA
	1.1%	1.1%	6.7%	23.3%	67.8%		

Mean	4.51	Strongly Agree
Legend: 1.00-1.50: Strongly Disagree (SD), 1.51-2.50: Disagree (D), 2.51-3.50: Neutral, 3.51-4.50: Agree (A), 4.51-5.00: Strongly Agree (SA)		

The findings presented in Table 1 illustrate the level of satisfaction among respondents regarding their internship experience. The overall mean satisfaction score is 4.51, which falls under the category of “Strongly Agree,” indicating a generally high level of contentment with various aspects of the internship program. A majority of the respondents strongly agreed that they had opportunities to engage in hands-on training during their internship (WM = 4.64). Similarly, they strongly agreed that they were entrusted with responsibilities that contributed to their professional growth (WM = 4.62).

Moreover, the respondents strongly agreed that their internship experience positively influenced their perception of the hospitality industry (WM = 4.57), suggesting that the program provided meaningful exposure and insights into the field. Additionally, respondents strongly agreed that they received timely and constructive feedback from their supervisors (WM = 4.56), emphasizing the critical role of mentorship and guidance in enhancing the learning experience.

Respondents also affirmed that the tasks assigned were relevant to their field of study (WM = 4.52), and that the internship allowed them to develop technical skills applicable to the hospitality industry (WM = 4.51). These results suggest that the internship program was effective in delivering practical training and promoting both academic and professional development.

Other aspects of the internship experience were rated under the category of “Agree.” These include the appropriateness and manageability of the workload (WM = 4.48), the extent to which the internship met their expectations (WM = 4.46), the adequacy of supervision and mentorship (WM = 4.42), and the professionalism and conduciveness of the working environment (WM = 4.28).

The results of this study, which revealed high levels of student satisfaction with their internship experiences align with the findings of Ramaprasad et al. (2021), who emphasized that internship satisfaction positively influences career adaptability and decision-making self-efficacy. This suggests that students who are satisfied with their internships are more likely to feel confident in making informed career decisions and adapting to the professional environment. The strong satisfaction ratings in the current study reflect not only the effectiveness of the internship program but also its role in enhancing students’ readiness to transition into the workforce, thereby supporting Ramaprasad et al.’s conclusion that internship satisfaction is a key factor in developing career-related competencies.

SOP 2. How do the stakeholders influence students' satisfaction with their internship?

Table 2: Influence of Stakeholders on Internship Satisfaction

n = 90

Indicators	SD	D	N	A	SA	WM	DE
1. My school provided sufficient guidance and preparation for my internship.	1	1	7	30	51	4.43	A
	1.1%	1.1%	7.8%	33.3%	56.7%		
2. The private sector (internship host) provided a structured internship program.	1	1	4	32	52	4.48	A
	1.1%	1.1%	4.4%	35.6%	57.8%		
3. I took personal responsibility in maximizing my internship learning experience.	1	1	8	29	51	4.42	A
	1.1%	1.1%	8.9%	32.2%	56.7%		
4. My school effectively monitored my internship progress.	3	0	4	35	48	4.39	A
	3.3%	0.0%	4.4%	38.9%	53.3%		
5. The private sector offered learning opportunities aligned with my academic training.	1	1	6	27	55	4.49	A
	1.1%	1.1%	6.7%	30.0%	61.1%		
6. The collaboration between my school and the internship provider enhanced my experience.	1	1	4	35	49	4.44	A
	1.1%	1.1%	4.4%	38.9%	54.4%		
7. The school's internship policies were clearly communicated and well-implemented.	2	1	5	31	51	4.42	A
	2.2%	1.1%	5.6%	34.4%	56.7%		
8. The internship provider maintained a supportive and professional learning environment.	1	2	5	32	50	4.42	A
	1.1%	2.2%	5.6%	35.6%	55.6%		
Mean		4.44			Agree		
Legend: 1.00-1.50: Strongly Disagree (SD), 1.51-2.50: Disagree (D), 2.51-3.50: Neutral, 3.51-4.50: Agree (A), 4.51-5.00: Strongly Agree (SA)							

The results presented in Table 2 highlight the influence of various stakeholders on internship satisfaction, with an overall mean score of 4.44, categorized under “Agree.” This indicates that respondents generally perceived the support provided by both their school and internship host as effective in enhancing their internship experience.

Among the key findings, respondents agreed that the private sector offered learning opportunities aligned with their academic training (WM = 4.49). This suggests that both structured programs and individual initiative played a role in increasing internship satisfaction.

Additionally, respondents agreed that the private sector provided a well-structured internship program (WM = 4.48), reinforcing the importance of organized and carefully managed experiential learning.

Respondents also acknowledged that collaboration between their school and internship provider enhanced their experience (WM = 4.44). The guidance and preparation provided by the school were rated positively (WM = 4.43), indicating that pre-internship orientations and support played a valuable role. Moreover, respondents agreed that they took personal responsibility in maximizing their internship learning experience, that the school’s internship policies were clearly communicated and well-implemented, and that the internship provider maintained a supportive and professional learning environment, all with a weighted mean of 4.52.

While respondents agreed that the school effectively monitored their internship progress (WM = 4.39), this was the lowest-rated item, indicating potential areas for improvement in tracking and supporting students throughout their internships.

These findings align closely with Bawica’s (2021) study, which emphasized that effective internship programs are shaped by both individual and organizational factors, including academic preparedness, supervision, task clarity, and institutional support.

SOP 3. What is the role of internship in shaping the career readiness of hospitality management students?

Table 3: Role of Internship in Career Readiness
n = 90

Indicators	SD	D	N	A	SA	WM	DE
1. My internship helped me understand real-world applications of my coursework.	1	2	3	19	65	4.61	SA
	1.1%	2.2%	3.3%	21.1%	72.2%		
2. I gained essential professional skills (e.g., communication, teamwork, problem-solving) through my internship.	1	2	2	18	67	4.64	SA
	1.1%	2.2%	2.2%	20.0%	74.4%		
3. My internship experience increased my confidence in entering the workforce.	1	2	4	20	63	4.58	SA
	1.1%	2.2%	4.4%	22.2%	70.0%		
4. The skills acquired during my internship are transferable to future employment.	1	2	5	21	61	4.54	SA
	1.1%	2.2%	5.6%	23.3%	67.8%		
5. My internship experience has influenced my career goals in the hospitality industry.	1	1	4	20	64	4.61	SA
	1.1%	1.1%	4.4%	22.2%	71.1%		
6. I feel prepared to pursue a career in hospitality management because of my internship.	1	2	2	24	61	4.58	SA
	1.1%	2.2%	2.2%	26.7%	67.8%		
	1	2	7	18	62	4.53	SA

7. My internship provided networking opportunities that may help in my future career.	1.1%	2.2%	7.8%	20.0%	68.9%		
8. I have a clearer understanding of the career path I want to take after my internship.	1	1	4	23	61	4.58	SA
	1.1%	1.1%	4.4%	25.6%	67.8%		
Mean	4.58				Strongly Agree		
Legend: 1.00-1.50: Strongly Disagree (SD), 1.51-2.50: Disagree (D), 2.51-3.50: Neutral, 3.51-4.50: Agree (A), 4.51-5.00: Strongly Agree (SA)							

The findings in Table 3 demonstrate that internships play a critical role in enhancing career readiness among students, as reflected in the overall mean score of 4.58, which falls under the category of “Strongly Agree.” This indicates that respondents highly valued their internship experience in preparing them for future careers, particularly in the hospitality industry.

Among the key indicators, the highest-rated statement was that students gained essential professional skills—such as communication, teamwork, and problem-solving—through their internship (WM = 4.64). Additionally, respondents strongly agreed that their internship helped them understand the real-world applications of their coursework and affirmed that the experience influenced their career goals within the hospitality industry, both with a weighted mean of 4.61.

Respondents also strongly agreed that their internship experience increased their confidence in entering the workforce, made them feel prepared to pursue a career in hospitality management, and helped them gain a clearer understanding of their desired career path, all with a weighted mean of 4.58. These results suggest that experiential learning significantly contributed to their professional development.

Moreover, respondents agreed that the skills acquired during the internship are transferable to future employment (WM = 4.54). They also expressed strong agreement that the internship provided networking opportunities that may benefit their future careers (WM = 4.53).

These findings support the studies of Fauzan et al. (2023) and Wang (2021). Fauzan et al. emphasized that internships develop essential skills like communication and teamwork, which respondents rated highly. Wang (2021) highlighted how positive internship experiences boost career confidence and clarity—reflected in the strong agreement from students in this study. These findings confirm that internships play a vital role in enhancing students’ career readiness.

SUMMARY

This study explored the internship experiences of 90 hospitality management students, focusing on their demographic profiles, levels of satisfaction, the role of various stakeholders,

and the influence of internships on career readiness. The findings reveal several key trends and implications for hospitality education and training.

Demographically, most respondents were young adults aged 23–25, with a majority being female (64.44%). All participants completed local internships, primarily in hotels (82.22%), and most engaged in short-term internships of less than three months. The absence of international internship experience highlights the limited global exposure available to students and underscores the need for expanded international training opportunities.

In terms of satisfaction, the respondents reported a high overall mean of 4.51 (Strongly Agree), indicating that the internship programs were generally effective. The highest-rated aspects included hands-on training opportunities (WM = 4.64), the assignment of meaningful responsibilities (WM = 4.62), and positive professional development, such as receiving timely feedback and developing industry-relevant technical skills. However, areas like workload management and mentorship were rated slightly lower, suggesting opportunities for improvement.

Stakeholder influence was also notable, with an overall mean score of 4.44 (Agree). Respondents acknowledged the importance of school-industry collaboration, effective pre-internship preparation, and the supportive environments provided by internship hosts. While respondents generally took personal responsibility for their learning, the relatively lower score in school monitoring (WM = 4.39) signals a need for enhanced tracking and follow-up systems during internships.

Most significantly, the data confirmed that internships are instrumental in boosting career readiness, as reflected in the high overall mean of 4.58 (Strongly Agree). Students agreed that internships improved their professional skills (WM = 4.64), helped them understand real-world applications of academic knowledge, influenced their career goals, and enhanced their confidence to enter the workforce. Respondents also acknowledged the networking and transferable skills gained through their internships, which are crucial for future employment in the hospitality industry.

CONCLUSIONS

Based on the findings, the following conclusions were drawn:

1. The study revealed that the majority of hospitality management students preferred local, short-term internships in hotel establishments, with a strong participation from female students aged 23 to 25. The absence of international internship experience suggests existing limitations in global exposure, underscoring the need for institutions to strengthen international linkages.
2. Students reported a high level of satisfaction with their internship experiences, particularly in areas related to hands-on training, responsibility assignment, mentorship, and the development of technical skills. The results confirm that the internship program was well-aligned with students' academic preparation and

- career interests, contributing meaningfully to their professional growth and industry perception.
3. Stakeholder involvement, including both the academic institution and internship hosts, was positively perceived by the students. The findings highlighted the importance of collaboration between schools and industry partners, effective pre-internship preparation, clear communication of internship policies, and the creation of a professional learning environment. However, monitoring by schools during the internship process emerged as a potential area for improvement.
 4. Internships were found to be instrumental in enhancing career readiness, as students gained critical professional skills, increased their confidence to enter the workforce, and clarified their career goals. The results strongly support the role of experiential learning in bridging the gap between academic theory and real-world application, as well as in developing employability and transferable skills.

RECOMMENDATIONS

Based on these conclusions, the following recommendations are proposed to further enhance the effectiveness of internships in the hospitality industry:

- 1) The institution should explore international internship placements and collaborations to provide students with global exposure and a competitive edge in the industry.
- 2) A career orientation may be conducted for the graduating students to help them get their first job in which they will intend to stay.
- 3) The university should continue developing the skills relevant to the graduates' job.
- 4) A study on job satisfaction and/or job performance of the graduates should be conducted.
- 5) The graduates should consider pursuing advanced studies for professional development and promotion in their workplace.

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SOCIO-CULTURAL MAGNETISM: INVESTIGATING THE ALLURE OF HERITAGE TOURISM IN PANGASINAN, PHILIPPINES

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ABSTRACT

This study "Socio-Cultural Magnetism: Exploring the Lure of Heritage Tourism in Pangasinan, Philippines" investigated the socio-cultural influences of heritage tourism in Pangasinan in the local community's perspective. The analysis considered the demographics of respondents, their importance of the advantages and disadvantages of tourism and the effects of exposure to tourism on their community and way of living. The participants were local residents who completed surveys about different dimensions of tourism, such as infrastructure, economic opportunities, and social implications, for a total of 400 questionnaires completed. The findings also showed that heritage tourism in Pangasinan is highly favored by young adults, but there is no significant difference between the male and female respondents. Most of the participants were in agreement that infrastructure has improved, employment opportunities are there for everyone and region also got popularized through tourism. But there were worries too over the risk that tourism might lead to moral decline and job insecurity. In addition, there was significant enthusiasm and positive framing about the growth of tourism and welcoming of visitors, with an obvious nod to challenges associated with overcrowding during peak times. The research highlights the significance of sustainable tourism that combines economic incentives with conservation of local culture and community welfare. The findings conclude that heritage tourism in Pangasinan tends to be advantageous so long as solutions are developed to solve the adverse impacts of tourism.

Keywords: Cultural identity, cultural integrity, heritage tourism, socio-cultural impact

INTRODUCTION

Pangasinan, a province celebrated for its rich cultural heritage and historical significance, presents a fascinating opportunity for a thorough examination of the socio-cultural allure inherent in its legacy. Historical sites and traditional villages all provide important traces of cultural identity of the province. It is through these sites that the researcher hopes to uncover methodologies of maintaining and transmitting cultural values, practices and traditions between generations. An understanding about the roots of Pangasinan's world of meaning may shed more light on our understanding of the socio-cultural terrain in the province. There are numerous heritage sites in Pangasinan of historical importance, including the ones that trace their origins back in the World War II and Spanish colonial period. Making sense of these stories, we take a critical look at history and culture, and see how Pangasinan, a province in the Philippines, is being marketed based on its rich cultural history, historical narratives and diverse nature formations thus making it an

interesting site for heritage tourism. The historic sites of the province, rich with national monuments and functioning traditional villages among other testaments of its long history, remain timeless showcases of how their past has crafted their current way of life and in turn afford its visitors an equally rare opportunity to embrace and appreciate the unique cultural traditions and norms that they have been bequeathed. The appeal of these places lies not only in their historical value, but in the ability to carry you between the past and present and create a fuller, more dynamic and culturally rich sense of content.

Pangasinan is a prime example of how heritage tourism has become an important driver of economic development in many areas. Pangasinan heritage sites have grown to be important tourist destinations as tourists' desire for authentic cultural experiences grows. These locations highlight the province's historic churches and monuments, customary celebrations, regional handicrafts, and unique culinary customs, all of which contribute to its distinct identity. The sociocultural aspects of heritage tourism, such as traditions, celebrations, and the characteristics of the local populace, play a crucial role in shaping the entire travel experience. To improve the province's tourism initiatives and preserve its cultural heritage for future generations, it is essential to analyze the specific factors that attract tourists to Pangasinan's heritage sites and how these elements relate to different demographic groups.

This study examined the sociocultural aspects of heritage tourism in Pangasinan, focusing on respondents' perceptions of the effects of tourism, the effects of exposure to tourist activities, and respondents' perceptions of seasonality, host-guest cultural differences, tourist types, and the specific stage of Pangasinan tourism development. The study's objectives were to identify the demographic traits of locals or locals who benefit from the tourist attractions, investigate the sociocultural elements they take away from the location, and assess how these elements affect visitors' overall experiences. The study also looked into how demographics affect visitors' perceptions and offered a sustainable tourism development that balances protecting the province's cultural heritage with attracting tourists. Insights into the sociocultural dynamics of Pangasinan heritage tourism were provided by this study, which advanced knowledge of how heritage sites can be used to support sustainable travel while maintaining cultural integrity for coming generations.

Statement of the Problem

This study was conducted to determine the socio-cultural aspects of heritage tourism that attract tourists to visit Pangasinan. More specifically, this study aims to answer the questions:

1. What is the demographic profile of the respondents in terms of age, gender, civil status, educational attainment, and respondents according to their areas of residence;
2. What is the assessment of the socio-cultural aspects of heritage tourism that attract tourists to Pangasinan in terms of the perception of the respondents toward the impact of tourism, perceptions of respondents towards the impacts of exposure of tourist activities, and perceptions of the respondents according to seasonality, cultural differences between hosts and guests, type of tourists and the particular stage of tourism development in Pangasinan;

3. What is the significant difference between the profile of the respondents and the socio-cultural aspects of heritage tourism that attract tourists to Pangasinan;
4. What policy brief will be proposed for sustainable tourism development that balances tourist appeal with the preservation of socio-cultural heritage; and lastly
5. What practical recommendations will be proposed for policymakers, local authorities, and stakeholders, emphasizing strategies for sustainable tourism

Scope and Delimitations

This study examined the social and cultural dimensions of heritage tourism in the province of Pangasinan, Philippines, with an emphasis on the perspectives and experiences of those who profit from the sale of goods or services to visitors to heritage sites. It examined how the province's cultural identity which is reflected in its historical landmarks, customs, and interpersonal relationships adapts to its growing appeal as a destination for heritage tourists.

The study's scope was restricted to specific parameters in order to maintain its focus and depth. Only residents who directly dealt with tourists by offering services like housing, food, transportation, handicrafts, or guided tours were asked to respond. Geographically, the study concentrated on a few Pangasinan heritage sites that are well-liked by visitors and support locally owned tourism enterprises. It made no attempt to cover every historical or cultural site in the province.

The social and cultural aspects of tourism, including cultural preservation, local customs, and interactions between residents and visitors, were the main focus of the study. This study did not address the natural and economic aspects, despite their perceived importance. Additionally, the results are accurate for the time period in which the data were collected because the study was conducted within a specific time frame.

Review of Related Literatures

Few studies explicitly address the socio-cultural aspects of tourism in Pangasinan, despite the fact that heritage tourism has been the subject of much research worldwide. Research that explores the distinctive cultural attractions of this province is needed, as the literature that is currently available is typically more generalized.

It can be difficult to match sustainable development goals with historic tourism, claims Castillo, R.C. (2015). This means preserving cultural resources, accurately interpreting the past, and using responsible and thoughtful ways to make money. The impact that historical tourism has on both the local population and the actual sites should be a top concern for stakeholders. Considering the many variables that influence the principles of prudent heritage use. Achieving a balance between revenue generation, responsible cultural space and heritage site maintenance, and community involvement in heritage tourism requires the collaboration of all stakeholders.

Furthermore, heritage tourism is necessary to guarantee that tourists leave with a lasting impression and a reasonable level of satisfaction, according to Asmelash and Kumar (2019). In

order to prevent the industry's sustainability from being seriously questioned, it should also promote sustainable tourism practices among them and make them more sensitive to sustainability issues. Only a small body of literature has been written about satisfaction and the development of sustainable heritage tourism. The relationship between visitor satisfaction and the expansion of sustainable heritage tourism is still not well understood, and there is a dearth of research on the subject.

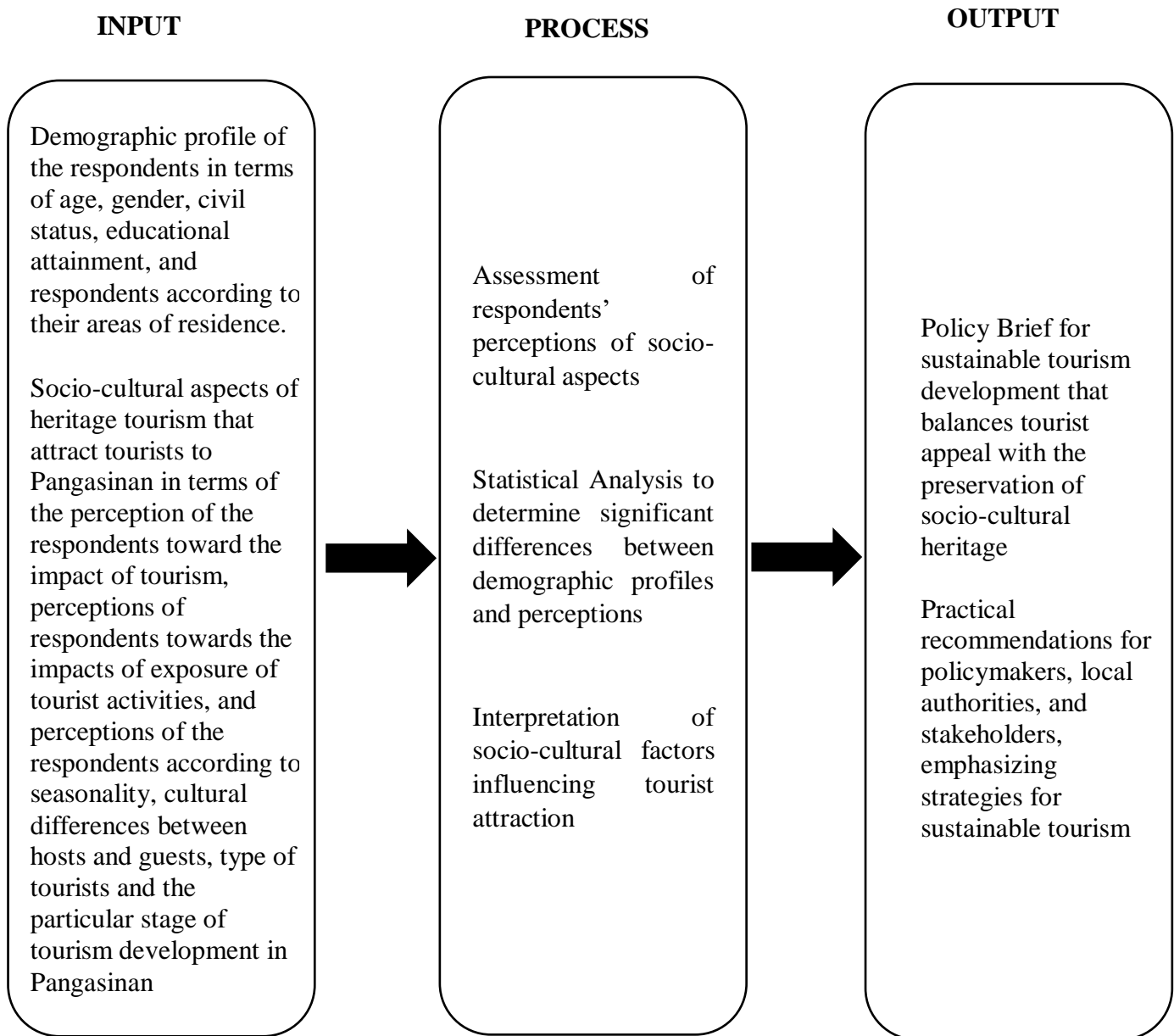
The fact that no comparable study has been done to date on this problem is another strong argument in favor of the current one. In addition to advancing scholarly knowledge of heritage tourism, filling these gaps will provide useful suggestions for stakeholders and policymakers engaged in the sustainable growth of Pangasinan tourism.

Theoretical Framework

George Doxey created the Irridex Model in 1975, and it offers a useful theoretical framework for comprehending how host communities react to the expansion of tourism over time. Four progressive stages of local attitudes toward tourism are described by the model: euphoria, apathy, irritation, and antagonism. Residents are typically ebullient and hospitable during the early stages of euphoria, and they value the financial opportunities that tourism provides. However, interactions become routine as tourism grows, which breeds apathy. Residents may eventually become irritated as problems like overcrowding, cultural intrusion, and growing living expenses arise. If these problems continue and locals feel taken advantage of or excluded in their own communities, this can turn into hostility. (Doxey, 1975)

This model is especially useful for examining the viewpoints of locals who profit financially from tourism by providing goods or services, particularly in places known for their rich cultural heritage. It contributes to the explanation of these people's shifting perspectives as they manage the difficult balancing act between cultural preservation and financial gain. The framework also clarifies cultural exchanges, social tensions, and the possible loss or alteration of cultural identity brought on by prolonged exposure to tourists. In general, the Irridex Model highlights the significance of inclusive and sustainable tourism development and offers crucial insight into the sociocultural effects of tourism on local communities.

Conceptual Framework



METHODOLOGY

The goal of the study "Socio-Cultural Magnetism: Investigating the Allure of Heritage Tourism in Pangasinan, Philippines" was to find out how locals perceived the sociocultural and economic effects of Pangasinan's heritage tourism. The population, research design, data collection techniques, and analysis processes utilized to meet the study's goals are described in this section.

Research Design

A descriptive research design was used in this study to evaluate the appeal of Pangasinan heritage tourism. Individual perspectives and experiences are best captured by descriptive research, which provides a clear understanding of how tourism affects the sociocultural dynamics and local economy. An extensive investigation of local perceptions of the impact of heritage tourism, with an emphasis on community viewpoints, was made possible by the design.

Research Steps

In order to identify knowledge gaps, the research started with a thorough review of related literature. The creation of a structured survey questionnaire in line with the study's objectives and the establishment of research objectives came next. Sampling of Pangasinan locals who interact directly with tourists by providing goods or services at particular heritage sites was the next step. Surveys were used to collect the data, guaranteeing that the answers reflected the sociocultural perspectives of these residents. To find trends and discrepancies between demographic profiles and attitudes toward heritage tourism, the collected data was subsequently encoded, arranged, and examined using statistical software.

Data Collection and Sample Selection

Local Pangasinan residents who have either experienced or are impacted by heritage tourism made up the target population. To represent a cross-section of the local community, 400 respondents in all were chosen. In order to guarantee that the participants had firsthand experience with heritage tourism and could offer pertinent insights into the sociocultural and economic effects of tourism in the area, purposeful sampling was used.

A self-administered questionnaire served as the main tool for gathering data. The purpose of the survey was to find out how respondents experienced about the influence of heritage tourism on different facets of Pangasinan life. There were multiple sections to the questionnaire:

The respondents' demographic data was the main focus of the first section. Basic data like the respondents' age, gender, civil status, educational background, and place of residence were collected in this section. The remaining sections of the instrument were adapted from the studies of Alhasanat & Hyasat, (2011), entitled, "Sociocultural impacts of tourism on the local community at Petra, Jordan" published in *Jordan Journal of Social Sciences* and from the study of Zaidi, et al., (2017) entitled, "Indigenous Resident's Attitude Towards Tourism Development and Perceived Socio-cultural Impacts in Carey Island published in the *World Applied Sciences Journal*. Perceptions of the sociocultural effects of tourism were the main topic of the second section. This section addressed the social, cultural, and economic effects of Pangasinan heritage tourism, including how it affects crime rates, social behaviors, economic opportunities, and infrastructure improvements. The exposure to tourist activities was the main topic of the third section which. The survey meant to discover more about the ways in which locals profit from tourism on a personal level, how they engage with visitors, and how tourism has affected their way of life and the neighborhood. The final section concentrated on the development of tourism, cultural differences,

and seasonality. This section examined the cultural exchanges between visitors and locals, the seasonal difficulties of tourism, and the opinions of locals regarding the growth and sustainability of Pangasinan tourism.

Respondents were asked to rate how much they agreed with each statement on a Likert scale, which ranged from 1 (strongly disagree) to 5 (strongly agree).

Data Analysis Methods

The data obtained from the questionnaires was analyzed using descriptive statistics and weighted mean scores. Frequencies and percentages were used to summarize the demographic profile of the respondents, providing a clear understanding of the participants' backgrounds. A weighted mean was calculated for each statement in the survey, allowing the study to determine the degree of agreement or disagreement with each perception. This provided a quantitative measure of how strongly residents feel about the impact of heritage tourism in their community. For the ranking of statements, based on the weighted mean scores, the study ranked the statements to identify the most and least significant perceptions of heritage tourism's impact, highlighting the socio-cultural and economic aspects that resonated most with the local residents.

Ethical considerations

No specific identities were disclosed in the report in order to preserve the high level of confidentiality of the survey. The identities of the respondents were kept concealed. The results of the study were not applied in any way that could endanger the research subjects. The researcher only presented facts and findings derived from the data collected; no personal opinions were expressed. Prior to the study, the participant's consent was obtained, and the study will place a high priority on respecting the dignity of research. In compliance with the Data Privacy Act of 2012, this study also protected the respondents' privacy. Additionally, all authors mentioned throughout the paper were appropriately acknowledged and cited in the references.

RESULTS AND DISCUSSION

Table 1. Result of the Demographic Profile of the respondents

Demographic Characteristics	Category	Frequency (n)	Percentage (%)
Age	18-20	56	14%
	21-35	232	58%
	36-50	88	22%
	51 and above	24	6%
Gender	Male	196	49%
	Female	204	51%

Civil Status	Single	160	40%
	Married	228	57%
	Widowed/Widower/Separated	12	3%
Educational Attainment	Primary graduate	24	6%
	Secondary graduate	120	30%
	Vocational/Technical course graduate	104	26%
	College graduate	136	34%
	Postgraduate	16	4%
Respondents According to their Areas of Residence	Local (residents)	400	100%

The demographic profile of the respondents, categorized by age, gender, civil status, educational attainment, and place of residence, is shown in Table 1 to give an idea of the community's composition and possible involvement in tourism-related activities.

Age-wise, the table showed that the majority of respondents (58%) were between the ages of 21 and 35, with those between the ages of 36 and 50 coming in second (22%). According to this finding, the bulk of respondents are young to middle-aged adults who are probably actively involved in business endeavors, employment, or locally driven tourism projects. In contrast, 14% of the respondents were between the ages of 18 and 20, suggesting that there are younger people out there who might still be in school or just starting their careers. Those 51 and older made up the smallest percentage (6%) of the population, indicating a low representation of senior citizens who might be less actively involved in tourism-related economic activities.

The community's workforce potential is highlighted by the preponderance of younger and middle-aged people. Their participation in tourism-related businesses, such as regional companies, services, or jobs in the sector, may be essential to optimizing the local economy's gains from tourism.

The community's workforce potential is highlighted by a large proportion of younger and middle-aged people. Their participation in tourism-related businesses, such as regional companies, services, or jobs in the sector, may be essential to optimizing the local economy's gains from tourism. This is consistent with research by Almeida-García et al. (2016), who found that because of the jobs that come with tourism, younger locals frequently view it more favorably.

With 51% of the respondents being female and 49% being male, the respondents were split almost evenly by gender. This balance implies that there are comparable opportunities for men and women to participate in tourism-related activities, whether through direct employment, starting their own business, or other ways to profit from the sector.

Near-equal representation of the sexes could suggest that tourism offers inclusive economic opportunities for the local community. In local businesses, handicrafts, hospitality, and service-oriented industries related to tourism, women may hold important positions. Men can also help by building infrastructure, providing transportation, or starting businesses that serve tourists.

Near-equal representation of the sexes could suggest that tourism offers inclusive economic opportunities for the local community. In local businesses, handicrafts, hospitality, and service-oriented industries related to tourism, women may hold important positions. Men can also help by building infrastructure, providing transportation, or starting businesses that serve tourists. According to Mensah (2016), men frequently play different roles than women when it comes to community-based tourism, and gender can have a big impact on participation.

The majority of respondents (57%) were married, suggesting that many of the local tourism industry's beneficiaries are family members. Just 3% of the respondents said they were widowed, widower, or separated, compared to 40% who said they were single.

Given the high proportion of married people, it is possible that many families rely on jobs and businesses related to tourism to support them. The participation of unmarried people also emphasizes the tourism industry's potential for youth employment and entrepreneurship.

According to the study, college graduates made up the largest percentage of respondents (34%) in terms of educational attainment, followed by secondary graduates (30%). Furthermore, 6% had only completed primary school, whereas 26% had finished a technical or vocational course. Just 4% had completed a postgraduate program.

According to these results, most residents have completed at least secondary school, and many have college or vocational degrees. The presence of graduates from technical and vocational courses is especially noteworthy because it shows that there is a pool of talented people who can support the tourism sector by working in trades like hospitality, culinary arts, tour guiding, and craftsmanship. However, the comparatively small proportion of postgraduate degree holders may suggest that obtaining a higher level of education is not always necessary to take advantage of the region's tourism-related economic activity. According to Huh and Vogt (2008), residents who have more education are more likely to support the growth of the tourism industry because education increases awareness of the potential advantages.

All of the respondents (100%) were locals, guaranteeing that the study fairly represents the viewpoints of people who are directly affected by the social and economic effects of tourism in their community. These locals have direct knowledge of how tourism affects their standard of living, employment prospects, and local economy because they reside close to the tourist destination.

Table 2. Perception of the Respondents toward the Impact of Tourism

Statement	Frequency	Weighted Mean	Rank
1. Tourism has improved the image of Pangasinan	400	4.4	3
2. Due to tourism, infrastructure in Pangasinan has been enhanced such as roads, hospitals, schools, parks, restaurants, etc.	400	4.5	2
3. Tourism increases the level of education in Pangasinan	400	4	5

4. Tourism improved my behavior with my family and society	400	3.9	6
5. Tourism creates opportunities for people in Pangasinan such as employment and investment	400	4.5	2
6. Tourism encourages some immoral behaviors of some people in Pangasinan	400	2.1	9
7. Tourism has increased crime in the local community in Pangasinan	400	2	10
8. Working in tourism makes me feel insecure about my future employment	400	2.1	9
9. Tourism is the reason for some youngsters misbehaving	400	1.9	10
10. Benefits of tourism in Pangasinan outweigh its costs	400	4.6	1

The respondents' perceptions of the impact of tourism are shown in Table 2. According to the study's findings, most respondents emphasized the benefits of tourism in Pangasinan, including how it can improve the province's infrastructure, reputation, and economic prospects. There is broad agreement that tourism has significantly raised Pangasinan's profile internationally, as evidenced by the statement "Tourism has improved the image of Pangasinan" receiving a weighted mean of 4.4. This is consistent with previous studies that emphasize the role of tourism in improving a destination's image since it attracts attention from around the world and fosters a sense of pride among locals (Mowforth & Munt, 2019). Similarly, the claim regarding improvements to roads, schools, and hospitals received a weighted mean of 4.5, suggesting a strong conviction that tourism has been essential to the development of these essential services. This is in line with global trends, since tourism development often leads to infrastructure improvements that benefit both locals and visitors (Dwyer et al., 2018).

The perceived economic benefits of tourism are an important finding. With a mean score of 4.5, respondents indicated strong agreement with the statement, "Tourism creates opportunities for people in Pangasinan such as employment and investment," underscoring the important role that tourism plays in creating economic opportunities. In addition to attracting investment into regional businesses and services, tourism has the potential to create job opportunities in sectors like hospitality, retail, and transportation, supporting the province's economic growth (Smith & Robinson, 2023). However, the results were more diverse when the social effects of tourism were examined. With a low mean score of 2.1, the statement "Tourism encourages some immoral behaviors of some people in Pangasinan" indicates that most respondents did not think that tourism was a factor in moral degradation. Similarly, the claim that "Tourism has increased crime in the local community in Pangasinan" received a score of 2.0, suggesting that people do not believe that tourism has significantly contributed to the rise in crime rates. These results cast doubt on the notion that, as seen in various contexts, tourism always has a negative social impact (Li & Ryan, 2020). According to many respondents, tourism has a positive influence on local behavior and

culture.

A weighted mean of 4.6 for the statement "Benefits of tourism in Pangasinan outweigh its costs" shows that, despite some concerns, such as job instability in the tourism sector and the potential for youth misconduct, the general consensus is that the benefits of Pangasinan tourism outweigh the disadvantages. This suggests that both visitors and locals are quite satisfied with the positive impacts of tourism. This result supports the idea that, with careful management, tourism can benefit a region in long-term socioeconomic and cultural ways (McKercher & Du Cros, 2018). Furthermore, even though tourism was not thought to be the main cause of juvenile misbehavior or an increase in crime, it is clear that participants believe the long-term benefits such as improved infrastructure, economic growth, and cross-cultural interaction are more significant.

Table 3. Perceptions of Respondents towards the Impacts of Exposure to Tourist Activities

Statement	Frequency	Weighted Mean	Rank
1. I benefit from tourism in Pangasinan	400	4.4	3
2. Tourism in Pangasinan improves my lifestyle	400	4.3	4
3. I support tourism and welcome tourists to come to my community	400	4.6	1
4. Women should be encouraged to work in tourism industry	400	4.5	2
5. Tourism weakens the social bonds and family structure in Pangasinan	400	2.1	9
6. The closer my residency to the tourist site the more I benefit from tourism in Pangasinan	400	4.1	6
7. Tourism increased the cost of living in Pangasinan	400	3	7
8. I have more money to spend because of my work in tourism in Pangasinan	400	4.2	5
9. I deal with tourists almost every day	400	3.5	8
10. Earnings from tourism lure children in my community to drop out of school at an early age	400	2.2	10

The perceptions of respondents towards the impacts of exposure to tourist activities are shown in table 3. The results of the survey's second section show how Pangasinan residents perceive

tourism's sociocultural effects, particularly with regard to its impact on community interactions, lifestyle changes, and economic benefits. The findings provide valuable insights into how the province's citizens view the benefits and drawbacks of tourism.

With the highest weighted mean of 4.6, the statement "I support tourism and welcome tourists to come to my community" indicates that the majority of respondents strongly agree with the idea of welcoming tourists to their localities. This result shows that the locals are generally welcoming to tourists, demonstrating a high level of community involvement and a positive attitude toward visitors. This result is consistent with research demonstrating that locals typically view tourism as a way to obtain social and economic benefits, which helps to foster goodwill between locals and visitors (Mowforth & Munt, 2019).

"Women should be encouraged to work in the tourism industry," a noteworthy statement, came in second place with a weighted mean of 4.5. Results show that the majority of respondents support women working in the tourism sector, which is consistent with the growing recognition of tourism as a means of empowering women through employment opportunities in hospitality, guiding, and related fields (Smith & Robinson, 2023). The economic and social standing of women in rural or developing regions is improved by promoting gender equality in the tourism industry, which is a potent catalyst for broader societal advancement.

The statement "I benefit from tourism in Pangasinan" came in third place with a weighted mean of 4.4, indicating that participants believe they personally gain from the social and economic opportunities brought about by tourism. This is in line with data from around the world showing that tourism significantly boosts local economies by generating revenue from a variety of tourism-related activities and creating jobs (Dwyer et al., 2018). Similar to this, the statement "Tourism in Pangasinan improves my lifestyle" (mean score 4.3) shows that locals believe that tourism can improve their quality of life by giving them better access to goods and services as well as chances for cross-cultural interaction.

On the contrary, the claim that "Tourism weakens the social bonds and family structure in Pangasinan" received a low mean score of 2.1, indicating a strong disagreement with the idea that tourism has a negative impact on local social structures. According to the results, participants did not believe that tourism threatened their ties to their families and communities. Instead, they seem to see it as a catalyst for cultural and social interaction. According to research, tourism can improve ties within the community, especially when locals engage in cultural activities with tourists (Li & Ryan, 2020).

With a mean score of 3.0, the statement "Tourism increased the cost of living in Pangasinan" demonstrated a neutral viewpoint on the idea that tourism raises living costs. This finding suggests that while some respondents may have noticed price increases for tourism-related goods and services, others may not have experienced significant changes in their daily costs. According to earlier research, while tourism may lead to price increases, particularly in industries like housing and retail, it can also have positive effects that offset these costs, such as improved infrastructure and more job opportunities (McKercher & Du Cros, 2018).

The statement "I have more money to spend because of my work in tourism in Pangasinan" received a moderate amount of agreement from participants (mean score of 4.2), indicating that employment in the tourism industry has a positive impact on personal income. This supports the

idea that tourism is an important source of income for many families, providing both direct and indirect employment opportunities. It is further supported by the claim that "The closer my residency to the tourist site the more I benefit from tourism in Pangasinan" (mean score 4.1), which shows that people who live closer to tourist attractions benefit more from tourism in the form of better business opportunities and more interaction with tourists.

Finally, with the lowest weighted mean of 2.2, the statement "Earnings from tourism lure children in my community to drop out of school at an early age" showed a significant disagreement with the notion that tourism contributes to early school dropout rates. This suggests that participants did not consider tourism to be a significant factor in young people's decisions to drop out of school early. This finding is important because it implies that the economic opportunities brought about by tourism may not be seen as detrimental to Pangasinan youths' aspirations for education.

Table 4. Perceptions of the Respondents According to Seasonality, Cultural Differences between Hosts and Guests, Type of Tourists and the Particular Stage of Tourism Development in Pangasinan

Statement	Frequency	Weighted Mean	Rank
1. Tourism during the high season contributes to issues such as crowding, inflation, etc.	400	3.9	1
2. Working in tourism during the high season is feasible, though I prefer having a more permanent job in another sector	400	3.4	6
3. I interact with individual tourists more than I do with tourists in groups	400	3.8	2
4. Tourists show respect to our culture and traditions	400	4.2	4
5. Tourism made me understand other cultures better	400	4.1	5
6. Tourism increased my pride in our national culture	400	4.3	3
7. I support tourism development in Pangasinan concerning more marketing and in-site infrastructure	400	4.5	7
8. Community representatives in Pangasinan are involved in development decisions concerning Pangasinan	400	4	8

9. Negative impacts of tourism may drive me to leave Pangasinan	400	2.3	9
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The perceptions of the respondents according to seasonality, cultural differences between hosts and guests, type of tourists and the particular stage of tourism development in Pangasinan are depicted in Table 4. The study's conclusions show how Pangasinan locals view the precautions associated with tourism, particularly during the busiest times of the year, and how they view the influence of tourism in general on their community. Respondents provided opinions on the benefits and challenges they face as they evaluated the effects of tourism on the local economy, environment, and culture in a number of statements.

With the highest weighted mean of 3.9, the claim that "Tourism during the high season contributes to issues such as crowding, inflation, etc." indicates that participants are aware of the challenges associated with high season travel, particularly with regard to crowding and inflation. These issues are commonly faced in popular tourist destinations, where the peak season can put a strain on local resources, raise living costs, and result in a sharp increase in the number of visitors (Mowforth & Munt, 2019). This research suggests that while tourism has significant economic advantages, it also creates tensions between meeting the high demand for tourism and preserving a sustainable standard of living for locals.

The second-highest ranked statement, "I interact with individual tourists more than I do with tourists in groups" (mean score 3.8), suggests that respondents feel a closer personal bond with lone travelers than with larger groups. This research raises the possibility of cultural exchange by indicating that locals may prefer more intimate tourist encounters in which visitors may show a greater interest in Pangasinan customs and culture (Li & Ryan, 2020).

The significance of tourism in fostering cultural pride and understanding was also underlined in the study. With a weighted mean of 4.2, the participants strongly agreed with the statement, "Tourists show respect to our culture and traditions." This implies that locals view visitors as generally respectful of the culture, which is a positive indication of how visitors behave in Pangasinan. This result is in line with earlier research showing that polite interactions between residents and visitors foster goodwill and lessen the chance of cultural deterioration (McKercher & Du Cros, 2018). Additionally, the statement "Tourism made me understand other cultures better" (mean score 4.1) shows that locals view tourism as a way to improve cultural awareness, supporting the idea that travel can serve as a platform for promoting respect and cross-cultural knowledge sharing (Smith & Robinson, 2023).

With a mean score of 4.3 for the statement "Tourism increased my pride in our national culture," it is clear that many locals feel that tourism has made them prouder of their heritage. This is consistent with research that highlights how properly run tourism can boost community pride by showcasing cultural heritage around the world and preserving it for coming generations (Dwyer et al., 2018).

However, concerns were raised about how tourism would affect the local population. The claim that "Negative impacts of tourism may drive me to leave Pangasinan" had the lowest weighted mean (2.3), indicating that while there are drawbacks to tourism, it is unlikely that most

locals will be forced to leave. This suggests that most participants believe the benefits of tourism such as the creation of jobs and opportunities for cross-cultural interaction outweigh the disadvantages. However, it highlights that some people may feel overpowered by the negative impacts of tourism, such as crowding and rising living expenses, which are often cited as sources of annoyance for local communities in tourist-heavy areas (Li & Ryan, 2020).

Lastly, the statement "I support tourism development in Pangasinan concerning more marketing and in-site infrastructure" received the highest weighted mean of 4.5, suggesting that the majority of the population supports continued tourism development, particularly with regard to improvements in infrastructure and marketing tactics. This is consistent with the widespread recognition that infrastructure development advances sustainable tourism by benefiting both tourists and local communities (McKercher & Du Cros, 2018).

SUMMARY

According to this study, most people have a positive opinion of Pangasinan historical tourism. Because of improved infrastructure, economic opportunities, and cultural pride, locals see tourism as beneficial. Despite the existence of issues like high living costs, juvenile behavior, and crowding during busy times, these were not considered important. Participants recognized the need to preserve cultural integrity while promoting tourism, especially those with advanced degrees. The study emphasizes the importance of a sustainable tourism strategy that balances visitor satisfaction with cultural conservation. Policymakers and stakeholders were given useful suggestions on how to enhance tourism management, promote cultural sensitivity, and increase community engagement in the preservation of Pangasinan's sociocultural past.

CONCLUSIONS

According to this study, most people have a positive opinion of Pangasinan historical tourism. Because of improved infrastructure, economic opportunities, and cultural pride, locals see tourism as beneficial. Despite the existence of issues like high living costs, juvenile behavior, and crowding during busy times, these were not considered important. Participants recognized the need to preserve cultural integrity while promoting tourism, especially those with advanced degrees. The study emphasizes the importance of a sustainable tourism strategy that balances visitor satisfaction with cultural conservation. Policymakers and stakeholders were given useful suggestions on how to enhance tourism management, promote cultural sensitivity, and increase community engagement in the preservation of Pangasinan's sociocultural past.

RECOMMENDATIONS

Based from the findings and conclusions of the study, the following recommendations are suggested:

This study outlines several important recommendations aimed at maximizing the advantages of heritage tourism in Pangasinan. At the outset, it is crucial to adopt sustainable tourism strategies

to address challenges related to overcrowding and inflation during peak seasons. This can be accomplished by managing tourist numbers and promoting travel during less busy periods. Promoting community-based tourism initiatives is crucial for encouraging local involvement in decision-making and protecting cultural heritage. Moreover, improving job security in the tourism sector through the provision of training and stable employment opportunities will strengthen long-term career prospects, especially for women and marginalized communities.

Continuous efforts to improve cultural awareness are crucial, including educating visitors about regional traditions and providing training for local guides. Developing tourism experiences that are family-friendly and educational is crucial, given that many respondents emphasize the importance of these aspects. Furthermore, monitoring and addressing potential negative impacts like moral decline and crime, alongside promoting gender inclusivity in the tourism workforce, will help maintain a constructive environment. In conclusion, continuous investment in infrastructure is crucial for supporting both residents and visitors, ensuring sustainable development and long-term success of heritage tourism in the region.

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Satisfaction with Factors Influencing the Hidden Curriculum in a BS Air Transportation Program

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ABSTRACT

The limited research on the hidden curriculum propelled the researchers to conduct a study focusing on specific aspects related to general activities, school facilities, faculty and staff behavior, and BS in Air Transportation (BSAT) activities. The study employed a mixed-method approach involving an assessment survey from two hundred BSAT respondents, along with interviews of six participants. Findings showed that most respondents were 21-year-old male Filipinos who generally expressed satisfaction across various areas. However, certain elements, such as general and departmental activities and teacher and faculty behavior, require improvement. Activities organized by the school and department effectively enhanced teamwork, discipline collaboration skills among students. Respondents identified classrooms as essential facilities; however, they indicated the library, activity room, and gym needed improvements. The researchers recommend increasing the availability of BS AT relevant books and journals, magazines, library, providing monetary incentives and other motivation to boost the passion and commitment of faculty members, ensuring cleanliness and orderliness during class transitions, maintaining more international programs, developing additional activities that are aligned with and needed by BS AT students.

Keywords: *Hidden Curriculum, Air Transportation, Assessment, Education, Aviation*

INTRODUCTION

The aviation sector has been one of the backbones of the world economy, as it involves numerous activities, including transporting passengers and cargo over vast distances. These activities encompass airline operations, airport management, aircraft design, and other aviation-related tasks. Aviation students must prepare for their prospective jobs in the field; much of this preparation involves their curriculum.

There are several types of curriculum. One of these is the Recommended Curriculum. This curriculum is defined as the curriculum suggested by government institutions or agencies. In the Philippines, Basic Education recommendations come from the Department of Education, while the Vocational and Technical Education standards are set by the Technical Education and Skills Development Authority (TESDA), and the Higher Education guidelines are provided by the Commission on Higher Education (CHED). For more than five decades, the aviation school and the air transportation program where the study was conducted have followed the rules and regulations of the commission.

While meticulously following the curriculum outlined by CHED, an unplanned type of curriculum also emerges: the hidden curriculum. Although not intentionally designed, this hidden curriculum significantly influences learners' behavior. Elements like peer pressure, school environment, media exposure, parental expectations, societal shifts, cultural traditions, and natural disasters all play a role in shaping it. To date, few research has been conducted in technical schools to explore this phenomenon further.

The researchers aimed to assess the satisfaction of air transportation students with general college activities, physical facilities, faculty, and non-teaching staff behavior, and departmental activities. These factors have an impact and play a significant role in the learners' experience, aside from the recommended curriculum being implemented and deliberately planned.

Background of the Study

The BS in Air Transportation program caters to a wide variety of careers, such as air traffic control, flight dispatch, and flight operations. The program includes courses in weather, navigation, theory of flight, and aviation regulations. It emphasizes safety protocols, decision-making skills, and critical thinking, essential components in the aviation industry. Established in 1969 under the name "Air Transport Engineering," it later evolved to "Air Transportation." To earn a degree in this field after completing approximately 180 units, including general education courses alongside core aviation subjects like electives, a comprehensive recommended, taught, and supported curriculum is being implemented by the department. Amongst its facilities are a Flight Simulator for scenario-based learning experiences; an advanced laboratory dedicated to understanding intricacies involved during each stage within complex systems; and a Virtual Visual Environment Trainer enabling firsthand appreciation via realistic simulations when exploring dynamic operational scenarios. These features are part of the recommended curriculum, while the learners attain this, the students also participate in a wide variety of activities to enhance their knowledge and experience. Activities like foundation day, departmental programs, the interaction of students with their teachers and non-teaching personnel, and the usage of the facilities help students develop values and social skills that aid them in cultivating essential abilities such as leadership, communication, and teamwork. These skills are highly valued in the aviation industry.

Statement of the problem

The study aims to assess the satisfaction of selected factors influencing the hidden curriculum of an air transportation program. It seeks to answer the following questions.

1. What is the demographic profile of the respondent in terms of:
 - 1.1 Age
 - 1.2 Gender
 - 1.3 Nationality
2. What is the level of BS AT student satisfaction in terms of the following?

- 2.1 General Activities
- 2.2 General Physical Facilities
- 2.3 Faculty Behavior
- 2.4 Non-Teaching Staff Behavior and
- 2.5 Departmental Activities

3. Which activities organized by the college and department are most significant to the participants?
4. What values were gained by the participants from joining in the activities?
5. Which school facility has had the greatest impact on shaping the personality of the participants?
6. Which school facilities are most neglected when it comes to maintenance and improvement?

Theoretical framework

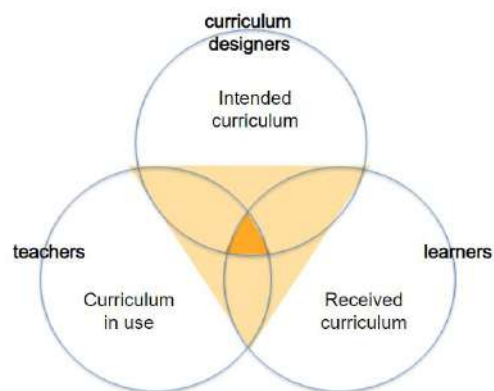


Fig. 1: Theoretical Framework diagram

This diagram, proposed by Rachel Ellaway PhD, Lisa Graves MD, and Andrew Robinson MD, was adopted as the theoretical basis of the study. They stated that a hidden curriculum is what students learn outside the formal curriculum given to them. It serves as a way for them to adapt to the real world of professional work.

Intended Curriculum. This refers to the plan and objectives developed by curriculum designers, including college administrators, course chairpersons, faculty members, and non-teaching staff involved in creating the BS AT program.

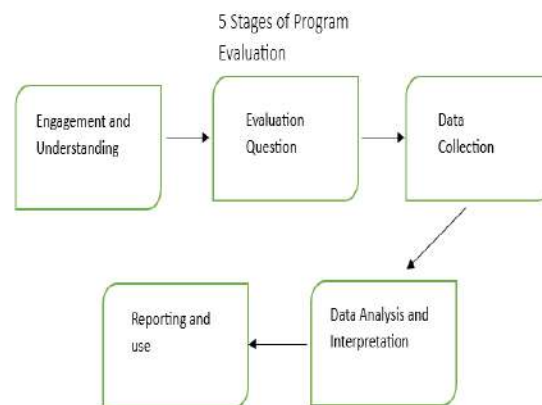
Received Curriculum. This pertains to the concepts and content that learners, specifically BS AT students, genuinely absorb and retain from their classroom experiences.

Curriculum in use - This refers to the implemented BS AT curriculum or lessons delivered and presented by each BS AT Faculty member.

Hidden curriculum - This refers to the lessons and values that students acquire indirectly through their school environment, interactions with others, and participation in activities. This concept is symbolized by the inverted triangle in the diagram.

Conceptual Framework

Fig. 2: Conceptual Framework of the study



The research follows the Five Stages of Program Evaluation in completing the study.

Stage 1: Engagement and Understanding. At this stage, collaborative integration took place between the researchers, the faculty of the BS in Air Transportation program, and the Guild of Air Transportation Students. The researchers gathered information and finalized the scope of the research.

Stage 2: Evaluation Questions. At this stage, the researchers seek the expertise of various professionals, such as graduates with an educational background, statisticians, student leaders, and the chairperson, to validate the alignment and correctness of the questions. Survey questionnaires and interview questions were prepared.

Stage 3: Data Collection. At this stage, the researchers distributed the questionnaire to students in the first semester of the Bachelor of Science in Air Transportation course for the academic year 2024-2025. The survey was conducted for one and a half months, targeting 200 students from different groups with assistance from the Guild of Air Transportation Students. The official course organization of the BS AT Department.

Stage 4: Data Analysis and Interpretation. The researchers worked closely with the Research and

Development Center to analyze the collected data. This process included compiling and interpreting responses from the questionnaire, with assistance from the statistician of the department.

Stage 5: Reporting and use. At the last stage, the researchers put together a report that encapsulated the major findings of the research study. This report was submitted to the interests of those who participated in the research, which included the Department of Bachelor of Science in Air Transportation, Office of the Student Affairs, and Guild of Air Transportation Students.

Scope and Limitations

This study primarily aims to assess the satisfaction of selected factors affecting the Hidden Curriculum of a BS in Air Transportation program. It covers satisfaction in terms of Campus and Departmental activities, General Physical Facilities, Faculty Behavior, Non-Teaching Behavior, and BS in Air Transportation Activities.

This study will not cover or touch other factors like educational policies, cultural influences, socioeconomic context, and assessment practices that influence hidden curriculum.

METHODOLOGY

Research Design

The researchers used the Mixed Method Research in the study. It is an approach that combines both qualitative and quantitative methods to provide a more comprehensive understanding of the topic. The researchers used survey questionnaires to collect data from a group of respondents and conducted one-on-one interviews with participants to cross-check the results of the survey against their opinions. Mixed methods research integrates elements of both quantitative and qualitative approaches to address the research questions. By combining these methodologies, the researchers can achieve a more comprehensive understanding than through isolated quantitative or qualitative studies alone, as it harnesses the strengths of each method (George 2023).

Respondents of the Study

The respondents were 3rd-year and 4th-year BSAT students, as they have completed most of the program's core subjects and participated in various curricular and extracurricular activities. By this stage, these students are expected to have had the most exposure to both the formal curriculum and the hidden curriculum—unspoken expectations, cultural norms, and values imparted through their academic journey. The researchers came up with 203 respondents and used the Cochran formula. Other researchers also interviewed three student leaders and three incoming officers of the Guild of Air Transportation Students.

Research Instrument

The survey questionnaire is a researcher-made questionnaire that was validated and tested by three experts. A member of the BS AT faculty, a staff member in the Research and Development Center, and a faculty member who is a licensed teacher. A student leader was also consulted in drafting the questionnaire.

The questionnaire consists of five sections. The first set of questions is about the demographic profile of the respondents. The second part concerns the level of student participation in extracurricular activities. The third section addresses satisfaction with various school physical facilities. The fourth section evaluates students' satisfaction regarding the behavior of faculty and non-teaching personnel. Lastly, interview questions were developed to explore factors affecting the hidden curriculum. These questions are exclusively for the six participants of the study who are primarily student leaders.

The answers to the questionnaire were measured using the following choices:

VALUE	RANGE	DESCRIPTION
4	3.51 - 4.50	I WAS EXTREMELY SATISFIED.
3	2.51 - 3.50	I WAS SATISFIED.
2	1.51 - 2.50	I WAS UNSATISFIED.
1	1.00 - 1.50	I WAS EXTREMELY UNSATISFIED.

Table 4: Range and Value

Data Gathering Procedure

On November 25, 2024, the researchers began a validation process using a few selected BS Air Transportation instructors with the intention of demonstrating the validity of the questionnaire. This preliminary trial helped identify possible issues in the questionnaire related to clarity, length, and relevance. Necessary adjustments were made to these aspects based on feedback from this validation before distributing it to the main sample.

On December 6, 2024, the researchers successfully utilized the revised questionnaires on a sample of students in their third and fourth years who were pursuing a degree in BS Air Transportation. The questionnaires were distributed as printed paper copies. Students were asked to respond by providing answers to various questions about their encounters and opinions regarding out-of-school experiences during face-to-face interactions. Upon completion of the questionnaires, the researchers automatically received them once filled out.

An interview was conducted with both current and incoming officers of the Guild of Air Transportation Students (GATS) to discuss their experiences and satisfaction concerning general activities, departmental activities, and physical facilities.

Statistical Treatment

1. Percentage Formula

Percentage=(WholePart)×100

2. Frequency

f=Number of occurrences of the response

3. COCHRAN’s Formula

$$n_0 = \frac{z^2 p (1 - p)}{e^2}$$

Fig. 2 COCHRAN’S

The researchers will be using COCHRAN’s Formula to determine the sample size for an infinite population wherein:

n_0 =is the sample size

Z= this is the desired confidence level which is 95%

p=this is the maximum variability

e= this is the margin of error which is 5% (0.05%)

After the infinite population, the researchers will apply it to the finite population correction wherein:

$$n = \frac{n_0 * N}{n_0 + N - 1}$$

n=sample size of infinite population (384)

N= the total population (416)

Thematic analysis is a qualitative method employed in the social sciences to spot and showcase recurring patterns or themes within data. The researchers process the transcripts via MAXQDA and meticulously interpret them to extract significance and comprehend diverse topics and interpretations.

Ethical considerations

The researchers adhered to the ethical principles outlined in Republic Act No. 10173 (Data Privacy Act of 2012). This included obtaining approval from the ethics committee, ensuring alignment with the BS AT research agenda, maintaining data security and storage, ensuring safety for both researchers and participants during interviews, and seeking permission from the BS AT Chairperson and Research Development Center before distributing questionnaires. Additionally, activities were conducted so as not to significantly disrupt the daily operations of the department or affect the institution's reputation. Finally, due care was taken regarding all source citations in their references section. Regarding academic integrity, they checked for plagiarism using plagiarism-checking software before considering the manuscript ready for presentation and publication.

RESULTS AND ANALYSIS

Findings

I. Demographic Profile of the Respondents

Age		
Age	Frequency	Percentage
Under 18 years old	0	0%
19 years old	61	30%
20 years old	32	15.3%
21 years old and above	111	54.7%
Total:	203	100%

Table 1: Age of the 3rd and 4th year BSAT students

The table shows a total of 203 respondents, with the 21 and years old above category the highest percentage among all four categories. Meanwhile, there is zero percent in the under 18 years old category, 30% in the 19 years old category, and 15.3% in the 20 years old category.

Gender		
Gender	Frequency	Percentage
Male	167	82.3%
Female	31	15.3%
Non-Binary	1	0.5%
Prefer not to say	4	1.0%
Total	203	100%

Table 2: Gender of the 3rd and 4th year BSAT students

The table above shows the values of the percentage of respondents regarding what gender they selected. The total number of respondents is 203, and most of the gender selected is male, having a percentage of 82.3%. The second

most selected is female with 15.3%. Four of the respondents chose the category of “prefer not to say,” having a percentage of 1.0%. Lastly, one respondent selected the “non-binary” category as having the least frequency and percentage among all.

Marete, C., Zakharov, W., and Mendonca, F. (2022) highlight that male enrollment in aviation courses is significantly higher than female enrollment, underscoring a persistent gender gap in the field.

Nationality		
Nationality	Frequency	Percentage
Filipino	199	98.0%
Other	4	2%
Total	203	100%

Table 3: Nationality of the BSAT students

The table above represents the values of percentage of respondents regarding their nationality. Most of the respondents are found to be Filipino, having a percentage of 98.0%. The other four respondents chose the “other” category, having a percentage of 2%.

Research indicates that the Philippines has a weak presence in the international student market, with inbound foreign students limited to specific nationalities and in much smaller numbers compared to other popular study destinations. Bayudan-Dacuyucuy, C., Luzon, P., & Zambrano, S. (2024)

Statement	Standard Deviation	Weighted Mean	Decision
The student and faculty production numbers were engaging and entertaining.	0.645	3.20	Satisfied
The student and faculty production numbers were engaging and entertaining.	0.567	3.28	Satisfied
The resource speaker's delivery was engaging and clear.	0.598	3.25	Satisfied
The cash raffle was conducted fairly and transparently.	0.739	3.25	Satisfied
Composite mean	0.637	3.25	Satisfied

Legend: 3.51 - 4.50 Very Satisfied, 2.51 - 3.50 Satisfied, 1.51 - 2.50 Dissatisfied, 1.00 - 1.50 Very Dissatisfied

Table 4: Opening Ceremony

The weighted mean of this area is 3.25, indicating a "Satisfied" result. The highest weighted mean is 3.28, reflecting the student-faculty interaction during the opening ceremony, while the lowest mean is 3.20 for engaging and entertaining student and faculty production numbers.

According to Liu and Tang (2024), their study titled “Optimizing University Ceremonies for Psychological Well-Being” concludes that school programs, such as opening ceremonies, have a highly positive impact on students by fostering a sense of belonging and community. These programs help students feel more connected, welcomed, and excited, improving their overall experience even if the events themselves are not continuously engaging until the end.

Statement	Standard Deviation	Weighted Mean	Decision
The exhibits were creative and innovative	0.610	3.24	Satisfied
The exhibits were informative and educational.	0.632	3.20	Satisfied
The exhibits were well-presented and visually appealing.	0.657	3.21	Satisfied
Composite mean	0.633	3.22	Satisfied

Legend: 3.51 - 4.50 Very Satisfied, 2.51 - 3.50 Satisfied, 1.51 - 2.50 Dissatisfied, 1.00 - 1.50 Very Dissatisfied

Table 5: *PATTS Exhibit*

The weighted average for this area is 3.2, suggesting a "Satisfied" outcome. The highest mean of 3.24 pertains to the exhibit's creativity and innovativeness, whereas informativeness and educational value received the lowest mean score of 3.20.

The 2023 study by Sreeramana Aithal and Nandita Mishra titled “Effect of Extracurricular and Co-Curricular Activities on Students’ Development in Higher Education” shows that extracurricular activities—including exhibits—make students more active inside and outside the classroom. These activities encourage students to socialize more, as they get opportunities to meet and interact with peers participating in such events.

Statement	Standard Deviation	Weighted Mean	Decision
The quality of the merchandise items was good.	0.707	3.16	Satisfied
The prices of the merchandise items were reasonable.	0.753	3.04	Satisfied
The taste of the food was good.	0.708	3.09	Satisfied

The prices of the food were reasonable.	0.708	3.09	Satisfied
The games were enjoyable.	0.733	3.04	Satisfied
The games were fair and well-organized.	0.71	3.12	Satisfied
The booth decorations were creative and visually appealing.	0.645	3.14	Satisfied
The booth decorations were appropriate for the event theme.	0.647	3.26	Satisfied
The performers showcased excellent talent and skills.	0.628	3.27	Satisfied
The costumes and props were appropriate and visually appealing.	0.641	3.28	Satisfied
The special numbers were entertaining.	0.643	3.29	Satisfied
The special guests were engaging and interesting to listen to.	0.683	3.14	Satisfied
The special guests made valuable contributions to the event.	0.633	3.19	Satisfied
The celebrity status of the special guests added to the overall appeal of the event.	0.728	3.16	Satisfied
Composite mean	<i>0.681</i>	<i>3.17</i>	Satisfied

Legend: 3.51 - 4.50 Very Satisfied, 2.51 - 3.50 Satisfied, 1.51 - 2.50 Dissatisfied, 1.00 - 1.50 Very Dissatisfied

Table 6: Booths and Bazaars

The weighted mean is 3.17, indicating a "Satisfied" response. The highest mean value of 3.29 pertains to the entertaining special number at the event, while the lowest mean of 3.04 relates to how enjoyable the games were.

A study by Magboo-Campo (2024) titled "Tourism Student Satisfaction with Extra-Curricular Activities in a Public Higher Education Institution in the Philippines" found that students are highly satisfied when engaged in extracurricular events. Participation in activities such as fairs and booths provides students with opportunities to express creativity and talents.

Statement	Standard Deviation	Weighted Mean	Decision
The contestants are stunningly beautiful and physically fit.	0.709	3.15	Satisfied
The production numbers are enjoyable.	0.677	3.35	Satisfied
The gowns and suits of the male and female contestants are breathtaking.	0.682	3.32	Satisfied
The contestants confidently answered the questions.	0.708	3.26	Satisfied
Composite mean	0.694	3.27	Satisfied

Legend: 3.51 - 4.50 Very Satisfied, 2.51 - 3.50 Satisfied, 1.51 - 2.50 Dissatisfied, 1.00 - 1.50 Very Dissatisfied

Table 7: Campus Pageant

The weighted average is 3.27, indicating a response of "Satisfied." The highest mean score is 3.26, focusing on the contestants' confidence during the question and answer segment. Meanwhile, their stunning beauty and physical fitness received the lowest score of 3.15.

In the study by Bañez et al. (2024), participants detailed their experiences managing the demands of both academic responsibilities and participation in pageantry. While some reported that the difficulties sometimes outweighed the benefits, the majority highlighted positive personal growth and outcomes. Key themes emerging from their accounts included the challenge of balancing pageantry with academic work, handling pressures and expectations, forging meaningful connections and relationships, and deriving a sense of fulfillment from their involvement.

Statement	Standard Deviation	Weighted Mean	Decision
The contestants' singing and dancing talents are impressive.	0.699	3.24	Satisfied
The production numbers are exciting and captivating.	0.675	3.27	Satisfied
Composite mean	0.687	3.26	Satisfied

Legend: 3.51 - 4.50 Very Satisfied, 2.51 - 3.50 Satisfied, 1.51 - 2.50 Dissatisfied, 1.00 - 1.50 Very Dissatisfied

Table 8: Campus Idol Singing and Dancing Contest

The weighted average for this area is 3.26, indicating a response of "Satisfied." The highest average value is 3.27, which pertains to the excitement and captivation generated by the production numbers. On the other hand, a 3.24 mean was obtained by contestants' singing and dancing talents, with slightly lower mean scores than others in comparison.

Hallam (2010) reviews extensive empirical evidence on how active engagement with music positively impacts the intellectual, social, and personal development of children and young people. It draws on brain research using advanced technologies, as well as quantitative and qualitative psychological and educational studies.

Statement	Standard Deviation	Weighted Mean	Decision
The artists invited are talented and experienced.	0.668	3.27	Satisfied
The sound and lighting were good and added to the excitement.	0.677	3.40	Satisfied
The concert was entertaining and memorable.	0.677	3.28	Satisfied
Composite mean	0.674	3.32	Satisfied

Legend: 3.51 - 4.50 Very Satisfied, 2.51 - 3.50 Satisfied, 1.51 - 2.50 Dissatisfied, 1.00 - 1.50 Very Dissatisfied

Table 9: *Music Fest*

The weighted average for this area is 3.32, indicating a response of "Satisfied." The highest mean score is 3.40, which focuses on the enhanced excitement from good sound and lighting. Meanwhile, at 3.27, the artists invited received the lowest score for their talent and experience.

Statement	Standard Deviation	Weighted Mean	Decision
The booths are organized.	0.670	3.26	Satisfied
The recruiters are approachable.	0.706	3.20	Satisfied
I believe my group is a good fit for me and my interests.	0.686	3.22	Satisfied
The recruiters were friendly and informative.	0.672	3.24	Satisfied
Composite mean	0.684	3.23	Satisfied

Legend: 3.51 - 4.50 Very Satisfied, 2.51 - 3.50 Satisfied, 1.51 - 2.50 Dissatisfied, 1.00 - 1.50 Very Dissatisfied

Table 10: *Recruitment Week: Program-Oriented and Special Interests Organizations*

The weighted average is 3.23, indicating a "Satisfied" response. The highest mean of 3.26 corresponds to the organized booths category, while the lowest score of 3.20 relates to recruiters being approachable.

According to a 2022 study conducted by Swingler et al. titled “Bridging the gap: skill development in curricular, co-curricular and extra-curricular activities and the impact on students' perceived readiness for employment.”, their study concluded participating in extra or co-curricular activities improves self-reflection on self-development. Also, the students are able to find ways to be confident during their progress of self-development making them more generally approachable. In this way, we can safely assume that the factors of reflection of self-development can lead to better preparedness for the general challenges in life.

Statement	Standard Deviation	Weighted Mean	Decision
I appreciate the opportunity to participate in Sportsfest and contribute to the school community	0.693	3.32	Satisfied
The sports activities during Sportsfest were engaging.	0.701	3.26	Satisfied
The events during Sportsfest were well organized.	0.739	3.22	Satisfied
I am satisfied with the camaraderie among participants during Sportsfest.	0.718	3.18	Satisfied
Composite mean	0.713	3.25	Satisfied

Legend: 3.51 - 4.50 Very Satisfied, 2.51 - 3.50 Satisfied, 1.51 - 2.50 Dissatisfied, 1.00 - 1.50 Very Dissatisfied

Table 11: *Sportsfest*

The weighted mean for this area is 3.25, indicating a response categorized as "Satisfied." The highest weighted mean stands at 3.32 and focuses on Sportsfest participation alongside school community contributions. Satisfaction with camaraderie among participants during the Sportsfest received the lowest score of 3.18.

The 2020 study by Rozali et al. titled “Factors of Active Participation of Engineering and Technical Student-Athletes in Co-Curricular Activities (Sport)” concludes that active participation in co-curricular activities leads to promising developmental growth across multiple dimensions: mental, spiritual, physical, and emotional intelligence. The study finds that students who actively engage become more capable and driven, demonstrating better self-management and overall discipline. This suggests that involvement in such activities fosters holistic personal development and improves the students' ability to manage themselves effectively.

Statement	Standard Deviation	Weighted Mean	Decision
Classrooms are properly ventilated and lighted.	0.754	3.19	Satisfied
The chairs are well-arranged and in good condition.	0.785	2.89	Satisfied
The room is clean and well-maintained.	0.797	2.75	Satisfied
The corridors are free from any obstructions.	0.886	2.72	Satisfied
The laboratories are well-equipped.	0.745	3.00	Satisfied
The computer's hardware and software operate efficiently.	0.812	2.91	Satisfied
The temperature in the non-air-conditioned laboratories is comfortable.	0.835	2.80	Satisfied
The tools and equipment are in good working condition and readily available.	0.956	2.46	Dissatisfied
Safety equipment, such as fire extinguishers, eye wash stations, and first-aid kits, are available.	0.793	2.93	Satisfied
The comfort rooms are well-lit and have adequate water supply.	0.797	3.05	Satisfied
The comfort rooms are regularly cleaned and maintained.	0.949	2.68	Satisfied
The library has sufficient books and other learning materials.	1.010	2.44	Dissatisfied
The library has enough space to accommodate students who want to study.	0.727	3.02	Satisfied
The library has enough space to accommodate students who want to study.	0.869	2.89	Satisfied
The internet connection is reliable and stable.	0.810	3.09	Satisfied
The assembly and athletic facilities are adequate and functional.	1.055	2.22	Dissatisfied
The offices are well-lit and properly labeled.	0.781	2.88	Satisfied

The accounting office is well-equipped with modern technology such as computers, printers, and scanners.	0.707	3.00	Satisfied
Composite mean	0.837	2.83	Satisfied

Legend: 3.51 - 4.50 Very Satisfied, 2.51 - 3.50 Satisfied, 1.51 - 2.50 Dissatisfied, 1.00 - 1.50 Very Dissatisfied

Table 12: Satisfaction Level of the Students in the General Physical Facilities

The weighted mean is 2.83, indicating a greater number of "Satisfied" responses. The highest mean, at 3.19, pertains to adequate ventilation and lighting in classrooms. Meanwhile, the library's availability of sufficient books and learning materials scored a mean of 2.44; tools and equipment being in good working condition and readily accessible scored a 2.46; whereas assembly and athletic facilities were rated lowest with an average score of 2.22 for adequacy and functionality.

The 2024 study by Enciso, R. E., and Bueno, D. C., titled "Enhancing Graduate Student Satisfaction through Modern Campus Facilities: A Case Study of Columban College," concludes that technological adaptation, infrastructure upgrades, and proper cleanliness and maintenance of campus facilities significantly enhance the academic experience for graduate students. Addressing issues related to the physical environment of the school and facilities leads to greater student comfort and confidence, which in turn improves their productivity and overall satisfaction with the facilities. This study highlights the importance of a quality physical and technological environment in fostering a high-quality academic experience and satisfaction among students at Columban College.

Statement	Standard Deviation	Weighted Mean	Decision
Faculty members are dedicated to their profession.	0.704	3.06	Satisfied
Faculty members are approachable and willing to help.	0.688	3.15	Satisfied
Faculty members provide timely and constructive feedback.	0.709	3.13	Satisfied
Faculty members provide guidance and support beyond academic requirements.	0.670	3.08	Satisfied
Faculty members are well-dressed and have a professional appearance.	0.699	3.20	Satisfied
Composite mean	0.694	3.12	Satisfied

Legend: 3.51 - 4.50 Very Satisfied, 2.51 - 3.50 Satisfied, 1.51 - 2.50 Dissatisfied, 1.00 - 1.50 Very Dissatisfied

Table 13: Level of Satisfaction of Students with the Behavior of the Faculty

The weighted average is 3.12, indicating a "Satisfied" response. The highest mean of 3.20 reflects students' satisfaction with the Faculty's behavior due to their well-dressed and professional appearance, while the lowest mean of 3.06 pertains to faculty members being dedicated to their profession.

The 2023 study by Gao, H. L., Ding, D., and Duan, X., titled "Understanding the Impact of Administrative Service Quality on Satisfaction and Loyalty Towards University Students," concluded that student satisfaction is significantly influenced by the quality of non-teaching staff. When administrative personnel are approachable, joyful, and respectful towards students, it leads to higher levels of student satisfaction. This highlights the important role that positive interactions with non-teaching staff play in fostering a supportive and satisfying university environment, which can also contribute to greater student loyalty.

Statement	Standard Deviation	Weighted Mean	Decision
Non-teaching personnel are knowledgeable and able to assist with inquiries.	0.721	3.22	Satisfied
Non-teaching personnel are always present and punctual.	0.720	3.13	Satisfied
Non-teaching personnel are friendly and approachable	0.666	3.08	Satisfied
Non-teaching personnel are respectful and courteous.	0.694	3.06	Satisfied
Non-teaching personnel are helpful and provide valuable guidance on campus.	0.694	3.12	Satisfied
Composite mean	0.699	3.12	Satisfied

Legend: 3.51 - 4.50 Very Satisfied, 2.51 - 3.50 Satisfied, 1.51 - 2.50 Dissatisfied, 1.00 - 1.50 Very Dissatisfied

Table 14: Level of Satisfaction of the Students with the Behavior of the Non-teaching Personnel

The weighted average is 3.12, indicating a "Satisfied" response level. The highest mean score of 3.22 pertains to students' satisfaction with the non-teaching staff's knowledge and capacity to handle inquiries effectively, highlighting their respectful and courteous conduct, which received a rating of 3.06.

The study by Patalinghug et al. (2021), titled “Students’ Satisfaction on School Services in a State College in the Philippines,” concluded that students are highly satisfied with the supportive assistance and healthy environment provided by the school. Students greatly appreciate the guidance and responsiveness of the staff, which positively impacts their overall satisfaction. Beyond meeting students’ needs effectively, the school itself also benefits by gaining high recognition. This underscores the importance of attentive service and a conducive environment in fostering student satisfaction and institutional reputation within the higher education context.

Statement	Standard Deviation	Weighted Mean	Decision
The information provided about the events was clear and easy to understand.	0.659	3.18	Satisfied
The information of all the events was communicated on time.	0.687	3.31	Satisfied
The activities' objectives aligned with the department's mission and vision.	0.696	3.12	Satisfied
The BS AT Officers and organizers were well-prepared and organized.	0.634	3.24	Satisfied
The different BS AT committees worked together effectively and efficiently.	0.745	3.20	Satisfied
The BS AT participants were actively engaged in the event activities.	0.697	3.25	Satisfied
The time allotted for all of the activities was appropriate.	0.716	3.31	Satisfied
The dates chosen for the event were suitable and convenient for most participants.	0.773	3.1	Satisfied
All the venues for BS AT activities have enough capacity to accommodate every participant.	0.792	3.13	Satisfied
Composite mean	0.711	3.20	Satisfied

Legend: 3.51 - 4.50 Very Satisfied, 2.51 - 3.50 Satisfied, 1.51 - 2.50 Dissatisfied, 1.00 - 1.50 Very Dissatisfied

Table 15: Level of Satisfaction of the Students with the Departmental Activities (King’s M.O.V.E, Recruitment Week, King’s Cup, International Coastal Clean-Up, BS AT General Assembly, ATRN Seminars, Guild of Air Transportation Study, Redbird Flight Simulator)

The weighted average is 3.20, indicating a "Satisfied" response level. The highest mean score of 3.31 pertains to information about all the events communicated on time and the time allotted for all of the activities was appropriate while the information provided about the events was clear and easy to understand which received the lowest rating of 3.18.

Summary of Findings

Age of the Respondents

Most of the respondents are twenty-one years old, followed by those who are nineteen and twenty

Gender of the Respondents

The majority of respondents are male, totaling 167. Thirty-one are female, one is non-binary, and four chose not to disclose their gender.

Nationality of the Respondents

One hundred ninety-nine of the respondents are Filipinos, and four are foreign nationals.

Satisfaction with Factors Influencing the Hidden Curriculum

Most areas received "Satisfied" level remarks. However, the researchers want to focus on and give attention to the lowest-rated aspects that need improvement:

- Opening Ceremony: engaging and entertaining student and faculty production numbers.
- Exhibit: informativeness and educational value.
- Booths and Bazaars: relates to how enjoyable the games were.
- Campus Pageant: stunning beauty and physical fitness of the contestants
- Campus Idol (singing and dancing contest): contestants' singing and dancing talents
- Music Fest: the artist's talent and experience.
- Recruitment week: recruiters being approachable.
- Physical Facilities: availability of sufficient books and learning materials, tools and equipment not being in good working condition or easily accessible, as well as issues with assembly and athletic facilities.
- Faculty Behavior: Commitment to Their Profession.
- Conduct of the Non-Teaching Personnel: Polite and Respectful Behavior
- Departmental Activities: the clarity details of the events.

Activities organized by the college and department hold great significance for the participants.

For the general activities, the participants selected the Foundation Day celebration as their most memorable event due to the wide range of activities available over two days. They particularly highlighted booths and bazaars, along with the music festival. Another activity noted by attendees was the Freshmen Recruitment Week organized by various organizations.

For the departmental activities, the GATS Annual Assembly became the most memorable event, followed by the Singapore Changi Airport Tour.

The values are received from engaging in the activities.

Leadership skills, social skills, communication abilities, collaboration, and teamwork were all gained and enhanced through organizing the campus-wide event. Participants mentioned that they enjoyed the music festival for its opportunities to socialize and bond with fellow community members.

Once more, participants highlighted social skills, teamwork, collaboration, and discipline as key values they learned through departmental activities. Collaboration was particularly emphasized as fostering a sense of unity among them.

The school facility has played the most significant role in shaping the participants' personalities.

The participants prioritize organization, orderliness, cleanliness, tidiness, and comfort. They believe that being organized boosts personal growth and drives strong motivation. The classroom environment has significantly influenced the development of their personalities. The library was also mentioned as a secondary factor that influences their personalities.

Neglected school facilities when it comes to maintenance and improvement.

According to the participants, the most neglected facilities at the school are part of the athletics area, the Activity Room, and the Gymnasium. While they find it spacious, issues were noted with ventilation, air conditioning, and sound systems.

CONCLUSION

The majority of respondents and participants in the study are satisfied with the activities, facilities, and behavior of both faculty and non-teaching personnel at the institution.

Activities, physical facilities, and the behavior of faculty and non-teaching personnel influence their motivation to study and learn. There are aspects of these activities and facilities that need improvement.

Skills and values are developed and enhanced by joining activities, participating in events, and interacting with faculty as well as non-teaching staff. This process fosters leadership, social skills, communication abilities, discipline, teamwork, and collaboration.

Recommendations

Air Transportation Department

- maintains the involvement of BS AT students in campus-wide and department-wide activities.
- required for selected BS AT students to participate in competitions during the foundation day program.
- ensure that there are sufficient and relevant BSAT books, journals, magazines, and learning materials available in the library.
- provide monetary incentives and other forms of motivation to enhance the passion and commitment of BSAT faculty members.
- Ensure that the officers and members in the Recruitment Booth of the Guild of Air Transportation have pleasant personalities and are approachable.
- Propose to the college administration improvements for the athletic facilities used by BS AT students.
- Coordinate with the Office of Student Affairs and the Foundation Day Program Committee regarding areas or aspects to improve in various programs and other campus-wide events.
- Provide financial support and resources for research projects led by faculty.

Air Transportation Chairperson and Faculty Members

- Ensure that the classrooms are clean and orderly during transitions between classes.
- Provide timely and relevant professional development opportunities specifically for BS AT faculty members, separate from the general faculty seminars they attend at the institution, to rekindle their passion for teaching.

Office of the Student Affairs

- To collaborate with the BS Air Transportation department, the Guild of Air Transportation Students aims to create more relevant student activities that align with the objectives of their program.
- To guarantee that the college's support services are providing quality assistance, special attention is required for the library, classrooms, and athletics services as they were mentioned in need of improvement.

Guild of Air Transportation Students

- Organize and sustain more activities like international programs that will enhance the skills of BS AT students, ensuring they gain valuable experiences.
- Collaborate with the Office of Student Affairs, as well as the BS AT Chairperson and Faculty Members, to develop additional activities that are aligned with and needed by BS AT students.

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THE FACE OF CHILD LABOR IN THE PHILIPPINES: A QUALITATIVE CONTENT ANALYSIS OF LAWS AND POLICIES

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Abstract

Child labor undermines human capital, leading to a decline in labor productivity that ultimately impacts a country's economy. This study reviewed the existing statutory and regulatory laws and policies of child labor in the Philippines using qualitative content analysis. The paper highlighted the compliance with child labor in the Philippine government with the child labor framework of the United Nations Convention on the Rights of the Child, particularly in terms of (a) statutes enacted, (b) policies and programs implemented, and (c) rate of child labor incidents in the country. The result shows that although laws were created shortly after the ratification of the CRC, the delay in implementing corresponding policies and programs contributed to an increasing child labor incident. However, once policies and programs were in place, the incidence of child labor declined. This indicates that addressing child labor is critically dependent on the timing and responsiveness of policy interventions. The study confirms that the Philippine government is committed to eradicating child labor and has complied with the provisions of the CRC. Academe should also be actively involved in disseminating information regarding child labor practices and in developing policies that are more research-based and adaptable to emerging challenges.

Keywords: *child labor, rights of the child, qualitative content analysis, Philippines*

Introduction

The Convention on the Rights of the Child (CRC) was adopted on November 20, 1989, and subsequently ratified by the members of the United Nations. The child, as a human being, is entitled to all rights and freedom as enshrined in the Universal Declaration of Human Rights and the International Covenants on Human Rights. In recognition of the rights of the child, they should be provided with a safe and caring environment that allows for the maximum development of their personality. This would prepare them to become responsible individuals, making them assets of the nation (Convention on the Rights of the Child, 1989).

Further, the CRC stresses that a child should be free from economic exploitation and that member states should create interventions or measures protecting the rights of the child. Recent global research has indicated that child labor remains a persistent challenge. Habib et al. (2024), found that the COVID-19 pandemic intensified child labor in all countries worldwide as a result of economic shocks, school closures, and otherwise weak social protections. Similarly, foreign direct investment flows and informal labor markets have been found to have continued effects on children's participation in labor in sub-Saharan Africa and Latin America by Kechagia & Metaxas (2023). Likewise, Camilletti (2025) asserted that child work continues to be universal in low and middle-income countries, both in terms of economically active and unpaid care work responsibilities. Supporting this evidence, Kozhaya (2025) reported that targeted bans against child labor significantly affect school attendance by emphasizing where such bans are enforced. All these findings put together show that child labor is not just a Philippine issue but a global concern that should be addressed with coordinated and timely policy responses.

In the Philippines, statutory laws and regulations were crafted in response to CRC. However, incidents of economic exploitation among children were reported (Villamil, 2002). In particular, several children were seen working in small-scale gold mining (Lu, 2012). This situation calls for an inquiry as to whether the Philippines is indeed compliant with the CRC despite the laws and regulations that have been created. Based on the literature, when children work at a very early age, they become less productive, thereby slowing the economic growth of the country (Orbeta et al., 2002).

This paper has explored and reviewed the existing laws and regulations that protect the rights of the child in the Philippines. It showed how the Philippine government was exhausting all its efforts to eradicate exploitation, especially on child labor. The paper answered the following review questions: (1) What are the legislative enactments of the Philippines that regulate and mandate child labor?(2) What are the policies and programs initiated and implemented on child labor?, and (3) what is the rate of child labor incidents in the Philippines after CRC was ratified?

Methodology

This study employed qualitative content analysis to examine the actions taken by the Philippine government against child labor by systematically examining laws, policies, and programs. Specifically, the study analyzed RA No. 7610, RA No. 7658, and RA No. 9231 as the primary statutes prohibiting child labor. The policies included Inter-Agency Council Against Trafficking Resolution No. 008, DOLE D.O. No. 216, DOLE Labor Advisory No. 24-A, and DOLE Labor Advisory No. 22. Moreover, major national framework such as Philippine Development Plan (2017-2022), The Philippine Plan of Action to End Violence against Children (PPAEVAC), Philippine National Strategic Framework for Plan Development for Children, 2000 – 2025 or “Child 21”, and Philippine Program Against Child Labor Strategic Framework were incorporated. The reports on child labor incidents from 1988 to 2000 and 2019 to 2022 were also analyzed.

A systematic process of coding has been undertaken-in which themes and categories have been inductively derived from the documents. Inter-coder comparisons and peer debriefs improved coding reliability in addition to that credibility was further deepened through trustworthiness checks such as triangulation of multiple data sources and an audit trail of analytic decisions. Importantly, the reviewed documents and data had been obtained from open-access and official repositories, including government websites, international organizations, and published reports online, ensuring both transparency and credibility of findings in the process.

Results and Discussions

Table 1. Statutes enacted by the Philippine Government

Law No.	Title of the Statute	Year
RA No. 7610	Special Protection of Children Against Abuse, Exploitation, and Discrimination Act	1992
RA No. 7658	An Act Prohibiting the Employment of Children Below 15 Years of Age in Public and Private Undertakes, Amending for this Purpose Section 12, Article VIII of Republic Act No. 7610	1992
RA No. 9231	An Act Providing For The Elimination Of The Worst Forms Of Child Labor And Affording Stronger Protection For The Working Child	2003

As shown in Table 1, the Philippine government has enacted two laws protecting the child from any form of exploitation two years after the ratification of CRC. The first law was RA No. 7610,

which mandates the protection of the whole being of the child. While the second law, RA No. 7658, regulates child employment **below the age of 15**.

After over a decade, the legislators of the Philippine government have seen a need to strengthen the protection of the child by enacting RA No. 9231. This law amended RA No. 7610, which intensifies penalties for those individuals’ exploiting children in any form.

The gap between Institutional and political constraints exists because RA No. 9231 was approved in 2003, but its implementing guidelines, policies, and programs were not established until 2017. Limited policy formulation was hindered by weak government capacity, competing national priorities, and a lack of effective enforcement mechanisms. Child labor cases continued to rise throughout the 1990s, when, despite various laws against child labor, such laws were never strictly enforced.

Table 2. Policies and programs on child labor

Policies	Descriptions	Year
Inter-Agency Council Against Trafficking Resolution No. 008	This prohibits human trafficking, especially the child.	2017
Philippine Development Plan (2017-2022)	This highlights in helping Filipino families gain a more stable income, therefore, preventing children from working.	2017
The Philippine Plan of Action to End Violence against Children (PPAEVAC)	This guides establishments and institutions to create a safe environment free from any form of harm towards children.	2019
DOLE D.O. No. 216	This prohibits illegal recruitment, human trafficking, and child labor in all establishments in the Philippines.	2020
DOLE Labor Advisory No. 24-A	This outlines in the regulation of allowing children as part of the entertainment industry.	2020
Philippine National Strategic Framework for Plan Development for Children, 2000 – 2025 or “Child 21”	This serves as a guide to formulate policies concerning the safety of the children as well as policies that help them grow productively.	2020
DOLE Labor Advisory No. 22	This reinforces the regulation of allowing a child to participate in public entertainment highlighting parental supervision.	2021
Philippine Program Against Child Labor Strategic Framework	This program helps all sectors to minimize the incidents of child labor.	2023

In Table 2, there are eight administrative policies and programs that the Philippine government is implementing.

It can be noted that the administrative policy concerning child labor by the Department of Labor and Employment (DOLE) was crafted in 2017. This shows that there was a 14-year gap after RA No. 9231 was passed into law. The gap suggests that establishments in the Philippines might commit child labor, as policies concerning child labor have not yet been in place.

Though there was an over a decade gap, the Philippine government has steadily campaigned against child labor from 2017 up to 2023, as shown in Table 2. This is a strong manifestation of the Philippine government to eradicate child labor and to respond to CRC.

Figure 1 shows the child labor in the Philippines from 1988 to 2000. It can be noted that there were around 2.1 million child labor incidents recorded from 1988 to 1991. After the ratification of CRC, there was only a 2.26% decrease in the child labor incident rate in the Philippines.



Figure 1. Rate of child labor in the Philippines from 1988 to 2000

Despite the enacted laws (RA No. 7610, RA No. 7658 and RA No. 9231) protecting the rights of the child and prohibiting child labor, the incidents of child labor continued to increase from 1993 to 1999. However, in 2000, the rate of child labor incidents declined by 9.99%.

It can be deduced that from 1993 to 2000, there was a lack of policies and programs relating to the regulation of child labor.

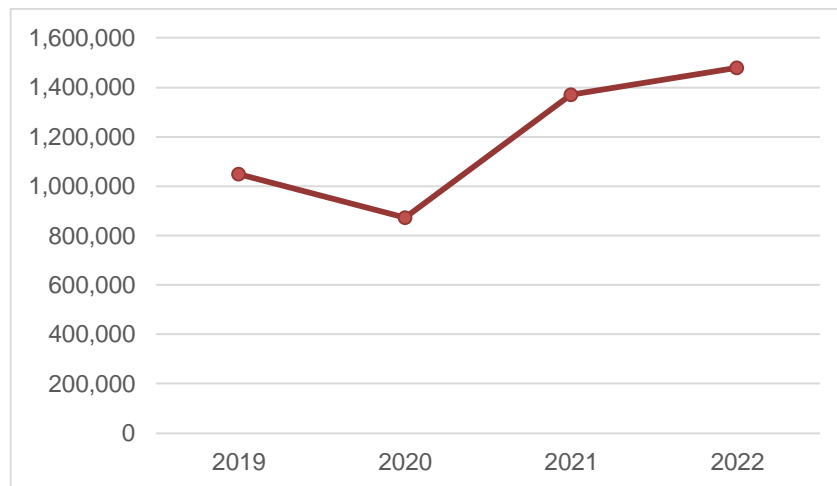


Figure 2. The rate of child labor in the Philippines from 2019 to 2022

Figure 2 shows the rate of child labor incidents from 2019 to 2022. Comparing the statistics of child labor incidents back in 2000, there was a decrease of 45.23%. This means that the Philippine government has been fighting child labor for the past 19 years. The decline in child labor incidents was even noted in 2020. As observed, from 2017 to 2020, there were several policies and programs being implemented to reduce child labor in the Philippines.

However, the child labor incidents began to increase by 36.35% in 2021. The inclined rate was added by 7.43% in 2022. There was one program crafted and implemented in 2021, but this was not fully actualized because of the restrictions caused by the COVID-19 pandemic. This shows that child labor was less arrested by the authority between 2021 and 2022 due to the pandemic. As reviewed, the most recent program was only initiated and implemented in 2023.

In comparison with its neighboring ASEAN countries such as Indonesia, child labor increased in the 1990s. Still, since the government implemented its National Action Plan on the Elimination of the Worst Forms of Child Labor (2002), with aid from the ILO, there has been a steady decrease in child labor incidence Bimardhika, E., Witoelar, F. (2025). Likewise, Vietnam experienced a

substantial decline in child labor incidence after the adoption of the National Program on Child Labor (2016-2020), which combined strict enforcement with educational support (Dung & Khuyen, 2021; Timár et al., 2022). In contrast, Cambodia continues to have higher incidences of child labor because of weak institutional frameworks and high reliance on informal economies (Bureau of International Labor Affairs, 2021). These comparisons illustrate that while the Philippines has complied with CRC standards, delays in harmonizing policies with laws significantly constrained early progress as compared to some of their neighboring countries.

Findings

In the Philippines, laws were created right after the ratification of the CRC. However, policies and programs promulgated aligned with existing laws concerning child labor were crafted a decade after the laws were enacted. The slow response of policies and programs has increased the rate of child labor incidents in the country. It was also found that after policies and programs prohibiting child labor were in place, the rate of child labor began to decline.

Conclusion

The study found that creating measures and interventions protecting the rights of the child and prohibiting child labor practices can lead to a decrease in child labor incidents in the country. In the Philippine context, it can be deduced that the government has been serious in eliminating child labor. As statistics is concerned, from the year CRC was ratified, child labor incidents in the Philippines have started to decline. This proves that the Philippine government, to some extent, has been compliant with the UN Convention on the Rights of the Child, specifically regarding child labor.

Recommendations

It is recommended that academe should be involved in information dissemination about child labor practices. Also, a more responsive and relevant policy that is research-based should be made.

Limitation

This study only reviewed RA No. 7610, RA No. 7658, and RA No. 9231, Inter-Agency Council Against Trafficking Resolution No. 008, DOLE D.O. No. 216, DOLE Labor Advisory No. 24-A, and DOLE Labor Advisory No. 22, Philippine Development Plan (2017-2022), The Philippine Plan of Action to End Violence against Children (PPAEVAC), Philippine National Strategic Framework for Plan Development for Children, 2000 – 2025 or “Child 21”, and Philippine Program Against Child Labor Strategic Framework. The data presented in the study was taken from the reports on child labor incidents from 1988 to 2000 (NSO & NEDA, 2002) and 2019 to 2022 (PSA, 2023).

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EXPLORING PEDAGOGICAL APPROACHES AND LEARNING EXPERIENCES IN INDUSTRIAL ARTS

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ABSTRACT

This study employed a qualitative research design to examine students' perspectives on instructional materials and learning challenges in Industrial Arts courses. The study employed interviews as its primary data-gathering method, enabling participants to share their authentic experiences and insights. Data were gathered from selected students enrolled in Industrial Arts, with responses analyzed thematically to identify patterns across satisfaction, access, challenges, and suggestions for improvement. The findings revealed that students expressed moderate satisfaction with the instructional materials provided, acknowledging that manuals, modules, and project guides offered valuable guidance in woodworking, metalworking, and related tasks. However, they also pointed out that many of these resources were outdated and limited in scope, lacking integration with modern technologies. Students emphasized that hands-on practice was the most effective learning resource, complemented by visual demonstrations, videos, and industry-related examples that connected theory to practice. Challenges included insufficient materials, limited practice opportunities, difficulty in interpreting technical drawings, and a lack of clear explanations during classroom instruction. Access to tools and resources was also found to be unequal, with financial constraints and limited school provisions restricting learning opportunities for some students. Despite these challenges, learners valued their teachers' creativity in maximizing available resources. To improve the instructional experience, students recommended more updated, interactive, and visually engaging materials, as well as digital platforms for supplementary learning. The study underscores the importance of providing comprehensive, modernized, and accessible instructional resources, coupled with experiential learning strategies, to enhance student engagement, skill mastery, and satisfaction in Industrial Arts education. Thus, it is recommended to develop an instructional book that is aligned with the curriculum and provides the necessary activities and hands-on learning experiences for the students.

Keywords: *Industrial Arts Education, instructional materials, learning experiences, hands-on learning, pedagogical approaches*

INTRODUCTION

Industrial Arts, as a field of study, plays a vital role in equipping learners with the technical knowledge, practical skills, and creativity essential for both personal development and future careers. It bridges theory and practice, enabling students to transform ideas into tangible outputs through hands-on activities such as woodworking, metalworking, drafting, and other applied technologies. In today's rapidly evolving educational landscape, the teaching of Industrial Arts is not merely about skill acquisition but also about fostering problem-solving abilities, innovation, and lifelong learning competencies. Given this, it becomes important to

examine how teachers deliver lessons and how students experience the learning process in this specialized subject area.

Pedagogical approaches in Industrial Arts education often combine traditional demonstration methods with modern, student-centered strategies such as project-based learning, collaborative tasks, and technology integration. However, teaching effectiveness greatly depends on how these approaches are contextualized within diverse classrooms, shaped by available resources, teacher expertise, and learners' backgrounds. Exploring these pedagogical strategies provides deeper insights into how teaching methods align with educational goals and how they influence student engagement, motivation, and performance.

Equally significant are the learning experiences of students, which serve as indicators of how effectively Industrial Arts education meets their needs. Students' experiences are shaped not only by teaching strategies but also by the learning environment, access to facilities, and opportunities for creativity and critical thinking. By capturing students' perspectives, educators can identify both strengths and gaps in instruction, allowing for continuous improvement in the delivery of the subject.

In the Philippines, Industrial Arts is an integral component of the K-12 Technology and Livelihood Education (TLE) curriculum, which aims to develop 21st-century skills, including problem-solving, innovation, and career readiness. However, few local studies have systematically documented students' perspectives in Industrial Arts, particularly on both the adequacy of instructional resources and integration of digital tools. This study, therefore, seeks to explore the pedagogical approaches employed by teachers and the lived learning experiences of students in Industrial Arts. Through a qualitative lens, it aims to uncover the dynamics between instructional practices and learner responses, providing valuable insights for educators, curriculum developers, and policymakers. Ultimately, this research highlights the importance of aligning pedagogy with students' needs and experiences to ensure that Industrial Arts remains a meaningful and transformative component of the educational system.

Statement of the Problem

This study aimed to explore pedagogical approaches and learning experiences in Industrial Arts by examining students' engagement, challenges, preferences, and suggestions for improving teaching and learning outcomes.

Specifically, it sought to answer the following questions:

1. How satisfied are the students with the instructional materials provided in the Industrial Arts course?
2. What types of instructional materials do students find most helpful in learning about Industrial Arts?
3. What challenges do students face in understanding the concepts and skills taught in the Industrial Arts course?
4. Do students have adequate access to the materials needed for successful learning in Industrial Arts?
5. In which specific topics or skills do students experience the most difficulty, and what types of instructional materials do they consider most helpful for addressing these

challenges?

6. What suggestions do students provide for improving the instructional materials used in the Industrial Arts course?

Scope and Delimitations

The study focused on exploring the pedagogical approaches and learning experiences in Industrial Arts classes. It covered selected teachers and students who were directly engaged in Industrial Arts instruction and learning during the academic year. The research investigated the strategies teachers employed in delivering lessons, the methods used to engage learners in hands-on activities, and students' perceptions regarding the relevance, effectiveness, and challenges of Industrial Arts education. The scope of the study was limited to analyzing instructional practices, classroom interactions, and student reflections that contributed to the development of technical skills, creativity, and problem-solving abilities.

The study was delimited to participants within a specific educational institution and did not include all schools offering Industrial Arts programs. It was also limited to the qualitative exploration of experiences, meaning that statistical generalization of findings was not intended. The research did not cover other areas of Technology and Livelihood Education (TLE) such as Home Economics, ICT, or Agri-Fishery Arts, as the primary focus was solely on Industrial Arts. Likewise, the study did not extend to evaluating students' long-term career outcomes or external factors such as socioeconomic status or institutional policies, since it concentrated on immediate pedagogical practices and learning encounters within the classroom setting.

Review of Related Literature

Pedagogical approaches in Industrial Arts education emphasize creativity, hands-on learning, and the integration of theoretical and practical knowledge. These teaching strategies are often aligned with broader trends in sustainable development, innovation, and performance improvement. For instance, Hongsakul and Chuaychoo (2024) examined the influence of logistics activities on the sustainable performance of the air cargo business in Thailand, highlighting how systematic processes, efficiency, and adaptability contribute to long-term growth. This finding parallels Industrial Arts pedagogy, where structured yet flexible approaches to teaching and learning—such as project-based activities and skill-based assessments—promote both immediate mastery of competencies and sustained professional growth for learners.

Similarly, Artan, Leureta, Petrit, and Agron (2025) explored the role of digital marketing in promoting sustainable tourism development. Their study revealed how innovative strategies enhance visibility, engagement, and sustainability in the tourism sector. This principle is highly relevant to Industrial Arts education, as innovative teaching approaches, such as the integration of digital platforms, virtual demonstrations, and the creative promotion of student outputs, can significantly enhance student learning experiences. By connecting industrial skills training with modern tools and creative dissemination of knowledge, learners become better prepared for professional and entrepreneurial endeavors.

Furthermore, Jingwen, Azmawani, Tong, Kamarulzaman, and Shafie (2025) examined the business models of Chinese enterprises to understand how dynamic capabilities impact

innovation and performance. Their findings emphasized adaptability, creativity, and strategic resource use as key drivers of success. When applied to Industrial Arts pedagogy, this insight emphasizes the importance of creating adaptive learning environments that promote problem-solving, innovation, and reflective practice. By cultivating dynamic capabilities within students, educators can prepare them not only to master technical skills but also to apply these competencies flexibly in real-world contexts.

Industrial Arts (IA) education increasingly draws on value-centered thinking to design learning that is purposeful, iterative, and closely aligned with real-world contexts. A time-value orientation—prioritizing sequences of activities that compound value for end-users—offers a valuable lens for structuring IA projects, where learners plan, prototype, test, and refine tangible artifacts over time. In management scholarship, time-value-oriented business model innovation is associated with more straightforward value propositions and increased perceived value among customers (Liu et al., 2024). Transposed to IA pedagogy, this suggests that instructors can scaffold units so students experience the “arc” of value creation (from need-finding to fabrication to user feedback), thereby strengthening problem framing, craftsmanship, and reflection. Such sequencing can also inform assessment—evaluating not only end products but also the cumulative gains learners realize across phases of making.

A second strand relevant to IA is the integration of sustainability and responsible practice. While studied extensively in corporate contexts, environmental, social, and governance (ESG) logics naturally map onto IA decisions regarding material selection, process safety, waste minimization, and community impact. Evidence that ESG performance is strategically linked to firm value (Yildiz et al., 2024) underscores the importance of embedding sustainability criteria as learning outcomes. Students can be tasked with justifying design choices using lifecycle thinking, ethically sourcing inputs, and documenting the social utility of projects. Doing so aligns technical skills with responsible innovation, helping learners internalize how craftsmanship intersects with stewardship and stakeholder accountability.

A third complementary perspective comes from service and experience design. Qualitative analyses of innovative service practices in airlines reveal that a focus on user needs, timely support, and iterative feedback systems can lead to improved organizational performance (Bakir et al., 2024). For IA classrooms and laboratories, the parallel is a learning environment where “service moments” matter: tool checkouts, safety briefings, constructive critiques, and rapid instructor or peer support at points of confusion. Designing these touchpoints intentionally—clear rubrics, just-in-time demonstrations, visible progress boards, and structured critique protocols—can enhance students’ perceived support and deepen engagement with complex making tasks.

Recent work on sustainability capability-building highlights the importance of aligning digital infrastructures with green knowledge practices to enhance innovation and performance (Al-Husain et al., 2025). In an Industrial Arts setting, this suggests that workshop curricula can integrate “digital dynamic capabilities” (e.g., CAD/CAM platforms, IoT-enabled tools, and data dashboards) with explicit green knowledge management (materials life-cycle literacy, waste minimization logs, and energy-use audits) to cultivate learners’ sustainable design thinking. The implication for pedagogy is a shift from tool-centric instruction to systems-

oriented projects where students document process data, reflect on environmental impacts, and iterate designs that balance function, cost, and sustainability—an approach consistent with competency-based, project-driven Industrial Arts learning.

Parallel insights emerge from studies of digital transformation in training management. Metayer (2025) demonstrates how digitizing training records improves efficiency, safety, and regulatory compliance in a complex, hands-on domain. By analogy, Industrial Arts programs—often governed by safety protocols and equipment-use competencies—can benefit from digital portfolios and evidence-tracking systems that capture skills progression, safety certifications, and reflective artifacts tied to specific operations (e.g., joinery, metalwork, CNC machining). Qualitatively, such systems enable richer narratives of learning, support timely feedback, and make tacit craft knowledge more visible through annotated images, micro-videos, and rubric-aligned checklists—a concrete enhancement to experiential pedagogy and reflective practice.

Customer-experience research further underscores how perception, engagement, and service design mediate outcomes (Ali & Alfayez, 2024). When transposed to Industrial Arts classrooms, “learner experience” functions as the mediating mechanism between pedagogical inputs and achievement: studio layout and tool accessibility, clarity of task flows, immediacy of formative feedback, and supportive instructor presence can meaningfully shape motivation, persistence, and craftsmanship quality. Incorporating user-centered design principles—briefing students to prototype for real users, gather feedback, and iterate—aligns with the evidence that experience quality influences loyalty in services; in education, analogous outcomes include sustained engagement, elective enrollment in advanced modules, and positive peer mentoring cultures.

Optimization research using multi-criteria decision-making (MCDM) methods provides additional guidance on balancing safety, throughput, quality, and resource constraints (Kulakli & Şahin, 2023). Industrial Arts labs face similar trade-offs: scheduling limited machines, prioritizing safety checks, allocating materials, and evaluating project quality. Employing MCDM-inspired rubrics—weighting criteria such as precision, finish, structural integrity, sustainability, and documentation—can make assessment more transparent and defensible while teaching students to reason about engineering trade-offs. Qualitative data (think-alouds, reflective journals, and group critiques) can reveal how learners internalize these criteria, negotiate choices under constraints, and develop professional judgment.

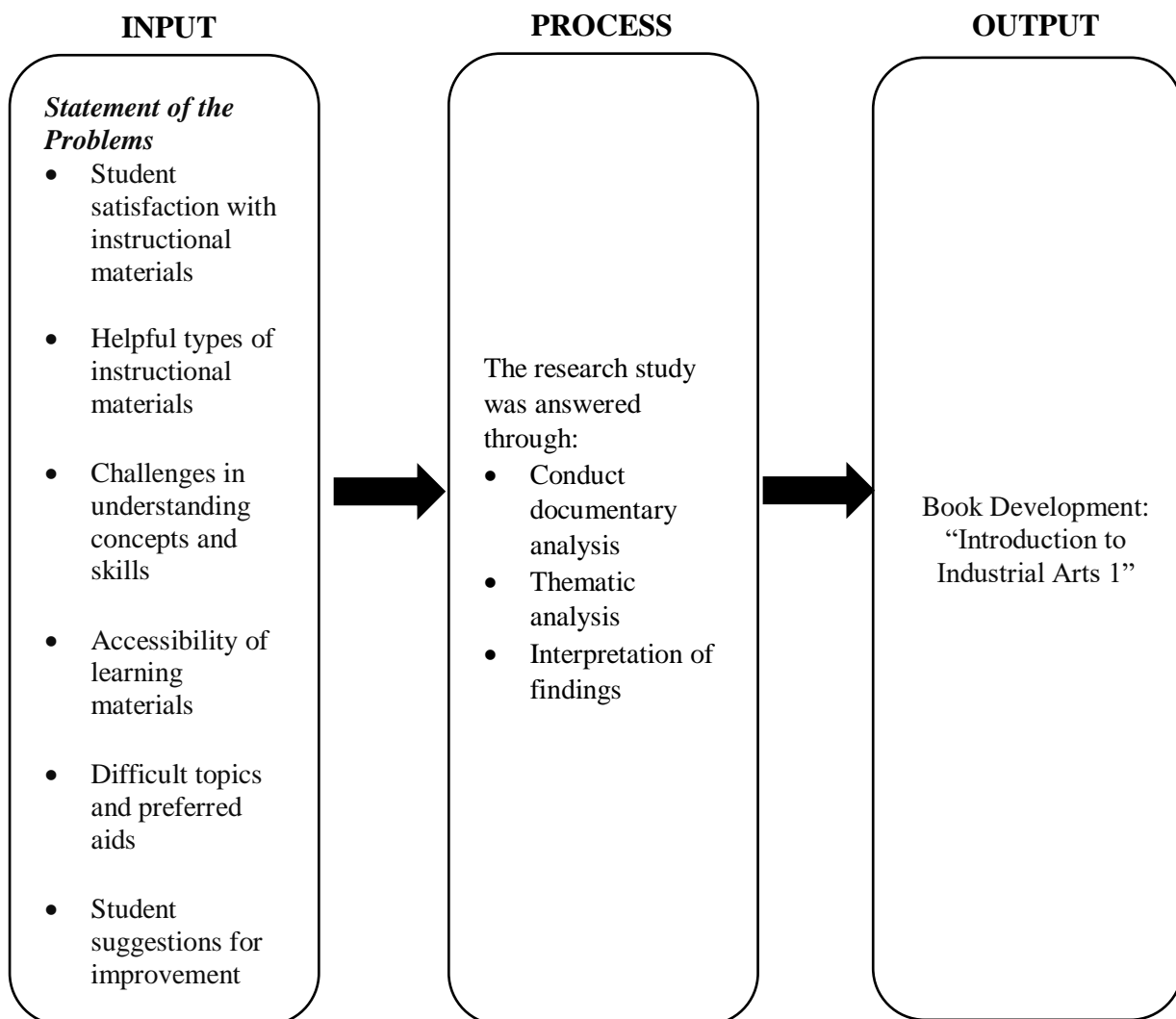
Theoretical Framework

Experiential Learning Theory (Kolb, 1984) posits that learning is a cyclic process in which concrete experience, reflective observation, abstract conceptualization, and active experimentation form an integrated whole. Applied to industrial arts, this framework foregrounds hands-on project work, iterative reflection on craft or design processes, and the testing of improvements as central to students’ development of practical skills and problem-solving abilities. In the context of the study, Kolb’s model helps explain how learners translate workshop activities and construction tasks into durable competencies: students gain knowledge through doing (concrete experience), pause to evaluate outcomes (reflective observation), form general principles about techniques or materials (abstract conceptualization), and then try refinements in new projects (active experimentation). Thus, the theory aligns closely with

research concerns about pedagogical approaches that emphasize practice-based learning, apprenticeship models, and the role of reflection in shaping industrial arts learning experiences.

Moreover, Social Constructivism (commonly associated with Vygotsky, 1978) emphasizes that cognitive development is fundamentally mediated by social interaction, language, and culturally situated tools. For industrial arts education, this framework highlights the importance of collaborative projects, instructor scaffolding, peer critique, and the use of technical artifacts and tools as mediators of learning. Within the study, Vygotskian ideas explain how novices move through a Zone of Proximal Development when more knowledgeable others (teachers, skilled peers, industry mentors) support students in tasks slightly beyond their unaided ability—whether learning safe tool use, interpreting technical drawings, or mastering complex fabrication sequences. Social constructivism therefore aligns with investigations into classroom organization, mentorship patterns, and collaborative pedagogies that shape students’ lived learning experiences in industrial arts settings.

Conceptual Framework



The *study's input* focuses on the key areas explored through the research questions. These include student satisfaction with instructional materials, the types of materials students find most helpful, the challenges they encounter in understanding Industrial Arts concepts and skills, their accessibility to the needed resources, the specific topics or skills where they experience the most difficulty, and the suggestions they provide for improving instructional materials.

The *Process* involves the qualitative methods employed to analyze these inputs. Data will be gathered through interviews, focus group discussions, or documentary analysis to capture student experiences. The collected information will then undergo thematic analysis, allowing for the identification of effective instructional materials, recognition of common challenges and needs, and integration of student-driven recommendations. These steps ensure a systematic interpretation of the learning experiences within the Industrial Arts course.

The *Output* of the study is the development of a specialized instructional material in the form of a book titled "Introduction to Industrial Arts 1." This book will incorporate the findings of the research, addressing identified gaps, challenges, and student needs, while also integrating suggested improvements. Ultimately, the output aims to enhance teaching and learning in Industrial Arts by providing a more effective and student-centered resource.

METHODOLOGY

Research Design

The study employed a qualitative research design to explore the pedagogical approaches and learning experiences in Industrial Arts. A qualitative design was appropriate because it provided an avenue to capture authentic voices, perceptions, and experiences rather than relying solely on numerical data. The main focus was on understanding how teachers delivered instruction, how learners engaged in practical activities, and what challenges and opportunities emerged in Industrial Arts classes.

Population and Sampling Technique

The study population consisted of Industrial Arts teachers and selected students enrolled in secondary education, where Industrial Arts was offered as part of the Technology and Livelihood Education (TLE) program. The study employed purposive sampling, as participants were selected based on their relevance to the topic and their ability to provide meaningful insights. A total of six teachers with at least two years of experience in teaching Industrial Arts and 80 students who had completed at least one semester of Industrial Arts under the TLE program participated in the study.

Data Gathering Procedure

The data gathering procedure involved semi-structured interviews. An interview guide with open-ended questions was prepared to elicit detailed responses from participants. Individual interviews were conducted with teachers to document their instructional strategies, teaching approaches, and the challenges they faced. With their consent, all sessions were audio-recorded and later transcribed verbatim for analysis.

Data Analysis

The study employed thematic analysis in interpreting the data. The transcribed interviews were carefully reviewed multiple times to identify recurring ideas, patterns, and themes. Codes were assigned to significant responses, which were then grouped into categories and synthesized into broader themes. This process helped in organizing the findings into coherent insights about pedagogical practices and students' experiences in Industrial Arts.

Limitations and Ethical Considerations

The study recognized certain limitations. The findings were limited to the group of teachers and students who participated, which meant they might not be generalizable to other schools or contexts. In addition, as the data were self-reported, there was a possibility of responses being influenced by social desirability.

In terms of ethical considerations, the researcher ensured that participants gave informed consent before participating. Pseudonyms were used to protect their identities, and confidentiality was strictly observed. Participants were informed of their right to withdraw at any time without penalty. The researcher also upheld academic integrity by reporting the findings honestly and accurately.

RESULTS AND DISCUSSION

Based on the findings, here is how the research questions were answered:

SOP 1. How satisfied are the students with the instructional materials provided in the Industrial Arts course?

In the Industrial Arts course, the students generally expressed a moderate level of satisfaction with the instructional materials provided. Many acknowledged that the materials, such as manuals, activity sheets, and project guides, served as useful references that helped them understand the step-by-step processes in woodworking, metalworking, and other practical tasks. These resources were particularly valued for their clarity and alignment with the competencies expected in the subject. However, some students noted that the materials were often outdated and lacked integration with modern tools and technologies commonly used in the field, which limited their relevance to real-world applications.

Several students emphasized the importance of visual aids, illustrations, and hands-on demonstrations as complementary to the written instructional materials. They shared that while the handouts and printed modules explained the concepts, learning was more meaningful when the materials were paired with demonstrations by the teacher and opportunities to apply the instructions directly in practical tasks. This highlighted their preference for a combination of text-based and experiential learning resources.

On the other hand, a number of students voiced dissatisfaction with the limited availability of materials, particularly when several learners had to share a single resource during workshops. This scarcity sometimes caused delays in completing projects and created challenges in independent learning. Despite these constraints, the majority recognized the efforts of the instructors in maximizing the available resources to make learning more engaging and effective. Overall, the findings suggest that while the instructional materials are beneficial and

appreciated, there is a need for more updated, comprehensive, and accessible resources to fully meet students' expectations and enhance their satisfaction.

SOP 2. What types of instructional materials do students find most helpful in learning about Industrial Arts?

In this study, students consistently highlighted that hands-on activities were the most helpful instructional materials in their learning process. They emphasized that Industrial Arts as a discipline is skill-oriented and requires practical engagement with tools, equipment, and materials. By directly participating in projects such as woodworking, metalworking, or drafting, students reported that they not only developed technical skills but also enhanced their problem-solving abilities, creativity, and confidence. This experiential learning allowed them to connect theoretical knowledge with real-world applications, making the lessons more meaningful and memorable.

Aside from hands-on activities, many students also found videos and online resources valuable, particularly in reinforcing concepts outside the classroom. Demonstration videos provided step-by-step guidance on specific techniques, which they could revisit at their own pace. Online resources such as tutorials and forums offered broader perspectives and innovative project ideas, allowing them to expand their knowledge beyond what was covered in formal lessons. These materials were especially useful in bridging learning gaps, as students could review them anytime to clarify doubts.

Furthermore, textbooks and printed manuals were recognized for their role in providing foundational knowledge and technical references. Students noted that while these resources were not as engaging as practical work, they served as essential guides for understanding standards, safety protocols, and design principles. Meanwhile, guest speakers and industry practitioners were also appreciated because they shared real-world experiences and professional insights that inspired students to pursue excellence in their craft. Their presence created a connection between classroom learning and industry practices, motivating students to take their work more seriously.

The findings suggest that students prefer a blended use of instructional materials—with a strong emphasis on hands-on learning, supported by multimedia resources, textual references, and industry exposure. This combination not only catered to different learning styles but also enriched their overall educational experience in Industrial Arts.

SOP 3. What challenges do students face in understanding the concepts and skills taught in the Industrial Arts course?

Students in Industrial Arts often encounter challenges in fully grasping the concepts and skills taught in the course. One major difficulty stems from the lack of clear explanations during classroom instruction. When teachers are unable to simplify technical terms or demonstrate procedures step by step, learners struggle to connect theory with actual application. This lack of clarity creates confusion and slows down their ability to develop the required competencies.

Another challenge is the insufficient opportunities for practice. Industrial Arts is a hands-on subject where mastery relies heavily on repeated performance of tasks such as measuring, cutting, assembling, or operating tools. However, limited time in class and inadequate facilities often prevent students from engaging in consistent practice. As a result, learners fail to refine their skills and gain the confidence needed to carry out projects independently.

Students also experience difficulty in finding relevant materials and resources that can supplement their learning. Industrial Arts often requires specific tools, equipment, and raw materials, but these are not always readily accessible in schools or at home. The lack of affordable and available resources hinders students from practicing outside the classroom, further restricting their learning opportunities.

Additionally, the limited use of visual aids poses another obstacle. Many students find it easier to understand abstract concepts or technical procedures when they are illustrated through diagrams, models, videos, or demonstrations. Without such support, learners are left to rely solely on verbal instruction or written notes, which may not fully capture the practical aspects of the subject.

Lastly, other challenges such as time constraints, overcrowded classes, and varying levels of prior knowledge among students also contribute to their difficulties in Industrial Arts. These factors collectively limit students' ability to grasp concepts, develop practical skills, and sustain their motivation in the course.

SOP 4. Do students have adequate access to the materials needed for successful learning in Industrial Arts?

The findings revealed that access to materials varied significantly depending on the availability of school resources and the socio-economic background of students. Many participants noted that while the institution provided basic tools and equipment, the quantity was often insufficient to accommodate the number of learners, resulting in shared usage and limited hands-on practice. This lack of adequate access occasionally hindered the learning process, as students were unable to engage in activities that required individual practice and mastery entirely.

Furthermore, some students expressed that although their teachers improvised and maximized available resources, the quality of learning was still affected by the absence of specific, specialized tools and materials essential for Industrial Arts projects. The situation was more challenging for students who could not afford to purchase supplementary materials independently, highlighting the role of financial constraints in shaping access. However, participants acknowledged that the resourcefulness of teachers and peer collaboration often compensated for these shortcomings, allowing them to develop fundamental skills despite limitations.

Overall, the study indicated that while students do have some level of access to Industrial Arts materials, it is not always sufficient to ensure equal and successful learning opportunities. Adequate provision of materials and institutional support remains a critical factor in enhancing students' practical experiences and learning outcomes in Industrial Arts.

SOP 5. In which specific topics or skills do students experience the most difficulty, and what types of instructional materials do they consider most helpful for addressing these challenges?

The findings revealed that students often experienced the most difficulty with topics that required a combination of technical precision and practical application. Skills such as accurate measurement, proper use of hand and power tools, and interpreting technical drawings posed significant challenges. Many students shared that while they understood the theoretical aspects of these skills, applying them in real-life tasks demanded greater mastery and confidence. Safety protocols and the integration of design concepts into functional projects also emerged as areas where learners encountered consistent struggles, mainly due to the need for both cognitive understanding and practical execution.

To address these challenges, students highlighted several types of instructional materials they found most helpful. Hands-on practice projects were consistently regarded as the most effective, as they allowed learners to directly apply their knowledge, correct mistakes, and gain confidence through repetition and experience. Step-by-step video tutorials were also considered highly valuable, particularly for complex tasks such as tool handling or furniture assembly, as students could pause, replay, and follow instructions at their own pace. Real-world examples and case studies were noted as helpful in bridging the gap between theory and practice, enabling students to see how concepts are applied in professional settings.

Meanwhile, interactive online exercises were appreciated by some learners for reinforcing technical knowledge, although they were seen as supplementary rather than primary tools. Overall, students expressed that a blended approach—combining detailed textbooks for theoretical grounding, visual demonstrations through videos, and authentic practice through projects—was most effective in overcoming their learning difficulties in Industrial Arts.

SOP 6. What suggestions do students provide for improving the instructional materials used in the Industrial Arts course?

Students provided several constructive suggestions for enhancing the instructional materials used in the Industrial Arts course. Many of them emphasized the need for more visually engaging and interactive materials, such as step-by-step illustrated guides, diagrams, and videos that clearly demonstrate processes and techniques. They explained that while textual explanations were helpful, visual aids made it easier for them to understand complex tasks and retain the information. In addition, students recommended integrating digital platforms where resources, such as tutorials, practice exercises, and reference materials, could be accessed at any time, providing them with flexibility in reviewing lessons beyond the classroom.

Another common suggestion centered on contextualizing the instructional materials to real-life applications. Students expressed that incorporating examples from actual industrial practices or showcasing finished products from professionals would make the learning experience more meaningful and motivating. They also proposed updating the materials to include modern tools, equipment, and techniques that reflect current industry standards. According to them, this would not only improve their learning but also enhance their readiness for real-world applications.

Finally, students suggested that instructional materials should be more learner-centered, offering opportunities for self-assessment, reflection, and peer feedback. They recommended incorporating activity sheets, project-based tasks, and problem-solving exercises that encourage creativity and critical thinking. By combining traditional printed resources with digital, visual, and hands-on components, students believed that the instructional materials would be more effective in supporting diverse learning styles and fostering deeper engagement in the Industrial Arts course.

Table 1. Summary of challenges encountered and corresponding suggested solutions

THEME	DESCRIPTION OF FINDING	STUDENT-DRIVEN SUGGESTION
Outdated instructional materials	Existing manuals and guides were useful tools, but often lacked alignment with current tools and industry standards.	Updated materials with modern technologies and contextualized examples
Limited Practice Opportunities	Overcrowded classes and insufficient workshop hours reduced hands-on engagement.	Allocate extended workshop sessions and provide more facilities.
Technical skill difficulties	Students struggled with measurement accuracy, tool handling, and interpreting technical drawings.	Incorporate step-by-step illustrated guides and video tutorials.
Inequitable Resource Access	Financial constraints limited some learners' ability to secure tools or practice independently.	Schools to partner with industries for equipment support or donations

SUMMARY

In exploring students' satisfaction with the instructional materials in the Industrial Arts course, the findings revealed a moderate level of satisfaction. Students appreciated the manuals, activity sheets, and project guides for their clarity and alignment with competencies. However, they pointed out that many were outdated and lacked relevance to modern tools and technologies. Visual aids and demonstrations were seen as vital complements, while the limited availability of materials sometimes caused delays and hindered independent learning. Overall, students valued the usefulness of the resources but stressed the need for more updated, comprehensive, and accessible materials.

When asked about the types of instructional materials they found most helpful, students strongly emphasized the importance of hands-on activities. Practical engagement with tools and projects enhanced not only technical skills but also creativity and problem-solving abilities. They also valued demonstration videos and online tutorials for flexible, self-paced learning, while textbooks and manuals served as essential technical references. Guest speakers and industry practitioners were likewise appreciated for connecting classroom learning to real-

world applications. Collectively, students preferred a blended approach to learning, with hands-on activities at the core.

The challenges faced by students centered on the lack of clear explanations during instruction, insufficient opportunities for practice, and the unavailability of resources. Time constraints, overcrowded classes, and varying levels of prior knowledge further compounded these difficulties. Students particularly struggled with technical skills, including measurement, proper tool use, interpreting drawings, and applying safety protocols. These challenges highlighted the need for more structured, accessible, and practice-oriented learning supports.

Access to instructional materials was also a significant concern. Although schools provided basic tools and equipment, these were often insufficient for the number of students, leading to shared use and reduced individual practice. Financial constraints also limited some learners' ability to supplement their resources, although teacher resourcefulness and peer collaboration often helped address these gaps. Despite these efforts, the study highlighted the crucial importance of adequate institutional support and the provision of resources for equitable learning opportunities.

In terms of instructional materials most helpful in addressing specific difficulties, students emphasized the effectiveness of hands-on projects, step-by-step video tutorials, and real-world case studies. These helped bridge the gap between theory and practice, while interactive exercises and textbooks provided supplementary reinforcement. The preferred approach was a blended mix of text-based, visual, and experiential resources.

Finally, students suggested several ways to improve instructional materials. They recommended incorporating more visual and interactive resources, such as illustrated guides, diagrams, and videos, as well as integrating digital platforms for flexible access. Updating materials to align with modern tools and industry standards was strongly emphasized. They also advocated for learner-centered designs that included self-assessment, reflection, and project-based tasks to foster creativity and critical thinking. Collectively, these suggestions underscore the students' desire for instructional materials that are engaging, relevant, updated, and adaptable to diverse learning styles.

CONCLUSIONS

- The study revealed that students were moderately satisfied with the instructional materials in Industrial Arts, recognizing their usefulness in guiding step-by-step processes in various tasks. However, limitations such as outdated content, scarcity of resources, and lack of integration with modern tools and technologies reduced their overall effectiveness. Despite these challenges, students appreciated the clarity of the materials and the teachers' efforts to maximize available resources.
- Students found hands-on activities to be the most effective instructional materials, as these directly developed their technical skills, creativity, and problem-solving abilities. Multimedia resources such as videos and online tutorials enhanced their learning by providing flexible, self-paced support, while textbooks and guest lectures offered foundational knowledge and real-world insights.

- Students struggled with limited clarity of technical explanations, insufficient practice opportunities, and a lack of accessible resources. The absence of adequate visual aids, overcrowded classes, and varying levels of prior knowledge further complicated their ability to grasp complex concepts and master practical skills.
- The findings indicated unequal access to Industrial Arts materials, as tools and equipment were often insufficient for the number of students. While teachers improvised with available resources, financial constraints limited some learners' ability to acquire their own materials, thereby restricting practice opportunities and hindering skill mastery.
- Students encountered the most difficulty in technical skills requiring precision, such as accurate measurements, tool handling, and interpreting technical drawings. Safety protocols and integrating design concepts into projects also posed consistent challenges. They considered hands-on practice, step-by-step video tutorials, and real-world examples as the most effective instructional materials for overcoming these difficulties.
- Finally, students suggested the use of more visually engaging and interactive materials, integration of digital resources, and contextualization of learning to real-life industrial practices. They emphasized the need for updated content that aligns with modern tools and techniques, as well as learner-centered materials that encourage creativity, reflection, and critical thinking.

RECOMMENDATIONS

Based on the findings and conclusions of the study, the following recommendations are suggested:

1. Firstly, it is recommended that instructional materials be updated and diversified to incorporate modern tools, digital references, and industry-aligned content. Schools should invest in ensuring wider accessibility of these resources and integrate visual aids, demonstrations, and practical applications to create a more engaging and relevant learning experience.
2. Educators should adopt a blended approach to instructional materials, emphasizing practical, hands-on projects while supplementing them with multimedia and textual resources. Collaborating with industry professionals to provide workshops and guest lectures can also enrich student learning and better prepare them for real-world applications.
3. It is recommended that teachers employ clearer explanations supported by visual aids, models, and demonstrations to enhance student comprehension. Schools should provide additional practice opportunities through extended workshop sessions, adequate facilities, and supplemental resources to help learners refine their skills and build confidence.
4. Schools should prioritize investing in sufficient tools and materials to ensure equitable learning opportunities for all students. Partnerships with local industries and community stakeholders may also be explored to secure sponsorships or donations of modern equipment, thus improving resource availability and enhancing the learning environment.

5. It is recommended that Industrial Arts instruction focus on providing repetitive, guided practice sessions supported by video tutorials and case-based examples. Teachers should integrate real-world projects that highlight accuracy, safety, and design application to help learners connect theory with practice and build greater confidence in their technical skills.
6. It is recommended that instructional materials be redesigned to include visual and digital components such as illustrated guides, videos, and online modules. Schools should also update content to reflect current industry standards while fostering student-centered learning through project-based tasks, peer collaboration, and opportunities for self-assessment and reflection.
7. Lastly, based on the findings of this study, it is strongly recommended to develop a comprehensive book titled “Introduction to Industrial Arts 1.” This book should serve as a standardized and updated instructional resource that addresses the gaps identified in existing materials. It must integrate clear explanations, step-by-step illustrated guides, and contextual examples to support both theoretical understanding and practical application. Additionally, the book should incorporate modern tools, techniques, and industry-based practices to ensure its relevance to current standards. To cater to diverse learning styles, it is advisable to complement text-based content with visual aids, diagrams, and suggested digital resources, as well as reflective activities and project-based tasks to promote creativity and critical thinking. By providing an accessible, learner-centered, and industry-aligned reference, this book can enhance student satisfaction, improve comprehension, and foster mastery of essential Industrial Arts skills, ultimately strengthening the teaching and learning experience in the subject.

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EVALUATING THE IMPACT OF DIGITAL SYSTEMS ON THE BUSINESS PERFORMANCE OF AIRLINE OPERATIONS

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ABSTRACT

This qualitative research examined the impact of digital technologies on operational efficiency, customer satisfaction, and overall business outcomes in the airline industry. Using a qualitative research design, the study employed a documentary analysis of industry reports, policies, and technological frameworks, complemented by a thematic analysis of participants' insights to enhance transparency. This study employed documentary and thematic analysis, utilizing purposive sampling to identify participants, with an emphasis on the origin and scope of these documents. This qualitative research examined the perceived impact of digital technologies on operational efficiency, customer satisfaction, and overall business outcomes in the airline industry. The findings revealed that airline personnel generally hold positive perceptions of digital systems, emphasizing their role in streamlining operations such as check-in, baggage handling, scheduling, and interdepartmental communication, which collectively enhance productivity. From the customers' perspective, digital systems improved experiences through seamless booking, real-time updates, personalized services, and reliable support channels, thereby fostering higher satisfaction and loyalty. Despite these advantages, challenges such as high implementation costs, integration with legacy systems, skill gaps, and cybersecurity threats were highlighted. However, opportunities for efficiency, revenue growth, sustainability, and global competitiveness outweighed the barriers. The study concludes that digital systems are indispensable tools in modern airline management, vital for sustaining performance in a competitive environment. The final recommendation is the development of a comprehensive reference book, "Evaluating Business Performance in Airline Operations," to consolidate best practices, case studies, and strategies that can guide aviation professionals, educators, and policymakers in leveraging digital innovations for sustainable growth.

Keywords: *Digital systems, airline operations, business performance, customer satisfaction, operational efficiency*

INTRODUCTION

In the modern aviation industry, digital systems have become an indispensable component of operational efficiency and business performance. Airlines are increasingly relying on advanced technologies, such as digital booking platforms, automated check-in systems, real-time flight tracking, predictive maintenance software, and data-driven customer service tools, to remain competitive in a rapidly evolving market. These innovations are not merely supportive; they fundamentally reshape how airlines manage resources, optimize workflows, and deliver services to passengers. As global air travel expands and customer expectations rise, the integration of digital systems plays a pivotal role in defining the success and sustainability of airline operations.

Despite the evident significance of digital systems, the extent to which they directly influence business performance in airline operations remains a subject of continuous exploration. Many airlines face challenges in implementation, ranging from the high cost of adoption and integration to issues of staff training, cybersecurity, and system interoperability. These challenges raise critical questions about whether digital systems consistently yield positive outcomes in terms of efficiency, cost savings, customer satisfaction, and overall profitability. Understanding these dynamics requires an in-depth examination of both organizational practices and the daily experiences of employees and stakeholders who interact with these systems.

This study seeks to qualitatively evaluate the impact of digital systems on the business performance of airline operations. By gathering insights from key personnel within the industry, the research aims to understand how digital technologies influence decision-making, streamline processes, and contribute to improved business outcomes. The study further examines the opportunities and challenges faced by airline operators in utilizing digital tools to achieve their strategic objectives. In doing so, this research aims to provide valuable perspectives on the evolving role of digital transformation in aviation, offering implications for airline managers, technology developers, and policymakers who seek to enhance the competitiveness and resilience of the sector.

Statement of the Problem

This study aimed to explore how the integration of digital systems influences the overall business performance of airline operations, with particular focus on efficiency, customer service, and decision-making processes.

Specifically, it sought to answer the following questions:

1. How do airline personnel perceive the role of digital systems in enhancing operational efficiency and productivity?
2. In what ways do digital systems affect customer experience and satisfaction in airline operations?

3. What challenges and opportunities do airline stakeholders encounter in adopting and utilizing digital systems to improve business performance?

Scope and Delimitations

The study focused on evaluating the impact of digital systems on the business performance of airline operations. It covered various aspects of airline operations where digital systems were applied, such as ticketing, flight scheduling, baggage handling, customer service, and operational efficiency. The scope included gathering insights from airline personnel, particularly managers, frontline staff, and IT specialists, who had direct experience with integrating and using digital platforms. The study was conducted within selected airline companies that had already adopted digital systems, ensuring that participants could provide informed perspectives on how these systems affected productivity, cost efficiency, customer satisfaction, and overall organizational performance. The research focused on the qualitative exploration of lived experiences, perceptions, and observed changes resulting from digital transformation in airline operations.

The delimitations of the study lay in its qualitative nature and limited participant pool. It was confined to selected airlines and did not encompass all carriers in the aviation industry, which meant that the findings could not be generalized to all airlines globally. The research was restricted to the perspectives of airline employees. It did not directly include passengers or external stakeholders, which might have provided additional dimensions to the evaluation of digital systems. Furthermore, the study focused primarily on operational and business performance aspects, rather than delving deeply into technical system design, cybersecurity issues, or financial accounting specifics. Time constraints also limited the depth of data collection, as interviews were conducted within a specific period. These delimitations ensured that the study remained manageable and focused on the primary aim of assessing the perceived impact of digital systems on airline business performance.

Review of Related Literature

Kıyıklık, Kuşakcı, and Mbowe (2022) proposed a digital transformation maturity model specifically designed for the airline industry, providing a self-assessment tool that enables organizations to evaluate their digital progress. Their study highlights how airlines can systematically assess and improve digital capabilities, ultimately leading to enhanced efficiency, cost reduction, and improved passenger experiences. This work is highly relevant to evaluating business performance, as it connects the adoption of digital systems to operational maturity.

Heiets (2022) examined the broader digital transformation occurring within the airline industry, focusing on the integration of modern technologies into various operational areas. The study highlighted the impact of digitalization on efficiency, customer service, and competitive positioning, underscoring the potential of digital systems to enhance profitability and sustainability in airline operations. This study reinforces the argument that digital transformation is not only a technological shift but also a catalyst for enhanced business performance.

La and Heiets (2021) explored the impact of digitalization on the air transportation system, demonstrating how digital technologies reshape both operational processes and decision-making within airlines. Their findings revealed that the integration of intelligent digital systems enhances safety, efficiency, and customer satisfaction, which directly correlates with better financial outcomes and stronger organizational performance. This perspective aligns with the current research as it bridges digital adoption with measurable business results.

Kabashkin (2024) developed a digital twin framework for managing aircraft lifecycles using data-driven models, demonstrating how real-time data and simulation technologies support improvements in maintenance, safety, and performance. The study demonstrates how predictive capabilities reduce downtime and optimize asset utilization, resulting in cost savings and efficiency gains for airline companies. By applying digital twin technology, airlines can make strategic improvements that directly enhance overall business performance.

Stanton et al. (2023) conducted a comprehensive review of predictive maintenance in aviation, focusing on methods and human factors challenges in implementing advanced technologies. Their research highlights how predictive maintenance, powered by digital systems, minimizes unexpected failures, reduces operational costs, and ensures smoother flight operations. These improvements directly impact business performance by reducing expenses, improving on-time delivery records, and enhancing customer trust.

SITA (2023) published its Air Transport IT Insights 2023, which provides industry-wide survey data on how airlines and airports are leveraging digital technologies to enhance operations. The report demonstrates that investments in artificial intelligence, cloud systems, and passenger self-service platforms have a significant impact on improving efficiency and customer satisfaction. The findings demonstrate a strong link between IT adoption and enhanced business performance, reinforcing the critical role of digital systems in shaping the airline industry's future.

Finally, the International Air Transport Association (IATA, 2024) presented its Annual Review 2024, which discusses industry trends, challenges, and innovations, including the increasing role of digital technologies in streamlining operations. The review emphasizes that digital transformation is crucial for sustaining growth and competitiveness in a rapidly evolving global market. By integrating advanced digital solutions, airlines can achieve better cost management, enhance customer experience, and improve long-term business performance.

Digital systems in airline operations refer to the technical tools and platforms that optimize various procedures, enhance efficiency, and improve the overall customer experience. In a highly competitive business, the strategic implementation of digital tools can revolutionize airlines' operational management, encompassing ticketing and in-flight services. These technologies enhance contact between airlines and passengers, enabling prompt responses to inquiries and complaints, which is increasingly vital in today's rapid world.

The customer experience is a primary concern for airlines, as it directly affects happiness and loyalty. As passengers pursue increasingly tailored and convenient services, digital solutions have become indispensable in fulfilling these demands. Online booking tools enable users to search for flights efficiently, compare costs, and finalize transactions within minutes, so improving their overall experience from the beginning.

Furthermore, digital technologies enable airlines to collect substantial data on client preferences and habits, which can be leveraged to provide personalized services and promotions. This data-centric methodology enhances customer satisfaction and cultivates a more robust relationship between airlines and passengers. (Kandil et al., 2024).

The examination of online booking systems reveals that these digital tools are essential in influencing the client experience, facilitating a more personalized and efficient travel procedure. The function of online booking systems highlights how digital innovations can directly enhance customer interactions with airlines, thereby influencing their satisfaction and loyalty.

Influence of Digital Reservation Platforms

Online booking systems have revolutionized customer interactions with airlines, enhancing their experience through increased accessibility and convenience. User interface design is a fundamental element of these systems, essential for facilitating client navigation during the booking process. An effectively designed interface reduces confusion and annoyance, enabling customers to search for flights, verify pricing, and complete bookings effortlessly.

Furthermore, these systems offer real-time updates on airline availability, cost, and modifications, which are crucial for clients formulating trip arrangements. Passengers can receive immediate warnings about delays or cancellations, allowing them to adjust their plans accordingly. This degree of transparency fosters trust and happiness, as clients perceive greater control over their travel arrangements.

The incorporation of online booking systems enhances the promptness of responses to consumer requests and concerns, hence augmenting overall service efficiency. Travelers can address their issues online, circumventing lengthy queues and overwhelmed customer care lines, resulting in a more favorable experience.

As we consider the advancements brought by online booking systems, it becomes evident that mobile applications are the next logical step in enhancing customer experience. These applications enhance the advantages of online booking platforms by providing additional convenience, allowing customers to view their travel information and make modifications on the go. The advancement of these digital solutions reflects a commitment to continually enhancing consumer engagement and satisfaction in the airline sector. (Harak, 2024).

Function of Mobile Applications

Mobile applications have become essential tools for enhancing airline services, significantly improving the client experience. A significant feature is mobile check-in, enabling passengers to

verify their attendance on flights using their smartphones. This convenience saves time at the airport, minimizes queues, and offers flexibility, enabling travelers to focus on their journey rather than administrative tasks.

Additionally, flight status notifications keep customers informed about any changes to their travel plans. Real-time updates regarding delays or gate changes help passengers adjust their schedules promptly, reducing anxiety associated with travel uncertainties. This proactive communication fosters a sense of control and reassurance for travelers, enhancing their overall satisfaction with the airline.

The integration of loyalty programs within mobile applications further elevates the customer experience. Passengers can easily track their points, redeem rewards, and receive personalized offers through the app. This seamless access encourages continued loyalty to the airline, as customers feel valued and recognized for their patronage. (Irina et al., 2016).

As mobile technology continues to advance, airlines are exploring ways to incorporate artificial intelligence and chatbots into their mobile applications. These innovations promise to further streamline interactions, offering instant assistance and personalized service options. By harnessing these technologies, airlines can enhance customer engagement and satisfaction, creating a more responsive and convenient travel experience. (Yu et al., 2022).

Use of Artificial Intelligence and Chatbots

The use of artificial intelligence and chatbots in airline customer service is transforming how airlines interact with their passengers. Automation of customer support tasks enables airlines to respond to inquiries promptly, significantly reducing wait times and enhancing customer satisfaction. Passengers can engage with chatbots to address common questions, such as flight status, baggage policies, or check-in procedures, resulting in quicker resolutions without the need for human intervention.

Personalized recommendations generated by AI further enhance the customer experience. By analyzing data from previous bookings and interactions, chatbots can suggest tailored travel options, upgrades, or services that align with individual preferences. This not only makes the booking process smoother but also fosters a sense of being valued, as customers receive suggestions that feel customized to their needs (Ekechi et al., 2024).

Data analysis plays a critical role in refining chatbot interactions. Feedback collected from user conversations enables airlines to adjust their responses and enhance service quality. Continuous learning enables chatbots to become more effective over time, adapting to the evolving preferences of travelers (Ekechi et al., 2024).

As airlines adopt these digital tools, they lay the groundwork for future innovations in customer experience. The ongoing advancements in AI and machine learning promise even more sophisticated support systems that will meet travelers' needs before they even arise. This shift toward proactive service indicates a compelling direction for customer engagement in the airline

industry, paving the way for the exploration of future trends in digital systems and customer experience.

Future Trends in Digital Systems and Customer Experience

Looking ahead, the future of digital systems in airline operations will be shaped by emerging technologies and changing customer expectations. Airlines are likely to invest in advanced data analytics and artificial intelligence to personalize travel experiences. Imagine systems that can predict a passenger's preferences, from meal choices to seat selection, enhancing satisfaction before the traveler even boards the plane.

Sustainability will also become a significant focus. Customers are increasingly expecting airlines to take responsible actions regarding their environmental impact. Digital systems can help airlines track and report carbon emissions, optimize flight routes for fuel efficiency, and promote eco-friendly choices during booking. By integrating these practices into their digital platforms, airlines not only meet customer demands but also make a positive contribution to global sustainability efforts.

As customer expectations evolve, airlines must adapt to provide seamless, intuitive experiences across all digital touchpoints. This could include using augmented reality for virtual seat selection or offering real-time updates through mobile apps. The goal is to create a seamless journey from booking to boarding.

In summary, future trends in digital systems will focus on personalization, sustainability, and a commitment to enhancing the overall customer experience. By embracing these advancements, airlines can significantly enhance customer experience and satisfaction, thereby securing their position in a competitive market as they look toward a more connected and environmentally conscious future.

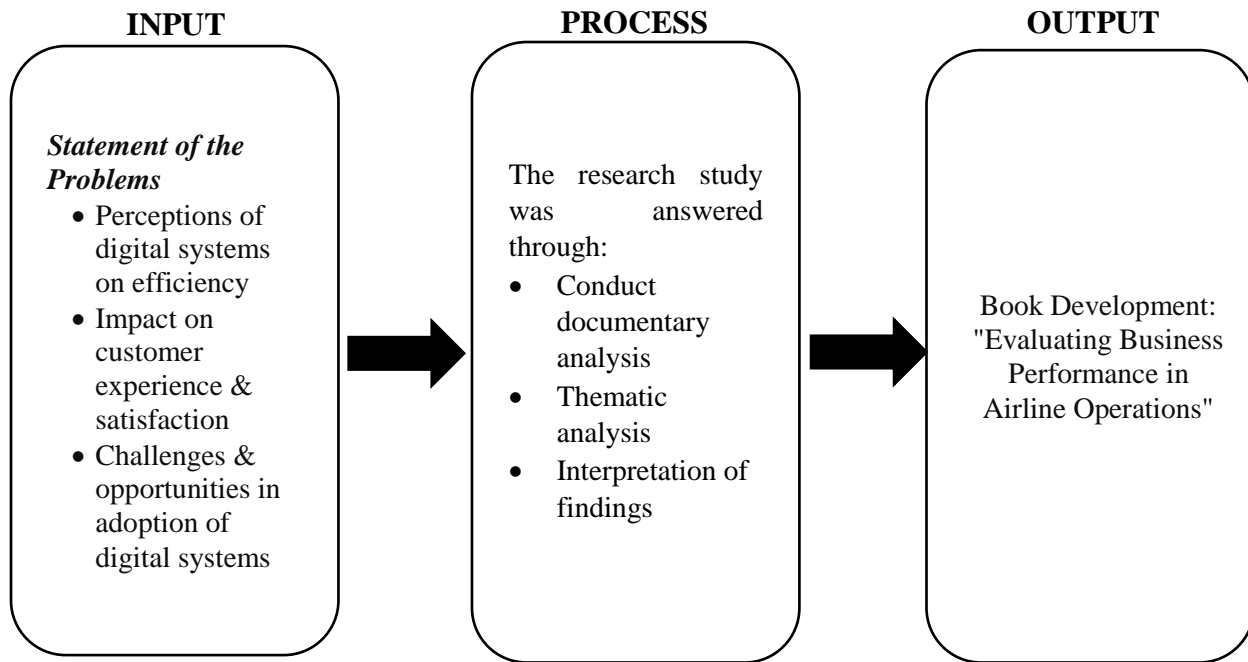
Theoretical Framework

One theoretical framework that guided the study was the *Technology Acceptance Model (TAM)* proposed by Fred Davis (1986). This model explains how users accept and utilize technology within organizational settings. It emphasized two primary factors—perceived usefulness and perceived ease of use—as determinants of technology adoption and its eventual impact on performance. In the context of airline operations, TAM was relevant because it demonstrated how employees and managers assessed the effectiveness of digital systems, including online booking platforms, digital ticketing, and automated operational tools. The framework suggested that the extent to which digital systems were perceived as valuable and easy to use influenced not only employee adoption but also broader business outcomes such as efficiency, cost-effectiveness, and customer satisfaction.

Another applicable framework was the *Resource-Based View (RBV) of the Firm* developed by Jay B. Barney (1991). RBV posited that an organization's sustainable competitive advantage stemmed from its unique resources and capabilities. In the study, digital systems were considered

strategic resources that, when effectively implemented, enhanced operational efficiency, reduced delays, and improved customer service in airline operations. This framework highlighted that the mere possession of digital technologies was insufficient; instead, their effective integration with organizational processes and human expertise determined their actual contribution to business performance. By adopting RBV, the research evaluated digital systems not just as tools, but as valuable resources that could differentiate airline companies in a highly competitive industry.

Conceptual Framework



The study was guided by the research questions that served as the *Input* of the framework. These questions focused on how airline personnel perceived the role of digital systems in enhancing operational efficiency and productivity, the ways in which digital systems affected customer experience and satisfaction in airline operations, and the challenges and opportunities that airline stakeholders encountered in adopting and utilizing digital systems to improve business performance.

The *Process* involved answering these research questions through the conduct of documentary analysis, thematic analysis, and interpretation of findings. These steps ensured that the collected data were systematically examined and meaningfully synthesized to address the objectives of the study.

The *Output* of the study was the development of a book entitled “Evaluating Business Performance in Airline Operations.” This book encapsulated the insights, analyses, and conclusions drawn from the research, serving as a valuable reference for airline stakeholders, academicians, and researchers interested in the impact of digital systems on airline business performance.

METHODOLOGY

Research Design

This study employed a qualitative research design to evaluate the impact of digital systems on the business performance of airline operations. A descriptive approach was utilized to provide a detailed account of how digital technologies influenced efficiency, service quality, and overall operational performance. Following Braun and Clarke's (2006) framework for thematic analysis coding procedures, intercoder reliability and trustworthiness criteria (credibility, dependability, confirmability) were applied to strengthen methodological rigor.

This design allowed the researcher to explore patterns, meanings, and interpretations that emerged from the available documents, providing a comprehensive understanding of the subject matter.

Population and Sampling Technique

The study population consisted of airlines and related aviation organizations that had adopted digital systems in their operations. Since the study relied on existing documents, purposive sampling was employed to select relevant materials, including industry reports, financial records, performance evaluations, and case studies published within the past five years. The selection criteria ensured that the documents directly addressed the integration of digital systems and their impact on business performance in airline operations.

Data Gathering Procedure

Data were gathered through documentary analysis. The researcher collected secondary sources, including official airline performance reports, published case studies, industry white papers, and articles from reputable databases and aviation authorities. Each document was carefully reviewed to extract information related to digital innovations, including automated check-in systems, customer service chatbots, flight operations software, and data management platforms, as well as their corresponding impact on efficiency, profitability, and customer satisfaction.

Data Analysis

The data were analyzed using thematic analysis. The researcher coded and categorized the information extracted from the documents to identify recurring patterns, themes, and insights. These themes were then interpreted to establish connections between the implementation of digital systems and their effects on business performance indicators, such as operational efficiency, cost reduction, revenue growth, and service quality. The use of thematic analysis provided flexibility in handling qualitative data while ensuring a rigorous interpretation of the findings.

Limitations and Ethical Considerations

The study faced limitations due to its reliance on secondary data. Since the research did not involve primary data collection from airline employees or management, the findings depended heavily on the credibility and availability of published documents. Additionally, the study focused only on

materials written in English and published within the last five years, which may have restricted the breadth of insights from other regions or earlier innovations.

Ethical standards were upheld throughout the study by ensuring that all documentary sources were cited correctly and acknowledged. The researcher avoided plagiarism and respected intellectual property rights by using information solely for academic purposes. Since the study relied on publicly available documents, issues of confidentiality and privacy were minimized. Nonetheless, the researcher remained mindful of presenting unbiased interpretations and ensured that the reviewed materials supported conclusions.

RESULTS AND DISCUSSION

Airline personnel perceive the role of digital systems in enhancing operational efficiency and productivity.

The findings revealed that airline personnel generally hold positive views regarding the integration of digital systems into their daily operations. Many participants emphasized that these systems streamline processes that were previously time-consuming and prone to human error, such as passenger check-in, baggage handling, and flight scheduling. By automating routine tasks, digital platforms enable staff to focus more on customer service and critical decision-making, which directly contributes to higher efficiency levels within the airline's operations.

Additionally, personnel highlighted that digital systems improve communication and coordination among departments, reducing delays and minimizing miscommunication. For instance, real-time data sharing between ground crew, cabin crew, and flight operations ensures better synchronization of tasks, resulting in smoother turnaround times and improved on-time performance. Employees noted that such interconnected systems foster a more collaborative work environment, where problems can be addressed quickly and proactively.

However, participants also acknowledged specific challenges in fully maximizing the benefits of digital systems. Some expressed concerns about the steep learning curve and the need for continuous training to keep pace with evolving technologies. Others noted occasional technical glitches and system downtimes, which, if unresolved promptly, could disrupt operations. Despite these limitations, most airline personnel agreed that the advantages of digital systems outweigh the drawbacks, as they contribute to faster workflows, reduced operational costs, and enhanced service quality.

The perception of airline personnel reflects a strong recognition of digital systems as vital tools that enhance both efficiency and productivity in airline operations. Their experiences suggest that while challenges exist, proper training, system maintenance, and technological upgrades can further strengthen the role of digital systems in ensuring competitive and sustainable business performance.

Digital systems affect customer experience and satisfaction in airline operations

Digital systems have a significant impact on customer experience and satisfaction in airline operations, transforming the way passengers interact with airline services before, during, and after their flights. They provide seamless booking, ticketing, and check-in processes that reduce waiting times and enhance convenience. With the integration of AI and data analytics, passengers benefit from personalized services, including tailored promotions, seat preferences, and loyalty program management, which fosters a sense of value and recognition. Moreover, real-time communication systems provide timely updates on flight schedules, delays, or gate changes, thereby minimizing uncertainty and enhancing passenger confidence. In-flight experiences are enriched through digital entertainment, internet connectivity, and mobile applications that cater to diverse customer needs.

Additionally, digital customer service tools, such as chatbots and virtual assistants, enable efficient problem-solving, ensuring that concerns are addressed promptly. Operational reliability, such as baggage tracking and faster boarding procedures, further strengthens satisfaction by reducing stress points in the journey. Finally, feedback systems allow passengers to share their experiences instantly, enabling airlines to respond and continuously refine their services. Collectively, these digital innovations foster convenience, trust, personalization, and efficiency, which are key drivers of positive customer experiences and satisfaction in airline operations.

- ***Streamlined Booking and Ticketing:*** Digital systems simplify flight reservations, online check-ins, and mobile boarding passes, making travel more convenient.
- ***Personalized Services:*** Through data analytics and AI, airlines provide tailored offers, seat preferences, and loyalty rewards that enhance satisfaction.
- ***Enhanced Communication:*** Real-time updates on flight status, delays, or gate changes reduce passenger anxiety and increase trust.
- ***Efficient Customer Support:*** Chatbots, AI-driven service desks, and 24/7 support channels allow passengers to resolve issues quickly.
- ***Seamless In-Flight Experience:*** Digital entertainment systems, Wi-Fi, and mobile applications improve comfort and engagement during flights.
- ***Operational Reliability:*** Digital systems contribute to smoother operations (e.g., baggage tracking, faster boarding), minimizing disruptions that negatively affect customer satisfaction.
- ***Feedback and Continuous Improvement:*** Online surveys and digital feedback tools provide passengers with a voice, enabling airlines to address concerns and adapt services.

Challenges and opportunities do airline stakeholders encounter in adopting and utilizing digital systems to improve business performance

Challenges:

- ***High implementation costs*** – Adopting advanced digital systems requires significant financial investment in infrastructure, software, training, and maintenance.
- ***Resistance to change*** – Employees and some managers may resist new technologies due to unfamiliarity, fear of redundancy, or the complexity of systems.
- ***Integration issues*** – Merging digital systems with legacy platforms or coordinating with third-party providers can be technically challenging.
- ***Cybersecurity risks*** – With more digital transactions and data storage, airlines face heightened risks of data breaches and system vulnerabilities.
- ***Skill gaps*** – Not all stakeholders have the necessary digital literacy, requiring continuous upskilling and training initiatives.
- ***Regulatory compliance*** – Airlines must navigate strict aviation, data protection, and international IT standards when adopting digital systems.

Opportunities:

- ***Enhanced operational efficiency*** – Digital systems streamline scheduling, maintenance tracking, baggage handling, and flight operations, reducing delays and costs.
- ***Improved customer experience*** – Features such as mobile check-in, real-time updates, and personalized services boost customer satisfaction and loyalty.
- ***Data-driven decision making*** – Analytics allow airlines to predict demand, optimize pricing strategies, and improve resource allocation.
- ***Revenue growth*** – Digital platforms support ancillary services (e.g., seat upgrades, in-flight purchases) and targeted marketing.
- ***Sustainability improvements*** – Optimized flight paths and fuel usage tracking contribute to environmental goals and reduced operational costs.
- ***Global competitiveness*** – Early adoption of digital innovations positions airlines ahead of competitors and attracts tech-savvy travelers.

Airline stakeholders face both significant challenges and promising opportunities in adopting digital systems to improve business performance. Among the important challenges are the high costs of implementation, technical integration issues with legacy systems, and employee resistance to change due to unfamiliarity with new technologies. Cybersecurity threats and compliance with strict international regulations further complicate adoption, while skill gaps among staff necessitate continuous training.

Despite these barriers, digital systems present substantial opportunities. They enable operational efficiency by streamlining core airline processes and enhancing customer satisfaction through personalized and convenient services.

Furthermore, they provide stakeholders with data-driven insights for better decision-making, open avenues for increased revenue through digital marketing and ancillary sales, and support sustainability efforts by optimizing fuel use. Ultimately, embracing digital systems not only helps airlines remain globally competitive but also strengthens their ability to adapt to the evolving needs of the aviation industry.

SUMMARY

Airline personnel generally view digital systems positively, recognizing them as essential tools for enhancing efficiency and productivity. Many emphasized that automation simplifies routine processes such as passenger check-in, baggage handling, and flight scheduling, reducing errors and freeing staff to focus on customer service and critical decision-making. Digital platforms also improved communication and coordination between departments, leading to smoother operations, faster turnaround times, and improved punctuality. However, personnel acknowledged challenges such as the need for continuous training, steep learning curves, and occasional system glitches that could disrupt workflows. Despite these hurdles, most employees agreed that the benefits of digital systems—streamlined processes, reduced costs, and improved service quality—outweigh the drawbacks, making them vital to sustaining competitiveness in the airline industry.

Digital systems play a transformative role in shaping customer experience and satisfaction across all stages of air travel. Passengers benefit from seamless booking, ticketing, and check-in processes, as well as personalized services driven by AI and data analytics, such as loyalty rewards and tailored promotions. Real-time communication tools reduce stress by providing timely updates on flight changes, while digital customer support channels—like chatbots and 24/7 service desks—offer quick solutions to passenger concerns. In-flight entertainment systems, Wi-Fi, and mobile applications further enhance the travel experience. Operational reliability, including baggage tracking and faster boarding, contributes to greater customer trust and convenience. Additionally, feedback platforms empower passengers to voice their concerns, enabling airlines to refine their services continually. Collectively, these innovations underscore how digital systems enhance convenience, personalization, efficiency, and trust—key factors in increasing customer satisfaction.

Airline stakeholders face both challenges and opportunities in adopting digital systems. Significant barriers include high implementation and maintenance costs, resistance to change among personnel, integration difficulties with legacy systems, and heightened cybersecurity risks. Skill gaps and the need for ongoing training also remain pressing issues, alongside the complexity of regulatory compliance. On the other hand, digital systems offer significant opportunities by enhancing operational efficiency, improving customer satisfaction, and enabling data-driven decision-making for more effective resource allocation and informed pricing strategies. They also open revenue streams through ancillary services, strengthen sustainability initiatives via optimized fuel management, and enhance competitiveness in the global market. Thus, while the adoption of digital systems presents complexities, their potential to improve business performance and adaptability in the aviation industry outweighs the risks, making them indispensable to future growth.

CONCLUSIONS

- The findings concluded that airline personnel generally perceive digital systems as highly beneficial in enhancing operational efficiency and productivity. By automating time-consuming tasks and promoting interdepartmental coordination, these systems facilitate smoother workflows and enhanced customer service. Beyond the immediate findings, the results extend the theoretical implications of both the Technological Acceptance Model (TAM) and the Resource-Based View (RBV), demonstrating how perceived usefulness and organizational resources combine to shape competitive advantage.

Although challenges such as training requirements and technical glitches remain, personnel largely agree that the advantages far outweigh the drawbacks.

- Digital systems significantly shape customer experience and satisfaction by offering convenience, personalization, and reliability across the passenger journey. From seamless booking to real-time updates and in-flight digital services, these technologies enhance trust, engagement, and overall service quality. However, as digital features expand, customer expectations rise, making consistent innovation essential.
- Finally, the results highlight that while adopting digital systems presents challenges such as high costs, resistance to change, skill gaps, and cybersecurity concerns, the opportunities they provide for efficiency, customer loyalty, sustainability, and competitiveness are substantial. The balance of these challenges and opportunities underscores the necessity of strategic digital adoption in airline operations.

RECOMMENDATIONS

Based on the findings and conclusions of the study, the following recommendations are suggested:

1. Firstly, airlines invest in continuous staff training and capacity-building initiatives to ensure employees adapt effectively to evolving technologies. Additionally, prioritizing regular system upgrades and proactive technical support is essential to minimize disruptions and maximize the long-term benefits of digital platforms.

2. It is recommended that airlines further leverage AI and analytics to deliver more personalized experiences, while also strengthening digital customer support channels for efficient problem resolution. Airlines should also establish responsive feedback systems to continuously monitor satisfaction levels and adapt services to evolving passenger needs.
3. Airlines implement phased investment strategies to manage costs effectively, strengthen cybersecurity measures, and integrate robust training programs to bridge digital literacy gaps among personnel. Collaborative partnerships with technology providers and regulatory bodies can also help ensure smoother integration, compliance, and sustainable growth in the digital era of aviation.
4. Based on the findings of this study, it is strongly recommended to pursue the development of a reference book entitled “Evaluating Business Performance in Airline Operations” to serve as a comprehensive guide for aviation professionals, students, and researchers. This book would consolidate insights on the impact of digital systems on operational efficiency, customer satisfaction, and overall business performance, while also addressing the challenges and opportunities faced by airline stakeholders. By integrating theoretical foundations, real-world case analyses, and practical strategies, the book can provide both academic value and industry relevance, equipping readers with evidence-based knowledge to navigate the evolving digital landscape of airline operations. Ultimately, this resource could contribute to advancing scholarship in aviation management and support airlines in achieving sustainable growth through digital innovation.

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MANAGEMENT CAPABILITIES OF HEAD TEACHERS

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ABSTRACT

This study determined the management capabilities of head teachers in secondary schools within the Division of Batangas, with the ultimate goal of proposing a management program. Specifically, the study examined the respondents' management capabilities concerning strategic leadership, managing school operations and resources, focusing on teaching and learning, developing self and others, and building connections. Furthermore, it identified the challenges faced by the respondents, which contributed to the formulation of the management program. This study employed a descriptive research method, utilizing a researcher-designed questionnaire as the primary data collection instrument, complemented by interviews and focus group discussions.

Results from the findings revealed that the management capabilities of the head were assessed to a very great extent in areas such as strategic leadership, resource management, teaching and learning, self-development, and building connections. Research showed that school heads' managerial competence is crucial for achieving school goals and improving quality education. This ensures effective school leadership, promoting educational excellence, and a supportive environment for students and staff. Moreover, the primary challenges faced by head teachers were preserving high levels of discipline. The proposed management program aims to enhance head teachers' leadership skills for more effective school management and improved educational outcomes.

Keywords: *Management Capability, Management Program, Issues and Challenges, Head Teachers*

INTRODUCTION

In the ever-evolving field of education, head teachers play a critical role in shaping the quality and effectiveness of academic institutions. Their responsibilities extend beyond classroom instruction to include leadership, management, and fostering a culture of excellence within their schools. Head teachers are at the forefront of implementing educational policies, guiding teachers, and addressing the diverse needs of students and the community. According to Bush and Glover (2016), the leadership and management practices of head teachers significantly influence school performance, impacting student outcomes, teacher satisfaction, and the overall school environment. Their research underscores the crucial role head teachers play in creating an atmosphere where both students and teachers can thrive.

Professional development opportunities are vital for equipping head teachers with the skills necessary to navigate the complexities of modern education, including curriculum changes, evolving student needs, and technological advancements. In today's rapidly changing

educational landscape, the responsibilities of a head teacher extend far beyond administrative tasks. As teaching methods evolve, curricula are adjusted, and technology becomes increasingly integrated into classrooms, head teachers must stay current to lead and manage their schools effectively. Engaging in ongoing professional development allows them to acquire the knowledge and skills needed to address these changes and implement innovative strategies that benefit both students and educators.

The ongoing development of leadership capabilities is essential for head teachers, enabling them to confidently manage diverse challenges. As the demands of education evolve, head teachers must be adept at making well-informed decisions, fostering the professional growth of teachers, and creating a supportive environment that promotes student success. Comprehensive leadership training equips head teachers to establish a clear vision for their schools, align resources with educational goals, and cultivate teamwork among staff. Additionally, it enhances their ability to address the complexities of modern educational administration, such as integrating technology, managing student behavior, and meeting increasing demands for academic achievement. By continually refining their leadership skills, head teachers are better prepared to guide their schools toward success, fostering a positive and sustainable learning environment for all.

In the Philippines, the Department of Education recognizes the importance of empowering head teachers to meet national educational goals while aligning with global standards. Frameworks such as the Philippine Professional Standards for Teachers (PPST) and professional development initiatives for instructional leaders ensure that head teachers acquire the necessary skills and knowledge to lead schools effectively, promote teacher development, and address the challenges of modern education. These programs emphasize not only students' academic achievement but also the personal and professional growth of the educators who guide them.

Management capabilities are fundamental to the success of head teachers, as these qualities enable them to effectively guide schools and achieve educational goals. Republic Act No. 9155, also known as the Governance of Basic Education Act of 2001, provides the legal framework for these roles in the Philippine education system. The Act designates head teachers as key leaders responsible for the administration, governance, and management of schools. It entrusts them with implementing educational policies, ensuring the quality of teaching and learning, and managing resources effectively. By emphasizing the importance of leadership and management skills, the Act underscores the critical role of head teachers in creating a nurturing learning environment, improving academic performance, and supporting the professional growth of educators. However, despite national frameworks such as PPST and RA 9155, it can be observed that many head teachers remain underprepared for modern administrative demands, particularly in maintaining discipline and integrating technological innovation.

As educational systems grapple with challenges such as the integration of technology, diverse student needs, and the demand for 21st-century skills, school leaders must continuously adapt to remain effective in their roles. Managing daily operations is no longer sufficient; head teachers must now navigate complex educational reforms, address the varying needs of students, and ensure that teachers receive adequate support and professional development. To

meet these demands, head teachers require access to continuous professional development that is both relevant and adaptable to the evolving educational environment. Enhancing leadership training, providing mentorship, and fostering collaboration among peers are critical steps to ensuring head teachers possess the skills needed to guide their schools toward success in an increasingly complex world. Prioritizing the professional growth of head teachers is essential for addressing contemporary educational challenges and ensuring students receive the highest quality of learning.

Reflecting on the management capabilities of head teachers reveals a growing concern over the years. The role of school leaders has evolved beyond administrative oversight to require a blend of effective leadership and strategic management. Unfortunately, many head teachers continue to struggle with the complexities of their responsibilities. While they are expected to lead their schools through educational reforms, manage daily operations, and create positive learning environments, there is a noticeable gap in leadership competence and management skills. This gap often hinders their ability to address challenges such as integrating technology, adapting curricula, and meeting the diverse needs of students.

The lack of sufficient professional development and training for school heads exacerbates these challenges. Many are tasked with managing school finances, overseeing faculty performance, and implementing policies without the necessary leadership tools. This lack of preparation often makes it difficult to cultivate a school culture that encourages collaboration, innovation, and improved student outcomes. These gaps can negatively affect both staff and students, making it harder to maintain a productive and positive school environment.

Given the importance of strong leadership in achieving educational goals, there is an urgent need to assess and enhance the management capabilities of head teachers. Providing them with comprehensive training and ongoing support will better prepare them to meet the demands of their roles. This approach will ultimately improve the educational experience for students and teachers alike. By equipping school heads with the necessary tools and skills, educational systems can strengthen school culture, enhance teacher performance, and drive student success. This study aims to identify areas for improvement, propose effective solutions, and ensure school heads are fully equipped to lead their schools toward continuous improvement and academic excellence.

Statement of the Problem

This study aimed to determine the management capabilities of head teachers of public secondary schools in the Division of Batangas.

Specifically, this study was guided by the following objectives:

1. Assess the management capabilities of prospective leaders in relation to:
 - 1.1 leading strategically;
 - 1.2 managing school operations and resources
 - 1.3 focusing on teaching and learning;
 - 1.4 developing self and others; and

- 1.5 building connections
2. Identify the challenges faced by the respondents.
3. Propose a management program to enhance the management capabilities of head teachers.

Scope and Delimitations

This study focused on the management capabilities of head teachers in public secondary schools in the Division of Batangas during the school year 2023-2024. The study aimed to assess the management capabilities of these prospective school leaders and the challenges they faced in leadership and management competencies. Additionally, the researcher prepared a management program to enhance the management capabilities of head teachers.

The study was delimited to the participation of school principals, master teachers, and teachers from the Division of Batangas. It utilized a descriptive-survey method of research, employing a researcher-constructed questionnaire as the main data-gathering instrument

Review of Related Literatures

Capabilities of School Managers. Management capabilities refer to a manager's skills that help in the development of the organization they lead. These skills are influenced by both internal and external factors. A manager's success in achieving organizational goals depends on their ability to manage effectively, which requires specialized knowledge and skills acquired through education and training. The key to success in management lies in recognizing problems and opportunities and making the right decisions. A manager's tasks include organizing resources, delegating authority, and assigning duties and responsibilities to achieve organizational goals. The efficiency and effectiveness of an organization are determined by the manager's ability to manage it.

School managers, including principals, head teachers, and other administrative leaders, require a diverse set of capabilities to effectively lead and manage educational institutions. These capabilities encompass various aspects of leadership, management, interpersonal skills, and strategic decision-making. Good school leaders influence their team to work together for the school's benefit. Their skills help them guide and direct their team to work as one, promoting unity, cooperation, and enthusiasm. Their ability to build relationships within the school community also inspires their team. These leadership skills help leaders succeed in reaching the school's goals.

Administrators are important and need a management strategy that includes strong leadership. Leaders need to have strong leadership to guide the organization effectively. Chaijuthaphak (2015) emphasized the importance of strong leadership for secondary school administrators in overseeing large educational institutions. Administrators with strong leadership skills can plan ahead, create a positive organizational culture, have a broad vision, meet expectations set by society and schools, and apply the necessary principles, knowledge, and skills for self-development and that of their colleagues. Hence, to effectively address future challenges and cultivate a positive organizational culture that supports school success, school administrators need to have strong leadership (Phusing, 2015).

According to Hitt et al. (2016) a strategic leader is someone who possesses the ability to foresee, plan, adapt, think strategically, and collaborate with others to drive changes that will enhance the organization's future. Griffin et al. (2014) stated that strategic leadership

plays a vital role in enabling the organization to convey its future vision and fulfill its mission in accordance with its strategic plan. Likewise, Wibawa (2014) and Davis (2004) define strategic leaders as individuals capable of developing strategic competencies, aligning people and organizations, translating strategy into action, identifying effective strategic intervention points, and possessing organizational capabilities with a strategic mindset. Day and Dragoni (2015) emphasize that leadership strategy serves as the driving force behind any implemented plan, encompassing various dimensions that outline how things will operate in the short and long term. These dimensions include developing the organization's vision, enlisting individuals to carry it out, and establishing targets and goals.

Meanwhile, Padmadisastra (2015), strategic leaders should comprehensively understand their environment, including the latest technological developments and how they impact the company. They also need a thorough knowledge of environmental aspects such as teacher teamwork and teaching excellence, as these factors can directly influence the academic results of their students. Manish (2014) advises that leaders in strategic leadership roles should identify opportunities for improvement in current practices and abilities while avoiding any behaviors that could have a negative impact on the organization. Therefore, school leadership and teacher collaboration and consensus are crucial for enhancing teaching quality, highlighting the importance of teachers working together in any efforts to improve the quality of teaching.

Furthermore, Muthimi and Kilika (2018) emphasize the importance of leadership strategy in providing a roadmap for an organization, guiding it towards its future. This involves analyzing the organization's current situation and its planned future state in terms of human resource requirements necessary to effectively implement the organization's strategy. A well-planned leadership strategy considers the total number of leaders needed in various segments over the next 5 to 10 years, the required skills and behaviors of individuals and teams, and the leadership culture necessary for the organization to achieve its goals. More so, the strategic leaders are responsible for driving the organization's strategy. Strategic leadership involves setting the organization's direction, creating and implementing strategies to achieve its objectives (Sarrattana, 2014). It requires staying abreast of internal and external changes, anticipating the organization's long-term future, and developing strategies to achieve desired outcomes.

Moreover, leading strategically promotes a positive learning climate by effectively communicating goals, setting clear expectations, and fostering a conducive learning environment. This approach is crucial for creating an atmosphere where students feel supported, engaged, and motivated to learn. Research highlights the importance of positive classroom climates in enhancing learning outcomes. In such environments, teachers play a key role in establishing effective social interactions among students, encouraging collaboration, and supporting academic work through open communication and clear expectations (Qiu, 2022). Teachers' clear communication and understanding of student abilities can enhance learning outcomes and self-esteem. Positive classroom climates stimulate interest and encourage sharing. In climate change communication, promoting positive engagement through empathy and understanding can motivate action. Strategic communication approaches prioritize constructive interactions for meaningful change.

Establishing a positive culture within a school necessitates that school leaders offer access to essential resources that enable effective teaching. Instructional materials affect how educators deliver their lessons, the breadth of instruction, and the ways in which they assess learning (Bettini et al., 2016). Consequently, the availability of educational resources (such as books, supplies, technology, and curriculum supports) impacts the

quality of instruction in the classroom. Educators who have easy access to robust curricular resources tend to achieve greater success, in contrast to those who lack such support. When teachers are equipped with appropriate resources, they are more capable of managing their classrooms and delivering the necessary content; on the other hand, those who do not have the right tools often struggle with confidence, feel disconnected, and face communication breakdowns (Du Plessis et al., 2015). Additionally, Ontong (2022) discovered that the school climate was affected by the surrounding school culture, and school heads' transformational leadership and emotional intelligence. Implications of the findings include the need for principals and or school heads to review their approaches, programs, and projects that are directed towards the development of the desired learning environment that promotes and supports academic growth of both teachers and students.

Beckers (2021) explains that creating a positive climate is not just about promoting positive thinking. It's about using proven methods to build a professional setting that supports mental well-being, growth, and goal achievement. Small acts like expressing gratitude, recognizing good performance, showing empathy, and addressing concerns can help create a positive environment. Leading an organization with a focus on positivity can improve success by creating a supportive workplace that encourages growth. This kind of environment can improve decision-making, productivity, creativity, social connections, and positive behaviors, leading to greater happiness, productivity, and profitability.

The management capability of school leaders includes effectively managing school operations and resources. This involves maintaining efficiency, effectiveness, and justice in carrying out duties to maximize organizational health. The school head's role in managing school systems and processes is crucial for the benefit of the teachers. Success in the 21st century requires school leaders to possess five leadership competencies: strategic leadership, management of school operations and resources, emphasis on teaching and learning, self and other development, and relationship building. According to Rasool et al. (2019), managers must be well-versed in management techniques to successfully manage an organization. Therefore, the head of an institution should possess management abilities to achieve desired goals.

The capabilities in managing resources by DepEd policies involve ensuring transparency, accountability, responsibility, and liability in handling government funds and properties. School heads must adhere to the principles of good governance, promoting ideas of transparency and accountability in all branches, departments, and agencies. The responsibility to manage resources by-laws, rules, and regulations rests with the chief or head of the government agency concerned (DO 24 s.,2020). Additionally, Andang et al. (2014) stress that in order to fulfill each school's objective, administrators must possess good managerial abilities in order to oversee the diverse range of resources in the building.

According to Ali et al. (2019), head teachers create, provide, and uphold a defined framework, regulations, and processes for the improvement of their schools. Purposeful actions by the administrator and the involvement of all stakeholders provide assistance to maintain a safe and effective learning environment (C. Watson, 2019). The head teacher is accountable for daily operations and essential to recognize the importance of the conditions of the school in which staff and students have to do their work and ensure a positive learning environment.

Additionally, School-Based Management (SBM) procedures are used to audit, evaluate, and monitor the school heads' operations and management practices. Every exercise they accomplished would demonstrate their skill and proficiency in carrying out their duties and obligations as productive and successful school leaders. Furthermore, school administrators are in charge of maintaining a welcoming and safe work environment

(Cabigao, 2019). It would include fostering a spirit of cooperation and respect between instructors, co-teachers, and other staff members. School administrators face challenges in carrying out their duties because every school is a unique institution with unique characteristics, such as an established organizational culture that exists even before they join the school. School heads are essential managers and leaders responsible for the overall operation of schools, focusing on vision, mission, curriculum, financial management, facilities, student services, community relations, and improvement plans. Their functions are complex and diverse, requiring accountability, integrity, and identifying necessary competencies to ensure the effectiveness and efficiency of the school's performance.

To connect the school budget and improvement objectives, school heads must be proficient in creating and implementing school budgets (School Finance Handbook, 2016). Above all, principals should be adept at creating budgets. These abilities support the development of school administrators' proficiency in purchasing procedures, such as the ability to acquire products and services in accordance with budgetary guidelines and principles. After that, school administrators need to put in a lot of effort to learn how to effectively monitor and assess the school budget. This is one of the most significant responsibilities of school heads, requiring them to prioritize the needs of the school while managing the limited resources at their disposal through appropriate management at all levels.

Furthermore, Phylister et al. (2018) elaborated on a related point by saying that in order to guarantee that school heads have the necessary abilities, financial management training becomes essential for the school head to become competent in the field. Further, school heads' capacity building for financial management needs to continue. Building on a similar notion, they contended that financial management education becomes essential for school heads to become competent in the field in order to guarantee they have the necessary abilities. Furthermore, school heads' continued financial management capacity training is still relevant. Concerns about professional updates, financial management education, and related matters ought to be shared. According to Mgandi et al. (2017), this can be achieved through specialized financial management seminars and workshops on the usage of financial guidelines handbook, consultations, monitoring, assessment, and appropriate financial record keeping.

In a study conducted by Amos (2021), the effectiveness of the financial management skills of school heads in providing quality education in secondary schools was examined. The research found that skills such as funding mobilization, budget monitoring, evaluation, and auditing were crucial for the financial management of schools. However, it was discovered that many school heads, bursars, and clerks lacked the necessary financial management skills to be effective as school managers. To address this issue, the study recommends capacity building programs for school heads, bursars, and clerks, decentralization of financial decision-making, alignment of financial management to the school's mission and vision, and effective monitoring, evaluation, and auditing of financial reports.

Educational leaders have a crucial role to play in achieving educational targets, particularly in instructional development. Instructional leadership involves an effort to enhance the delivery of instruction in a school system where learners learn at a high level. The school administrator shall meet their instructional roles and responsibilities by assuming a top-down supervisory approach that focuses on monitoring and evaluating teacher's performance and learners' achievement. Therefore, they need to perform their administrative and supervisory function properly to effectively and efficiently deliver the purpose in the development of change.

Focusing on teaching and learning is another management capability of school leaders that concentrates on school heads' work in promoting quality teaching and learning. This skill emphasizes the school heads' commitment to providing instructional leadership towards improving competence among teachers and outcomes among learners. School heads are expected to provide technical assistance on instruction that relates to curriculum, practice, and performance. They should also create a learner-centered environment that ensures access to inclusive, excellent, relevant, and liberating education. In order to meet educational goals, especially in instructional development, educational leaders are essential. Enhancing the way that education is delivered in a school system so that students learn at a high level is the goal of instructional leadership. The school administrator will carry out their instructional roles and responsibilities by adopting a top-down supervisory strategy that prioritizes the observation and assessment of teachers' performance as well as the academic progress of their students. To successfully and efficiently accomplish the goal of the development of change, they must thus carry out their administrative and supervisory duties in the right manner.

Additionally, Manaseh (2016) agrees with the scholarly viewpoint that the role of the head teacher is to coordinate the curriculum, monitor teaching activities throughout the school, conduct lesson observation, and participate in curriculum review. Head teachers are responsible for promoting teacher professional development by enhancing their knowledge through classroom observations, communicating high expectations, and ensuring that the school environment is conducive to learning (Wyatt, 2017). Omaali et al. (2019) define the role of the head teacher in ensuring effective teaching as holding teachers accountable for what they do in class and ensuring better lesson planning and delivery, thereby promoting efficiency in the teachers.

Effective management capabilities encompass a multifaceted approach that not only focuses on the development of the individual manager but also extends to fostering the growth and potential of those within the team or organization. Developing self and others is a behaviour that focuses on demonstrating commitment to ongoing professional development: both your own and that of the people around you. School heads are expected to reflect on their personal and professional development to enhance their practice in leading and developing people as they support their personnel's professional development and welfare. They should provide others with the means for development such as opportunities to learn, reflect, lead, and progress in their profession.

Head teacher creates an atmosphere in which teachers are considered professionals and have opportunities to continue their professional development both within and without the school they teach in, which leads teachers toward excellence. There should be a climate of high expectations in which the staff believes and demonstrates that all learners can obtain mastery of the school's essential curriculum. An effective head teacher communicates the school's mission and vision, by persistently creating a shared sense of purpose and establishing a set of common core values among the instructional staff. There is an orderly, purposeful, business-like atmosphere, which is free from the threat of physical harm.

Lastly, building connections is another management capability that is a vital aspect of a head teacher's role in fostering a positive school culture, promoting collaboration, and enhancing student success. School heads are expected to be responsible and accountable for inculcating a deeper understanding of the vision, mission, core values, and directions of the school to relevant entities. They possess skills in relating with, dealing with, and forging relationships with people. They should be able to build relationships with individuals and organizations anchored on mutual trust, honesty, openness, respect, and commitment toward sharing the same vision for the attainment of institutional goals.

Structured activities and professional development focused on rapport, trust, and communication are crucial for head teachers to build strong relationships (Lasater, 2016).

Stakeholder involvement is all about collaborating with people and utilizing resources to achieve common objectives and goals. A competent manager looks for ways to harness the interests and abilities of each individual in a way that benefits everybody. This is the kind of environment that a head teacher tries to foster in school. Since the government has made primary education compulsory and free for all, it is crucial that school management involves all stakeholders in the decision-making process. As school leaders, they are responsible for carrying out the school's overall vision in line with the Department of Education's guidelines. They are also expected to provide guidance to teachers and students, manage resources efficiently, and bring the school community together. Another crucial aspect of their role is to lead dynamically, fostering teamwork and collaboration while motivating staff and students to achieve better outcomes for the school organization (Department of Education, 2021).

The school system cannot exist in a vacuum separated from the larger social context; therefore, the vital role stakeholders such as parents, community, and teacher play in a child's education cannot be underestimated. The connection between communication and stakeholders' participation is imperative because it builds trust and mutual relationship which in turn fosters the level of stakeholders' involvement or participation in the running of the school. Where effective participation of stakeholders exists, the employees are offered the opportunity to express their feelings and communication serves as a medium of conflict resolution in any given organization. Cabardo (2016) maintained that effective communication and stakeholder participation will help in the learners' education by enhancing their progress and better realization of their educational performance. Stakeholders' participation in the school system is buttressed by the principles of consensus which advocate for representation in any school system if quality education is to be enhanced, various school stakeholders need to be regularly communicated and brought on board to play significant roles in school management.

Maintaining a strong connection with school alumni is crucial for the continued success and development of the school community and the role of the head teacher in this regard is pivotal. Through this connection, the head teacher can benefit from the alumni's knowledge, experience, and support, which can help current students and future generations (Villanueva et al., 2021). This connection can be upheld through various means such as alumni events, newsletters, social media platforms, and networking opportunities. By actively engaging with the school's alumni, the head teacher can cultivate a sense of pride and loyalty among former students, keeping them connected to their alma mater and encouraging them to give back to the school in various ways. Moreover, the head teacher can create opportunities for alumni to contribute their expertise and resources to the school community. Alumni can participate in career guidance programs, mentor current students, or provide financial support for scholarships and educational initiatives. Having a strong connection with school alumni can provide numerous benefits for both the school and the alumni.

In summary, school managers, including principals and administrative leaders, need a diverse set of skills to effectively run educational institutions and achieve organizational goals. Their success depends on both internal and external factors, such as their ability to manage resources, delegate tasks, and make strategic decisions. Strong leadership is crucial for creating a positive school culture, fostering teamwork, and aligning the school's vision with its operations. Strategic leadership, which involves foresight, planning, and adaptability, is essential for long-term success. Additionally, school managers are

responsible for overseeing operations, managing budgets, ensuring transparency, and prioritizing accountability in financial decisions. Continuous self-development and fostering professional growth among staff are key to building a supportive school environment. Furthermore, managing resources efficiently and implementing processes like school-based management (SBM) are important for ensuring school effectiveness and improvement. Overall, effective school leadership involves balancing leadership, resource management, financial oversight, and instructional guidance to drive school success. leadership, and stakeholder involvement, to ensure the success and sustainability of the school.

Issues and Challenges met by Head Teachers. Head teachers, often known as principals or school leaders, are essential to the leadership and management of educational institutions. They are charged with monitoring day-to-day operations, creating a good learning environment, and pushing continuous improvement to improve student results. However, head teachers face a myriad of complex issues and challenges in fulfilling their leadership and management roles effectively. Head teachers have always faced numerous challenges in their roles. Their responsibilities include maintaining educational standards, fostering productive collaboration with groups such as parents, teachers, and local councils, and creating a conducive environment for students to thrive. They are often tested and must implement strategies to improve the school's reputation while making the most of limited resources. Bean et al. (2016) showed that difficulties encountered by new school principals consisted of faculty having unrealistic expectations, lack of leadership experience, insufficient training, trouble applying theoretical training to real organizational situations, absence of a mentor, poor induction programs, unclear expectations without support, and conflicting demands leading to challenges in budgeting, prioritizing tasks, and managing personal and work responsibilities. In the research conducted by Castañeros et.al (2023), it was found that newly appointed school principals encounter challenges such as supervising staff, balancing work and personal life, managing the school, and handling the previous leader's legacy. The recently promoted school principals addressed leadership obstacles by being open-minded, seeking support, relying on themselves, and managing their time effectively.

Newly promoted school principals face significant challenges due to inadequate education and preparation for their roles. According to Jaarsveld et al. (2015), mentorship is necessary to improve school principal leadership and student achievement. Arrieta et al. (2020) also stated that new school principals struggle with paperwork, school culture, processes, and meeting superiors' expectations. Many principals fail to complete their master's degrees due to the demands of their role and pressure to obtain the necessary academic credentials. Additionally, there is a low completion rate for master's degree programs in school leadership and management.

Another study highlighted the challenges principals encounter in connecting theory, policy, and practice. Ethical leadership is a key focus of leadership development programs in the Philippines due to widespread corruption and nepotism. Thus, principals need to be culturally sensitive in their preparation for their roles. Transitioning into a leadership position comes with various difficulties, such as strained relationships, facility maintenance issues, and lack of teacher support. Staff cooperation, existing school mechanisms, and familiarity with the system can facilitate a smoother transition. New principals encounter challenges in managing teacher tardiness, student misconduct, interpersonal relationships, and facility upkeep. Lack of teacher support for the administrators' visions is also a significant issue (Jaarsveld et al., 2015). Transitioning from classroom teaching to school leadership is a complex process. Contrary to common belief,

not all classroom teachers are immediately prepared or willing to take on leadership roles. The transition involves distinct challenges, as classroom teaching and school leadership represent different yet complementary aspects of education (Arrieta et al., 2020).

Similarly, a research in Ghana uncovered the difficulties head teachers encounter, including unsafe school conditions, teachers' reluctance to assist with student supervision, inadequate school personnel, lack of student discipline, and negative perceptions towards education in schools and overall education (Tudzi, 2018). Additionally, some school leaders have poor oversight in the system, overwhelming administrative work, large class sizes, student behavior management, limited parental involvement in education, insufficient number of qualified teachers, evaluation methods, and high rates of student withdrawals (Anwer et al., 2018). A survey at the Philippine Integrated School in Marawi City showed that teachers have varying professional needs in terms of classroom management skills and handling professional issues, which should be taken into consideration for teacher training programs.

Also, a study by Ünal & Dulay (2022) investigated teachers' experiences with work-life balance during emergency remote teaching. The study identified two major themes: the challenges of maintaining work-life balance and strategies to address these challenges. Teachers reported difficulties such as inadequate workspace, irregular hours, lack of support, and role conflicts, which hindered their ability to balance work and personal life and negatively impacted their well-being. The study highlights the need for practical solutions and managerial support to address these issues, given that remote work and distance education may persist beyond the pandemic.

Furthermore, Parek (2018) stresses the importance for women to actively pursue methods to attain a balance between work and personal life. Women should focus on their priorities and select strategies that optimize both pleasure and drive. Recognizing one's values and achieving a harmony between work and personal life are essential for their career growth and overall happiness. The principal, being in charge of the school, also serves as a technology leader. An education technology leader needs to efficiently utilize technology to improve teaching, help teachers incorporate technology into their lessons, and build a strong technology support team. Key responsibilities for a school principal involve developing and executing creative technology plans, fostering teacher knowledge of technology's significance, and incorporating technology into the curriculum to enhance teaching efficacy.

Incorporating technology into schools presents difficulties for head teachers, as indicated by Lomo et al. (2024) and Wong & Daud (2017). The obstacles consist of insufficient funding for ICT tools, lack of support from stakeholders, challenges in training teachers, and inadequate infrastructure like electricity and internet access. In order to tackle these challenges, policymakers must implement practical measures to solve the problems encountered by school principals. School administrators need to have strong technology skills to establish a technology-rich educational environment. According to Awalt and Jolly (2019), the lack of technology improvement among school heads may be attributed to a failure to recognize modern technology and ineffective technology management within schools. Apsorn et al. (2019) further argue that the reluctance to adopt new information technologies and inadequate preparation for learning these technologies are significant issues. They emphasize that many administrators do not fully understand the importance of innovation and technological advancements, which affects the effectiveness of educational administration. In addition, Apau (2017) found that teachers often lack technological content knowledge and recommends that educators model technology use in teaching to stay updated with technological pedagogical content.

Moreover, another challenge that head teachers face is managing both human and financial resources. These studies address issues such as recruitment, induction, development, motivation, and management of teaching and support staff. For instance, Ayikue (2020) carried out a study on the difficulties encountered by secondary school head teachers in Kenya for recruitment, induction, development, and motivation of teachers and management of support staff. Some of the factors found in the study comprise; recruitment challenges and failure to provide adequate in-service training teachers as significant issues. In addition, Behlul and Caganaga (2018) further examined the challenges that headmasters face in the management of human resources such as the area of governance and its effects on the motivation of teachers. These findings also point to the dynamism of problems that head teachers encounter in their efforts to human capital and resources in educational organizations.

However, according to the study of Robina et.al (2018) the financial management obstacles encountered by new head teachers include procurement problems like school debt, accounting difficulties such as inadequate record-keeping, budget limitations, and auditing issues like late reports and lack of financial expertise. It was suggested that head teachers should receive training on financial management, which was crucial for their new role. Research on how newly appointed head teachers are trained and introduced would enhance the current study's comprehension. Similarly, Getahun (2018) pointed out that the problems of school financial management include low stakeholder involvement, lack of human resource, insufficient professional development, no framework and poor criterion for budgeting. Moreover, Tadiwos (2014) specified the following difficulties pertaining to the use of financial resources: budget releases arrived late; there was no skilled manpower for the compliance with budget control; poor cooperation with stakeholders; and insufficient financial control training.

Head teachers also face challenges in improving and maintaining high academic performance. Research studies have consistently highlighted the difficulties encountered by head teachers, including inadequate leadership, lack of coordination and support from educational supervisors, and high accountability for outcomes, particularly pupils' academic performance. A report by the Education Policy Institute found that less effective head teachers are concentrated in low-attaining schools, and effective head teachers increase pupils' performance and their future earnings. Investing in leadership improvement is worthwhile given the benefits that effective head teachers bring. Another research conducted by Alkarni (2014) discovered that principals face difficulties when collaborating with educational supervisors, including issues related to coordination and assistance. Head teachers also require individuals to pay attention to them, display care for their welfare, and provide validation and support. In Tanzania, a recent study discovered that obstacles encountered by school administrators in private secondary schools, such as limited funds, absence of inspiration, and declining student enrollment, hinder the maintenance of students' academic success (Onai & Ligembe, 2022).

In a study by Charles and Mkulu (2020), it was found that school administrators face leadership challenges in maintaining students' academic performance. Some of the difficulties faced are insufficient funding, limited collaboration with education partners, high student population, infrastructure problems, and teacher shortages. These obstacles impede the efficiency of principals in private high schools. In Mbaabu's (2014) study, the aim was to examine the challenges faced by head teachers in primary schools. The main finding was that despite having appropriate academic qualifications, head teachers faced numerous interconnected challenges related to a lack of leadership skills, curriculum and instruction knowledge, and inefficient management of human, physical, and financial

resources. As a result, there was a failure to work together effectively among important participants in the field of education, leading to negative school results like student behavior issues and academic achievements in both local and national tests. The research suggested that the Government of Kenya, with the help of the Kenya Education Staff Institute (KEMI), improve the professional development of head teachers and School Management Committee members in school leadership, with a special emphasis on resource procurement and management strategies.

Furthermore, the study by Mkulu et al. (2020) found that insufficient budget, poor cooperation with education stakeholders, high student enrollments, lack of infrastructure and teaching resources, and a shortage of teachers were the major challenges affecting school administrators and students' academic performance. These challenges have led to increased absenteeism and negatively impacted the schools and students' academic performance. The researchers suggested that educational stakeholders should invest more in education by implementing income-generating activities within the schools and recommended that the government allocate more funds to schools, hire more teachers, and encourage school administrators to collaborate with all educational stakeholders to address the management challenges.

Indiazi (2018) explored the problems affecting head teacher training and their impact on academic performance in public primary schools. According to the findings, the obstacles faced by head teachers were a lack of monitoring and assessment, the high expense of training programs, a negative attitude toward training among certain head teachers, and a severe workload. The report advises that the Ministry of Education develop ways to ensure that head teachers receive official pre-service training on how to deal with administrative problems in order to improve performance.

School leaders are in charge of fostering student academic success by coordinating and overseeing the curriculum. Nevertheless, certain situations prevent principals from completely meeting this obligation. This indicates that school principals encounter difficulties in their daily task of enhancing student academic achievement. In a study conducted by Githiari (2017), the aim was to discover the difficulties faced by principals when carrying out different operational management duties in secondary schools. The study revealed that principals encountered a range of obstacles while carrying out administrative duties. The challenges comprised of limited funds, lack of teachers, student misbehavior, teacher misconduct, substance abuse, adolescent pregnancies, political intervention, ineffective student leadership, and unsatisfactory school-community relations. It is suggested by the research that it is crucial to provide training for principals in order to ensure that both current and future principals have the necessary certification in school management. This training must also focus on developing interpersonal skills to assist principals in managing issues with students and staff members.

Meanwhile, establishing and keeping up a supportive learning environment in a multicultural setting poses a major challenge for school administrators. They encounter challenges in handling personal discrepancies and disputes that may hinder the attainment of organizational objectives. School leaders encounter various challenges in establishing and upholding a conducive learning environment. These challenges include managing cultural diversity, addressing student discipline issues, and ensuring sufficient resources. Effective leadership practices involve building integrity, communicating vision, catering to individual needs, and supervising staff and students (Joseph M. Velarde et al., 2020). Head teachers play a crucial role in shaping the school climate, which significantly influences academic performance (J. Kor & James K. Opare, 2017). To address discipline issues, schools emphasize guidance and counseling, creating a positive environment, and

addressing student concerns.

The management of physical school environments also plays a crucial role in creating a positive learning climate. Olowo (2023) emphasizes the importance of maintaining safe, clean, and comfortable classroom facilities. However, Allen (2015) reported that maintenance of school facilities is often neglected, leading to deteriorated conditions and failed objectives. This issue is particularly pronounced in primary schools in Nigeria, where facilities are frequently in poor condition. Asiyai's study indicates that school heads often neglect the maintenance of school facilities, viewing it as outside their responsibilities. Similarly, Ogie (2015) found that head teachers' pay minimal attention to facility maintenance, including classroom upkeep. These findings suggest that head teachers have a critical role in ensuring the proper maintenance of physical facilities. However, there is a noted lack of research on this issue in public primary schools in Osun State, underscoring the need for further evaluation of head teachers' roles in maintaining classroom facilities in this region.

Research indicates that maintaining discipline in schools is a vital concern in the field of education, necessitating the implementation of guidelines for appropriate conduct, fostering respect, and instilling value systems to encourage students' self-regulation and autonomy (Andegiorgis, 2019). Research has also recognized numerous difficulties in handling student behavior, such as parents advocating for their children, a shortage of professional counselors and resources, political intervention, students trying to harm educators, and student opposition (Essau, 2022). In Kenya, dealing with student discipline has been a major problem, as head teachers have been in legal trouble because of unclear policy directions, ongoing reliance on physical punishment, and insufficient training in managing discipline (Ondieki, 2018). A different research discovered that common discipline issues in public high schools consist of skipping classes, disrespect towards teachers, and student conflicts, with inadequate teacher-student relationships and parental neglect being key factors contributing to indiscipline.

To address these challenges, it is essential to provide head teachers with effective leadership, training, and support to ensure a safe and supportive school environment. This can be achieved by developing alternative strategies for punishment, improving relationships between teachers and students, and promoting parental involvement in discipline management. Furthermore, schools should establish clear behavior policies and ensure consistent and fair implementation to promote good behavior and self-control among students. By addressing these challenges, schools can create a positive and productive learning environment that supports the academic and personal growth of all students.

Head teachers face challenges and issues in the performance of teacher evaluation. These challenges include the impact of evaluation results on teacher motivation and the need for careful feedback delivery. There are concerns about the clarity and consistency of evaluation systems, evaluator training, and distinguishing between teacher quality and teaching quality. Additionally, the use of student evaluations as the sole method of assessing teachers is problematic due to biases and construct-irrelevant factors. The design of written evaluation tools also presents difficulties for head teachers, highlighting the need for improvement in methodological work and teaching performance.

Teacher performance evaluation is an important tool for assessing the effectiveness of teachers and improving student learning. The evaluation process can be carried out by school heads, evaluators, and students. The evaluation process should be fair and objective, and evaluators should possess the proper skills and competencies. Utilizing various data sources like classroom walkthroughs, portfolios, self-assessments, peer appraisal, and head

teachers' evaluations can offer a more comprehensive perspective on teacher performance. The focus of evaluation should be on providing personalized evaluative feedback to teachers, rather than just using it as an input to selective dismissal decisions.

Previous studies have consistently emphasized the role of robust collegial relationships in enhancing school improvement and overall success. High levels of collegiality among staff are characteristic of effective schools, and strong, healthy relationships among teaching personnel are vital for institutional efficacy (Arnold, 2014). However, promoting collegiality can prove difficult for head teachers. The transition from bureaucratic to market-oriented governance of teachers' work, along with the participation of diverse stakeholders from various cultural and social backgrounds, can hinder the comprehension and execution of collegiality (Samuelsson, 2018). Despite these challenges, the significance and benefits of collegiality in the workplace, especially within higher education institutions, have been acknowledged. Collegiality fosters camaraderie, cooperation, and collaborative environments among employees, resulting in favorable outcomes (Enaifoghe, 2022).

Moreover, Head teachers encounter different obstacles when monitoring the continuity of learning with restricted resources. Some of the challenges involve minimal teacher-student interaction and safety concerns during home visits, restrictions in assessment elements, inadequate budget distribution, variation in grading practices, validating student performance is complex, heavy workload, and limitations in classroom observations (Nebriada et al.). (Al., 2022) has stated this information. In spite of the obstacles, head teachers use methods like community partnerships, home visits, training, realigning funds, utilizing school resources, changing assessment criteria, delegating responsibilities, and scheduling video lesson observations to tackle these challenges. These approaches assist head teachers in overcoming resource limitations and ensuring efficient monitoring of teaching and learning.

Mbaabu (2014) conducted a study to investigate the difficulties encountered by primary school head teachers. The primary discovery indicated that head teachers encountered various interconnected obstacles due to a shortage of leadership skills, curriculum and instruction expertise, and ineffective management of human, physical, and financial resources, despite possessing suitable academic qualifications. As a result, a lack of cooperation among important individuals in the education sector led to negative school results, including student behavior and academic achievements in internal and national tests. The research suggested that the Kenyan government, via KEMI, should improve the training of head teachers and School Management Committee members in school leadership, with a specific focus on resource acquisition and management strategies.

Lastly, Kalane & Rambuda (2022) carried out research on the elements influencing the supervision of educational activities by heads of departments. The study found multiple reasons such as a lack of administrative and financial assistance, minimal parental engagement, inadequate academic progress of students, unfavorable working conditions, insufficient availability of educational resources, and absence of labs. Therefore, the research suggests that department heads be granted sufficient time to juggle their teaching and learning management duties with other responsibilities listed in the Personnel Administrative Measures (PAM). Furthermore, they need to be provided with training and support in order to assist teachers and students in enhancing the quality of education. It is also recommended that they share classroom difficulties with parents to allow for parental support. Effective departmental management is considered essential through collaborative partnerships between schools and parents. In addition, the Department of Basic Education must offer ongoing administrative and financial assistance to enhance the supervision of

education in elementary schools.

In summary, Head teachers face numerous challenges in effectively managing schools, which include both internal management issues and external pressures. New school leaders often struggle with balancing leadership responsibilities, managing staff, and dealing with the legacy left by previous leaders, compounded by a lack of mentorship and insufficient training. Many principals feel unprepared due to inadequate training and challenges in adapting from teaching to leadership roles. Achieving work-life balance is a significant issue, especially for female principals, as they must juggle professional duties and personal life. Poor infrastructure, large class sizes, student discipline issues, and limited resources further hinder effective school management. Principals also encounter resistance from staff, struggle with technological integration, and must navigate ethical challenges, such as corruption and nepotism. Additionally, maintaining academic performance is difficult in the face of declining student enrollment and limited funds. Other obstacles include managing school facilities, promoting collegiality among staff, and evaluating teachers effectively. Despite these challenges, head teachers use strategies like community partnerships, professional development, and collaboration with stakeholders to improve teaching and learning outcomes.

Management program preparation. Management program is the process of managing new process related activities, often with the purpose of improving an organization's performance. It also composed of interactive activities with enable the participant to gain broader management perspective through understanding of management competencies (Martin, 2024). Management program development is deemed necessary since the sophistication of the 21st century form new tasks, challenges and opportunities in the educational system. It is, for a fact, that globalization has led far-reaching positive and negative impacts on school managers and that these also have resulted in the advent and progression of a variety of remarkable and real-world educational leadership paradigm, and managerial practices. Thus, it requires school heads to be globally competitive, to be able to cope with increasingly difficult and complex challenges.

According to Strass (2015), the creation of management programs is a learning process plan that may involve job notation, college courses, and mentoring in order to equip staff members with the abilities needed to oversee an organization's daily operations. Employees can carry out the organization's strategies thanks to this method. Typically, managers are expected to possess specific talents, such as the ability to apply management theory and processes, solve interpersonal problems, solve financial and accounting issues, and demonstrate leadership and communication abilities. Relatively to this, Rasher (2016) highlighted that creating a management program involves a systematic program of the technical and methodological approaches in research development and implementation. In this sense, management development can help develop a new approach, indicate a possible direction for change, help some to acquire the skills needed to analyze the existing situation and develop appropriate plans for change and help some to acquire the skills needed to analyze the existing situation and develop appropriate plans for change and even to spark a few new approaches in research undertakings.

The planning and development process must be designed in clear and simple words and stakeholders should get the direction so that all their effort are focused on the attainment of a particular goal. Leinden (2016) asserts that the creation of management programs is a concerted attempt to inspire and assist managers in altering their behavior in a specified way through experience, training, education, and feedback. One of the main objectives of

management development is to raise managers' competencies by letting them know what is expected of them going forward and what they need to do to acquire and enhance the competencies required to complete their tasks. Furthermore, at least some elements of organizational growth as well as personal career development can be integrated into the creation of management programs. For the management development program to support managers in their work, it must be a viable and useful concept.

On the other hand, a management development program is an active system-wide training program that is crafted to enrich and strengthen leadership and management capabilities in the competencies mandated by the department. It is proven that any organization with skilled people meets its goals faster. As the lifeblood of the organization, people should be led and managed appropriately to produce the desired outcomes. The management program is a central part of the modern-day management of schools and forms the foundation of much of what is accomplished during course projects and activities. Additionally, a management program is a practical discipline that becomes effective when used on what is needed by the situation of the organization. It must be based on the needs assessment to really deliver what is needed by the school heads.

Great management of programs creates a vision for success and gets everyone on the same page of what's needed to stay on track for success. When programs are managed properly, there is a positive impact that resounds beyond the delivery of projects and activities. It is therefore important thing to manage a program to ensure that the goals of the program are closely aligned with the strategic goals of the school or any organization, without program management, a team can be like a ship without a rudder; moving but without direction; control or purpose. Good management of programs demonstrated phases where teams can assess the output for quality and applicability. Additionally, it emphasizes the need for program specific processes, based on an iterative life cycle and the management of multiple stakeholders and their expected benefits. It analysis the best organizational structures for managing program and provides tools and techniques to deal with complex, unplanned and change structured manner. It also develops knowledge of particular techniques required for managing programs as well as the competencies and skills required for program manager.

Lastly, Banayo, (2023) in his study aimed to determine the relationships between leadership practices and management behavior of school heads and their impact on the quality service and performance of teachers, which has implications for educational policymakers, school administrators, and leadership development programs. Understanding the crucial role of school heads in enhancing teacher performance can guide the development of effective leadership training programs and inform strategies for improving the overall quality of education. By adopting the best practices identified in this research, educational institutions can foster a culture of continuous improvement and provide quality of service to students through the professional growth and development of their teachers. Gonzales et al. (2022) found in their study of school leadership preparation programmes, that the strengthening of school and community partnerships, especially with parents, was a key factor in alerting school leaders (and, indeed, classroom practitioners), to the issues faced by their pupils in the home learning environment

In summary, management programs are designed to enhance organizational performance by developing leadership and management skills, particularly in educational settings. These programs are vital due to the evolving challenges in the 21st-century educational system, where globalization has introduced both opportunities and difficulties. Educational managers are expected to possess a range of skills, including leadership, financial management, and problem-solving abilities. Effective management programs

incorporate various methods such as training, mentoring, and education to equip leaders with the competencies required to manage daily operations and drive organizational success. Additionally, these programs help foster personal career development and support organizational growth. As schools face increasing complexity, developing effective management strategies that align with strategic goals is crucial. Research emphasizes that school heads need training in areas like finance, human resources, curriculum management, and general administration to effectively lead schools. The development of these programs ensures that leaders can navigate challenges, improve teacher performance, and enhance the overall educational environment.

Theoretical Framework

The theoretical insights of this research will partly derive from leadership theories that are relevant to the main problem. The Total Quality Management Theory by Edwards Deming and Skills Based Leadership Theory by Robert Katz were used to support this study.

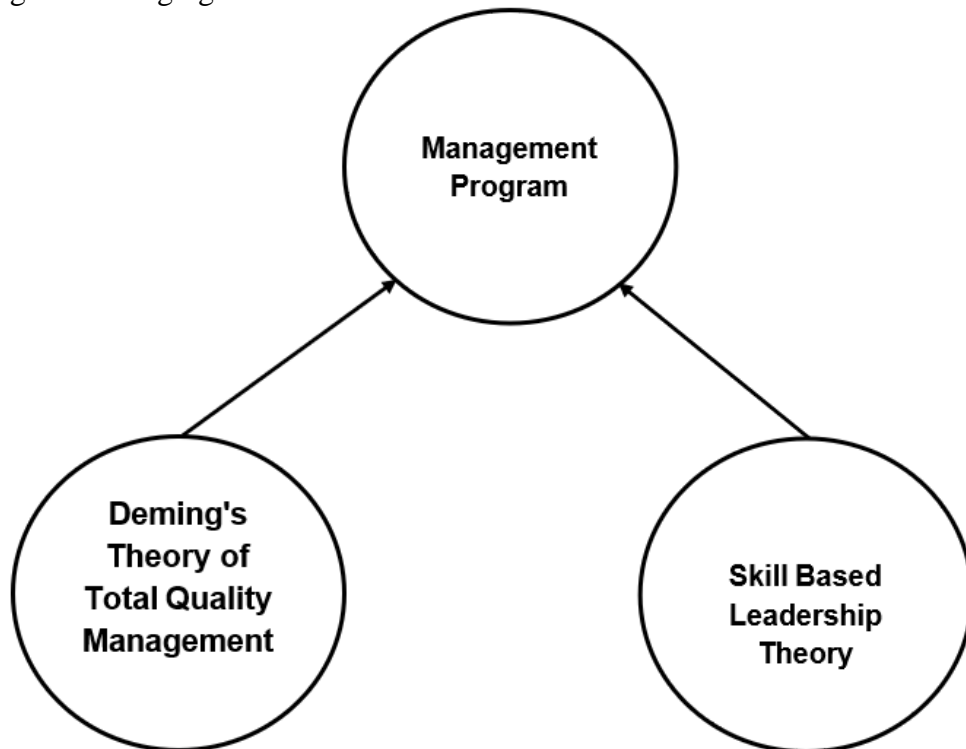
W. Edwards Deming developed Deming's Theory of Total Quality Management (TQM) as a comprehensive method for quality management. It focuses on constant improvement, prioritizing customers, and involving all organization members to achieve quality excellence. The theory promotes incorporating quality throughout the entire production process instead of just checking it at the end. It also stresses the importance of employee training, teamwork, and the continual push toward improvement. By implementing Deming's principles of Total Quality Management (TQM), school administrators can establish a culture of excellence, foster teacher empowerment, and promote ongoing improvement within the education system. This can ultimately result in improved academic results for students. Promoting a robust educational program and self-improvement for all stakeholders is key. School leaders ought to encourage and facilitate professional growth and continuous learning among teachers and staff.

In the Skills-Based Leadership Theory by Robert Katz, acquired knowledge and skills play a crucial role in the development of effective leaders. This theory outlines effective leadership through a collection of abilities rather than personal characteristics. The Skills-Based Leadership Theory allows aspiring leaders to acquire necessary skills by analyzing a leader's performance in relation to their skills. The theory emphasizes that specific abilities, knowledge, and skills necessary for leadership can be acquired or enhanced through learning. It assesses a leader's success by their achievements and demonstrates that effective leadership stems from specific character traits shared by great leaders. It also aids leaders in gaining a better understanding of their roles by enabling them to evaluate their current skills, identify areas for improvement, and determine the most beneficial skills for particular circumstances. This resulted in identifying the domains of managerial skills and labeling them as technical, human, and conceptual skills.

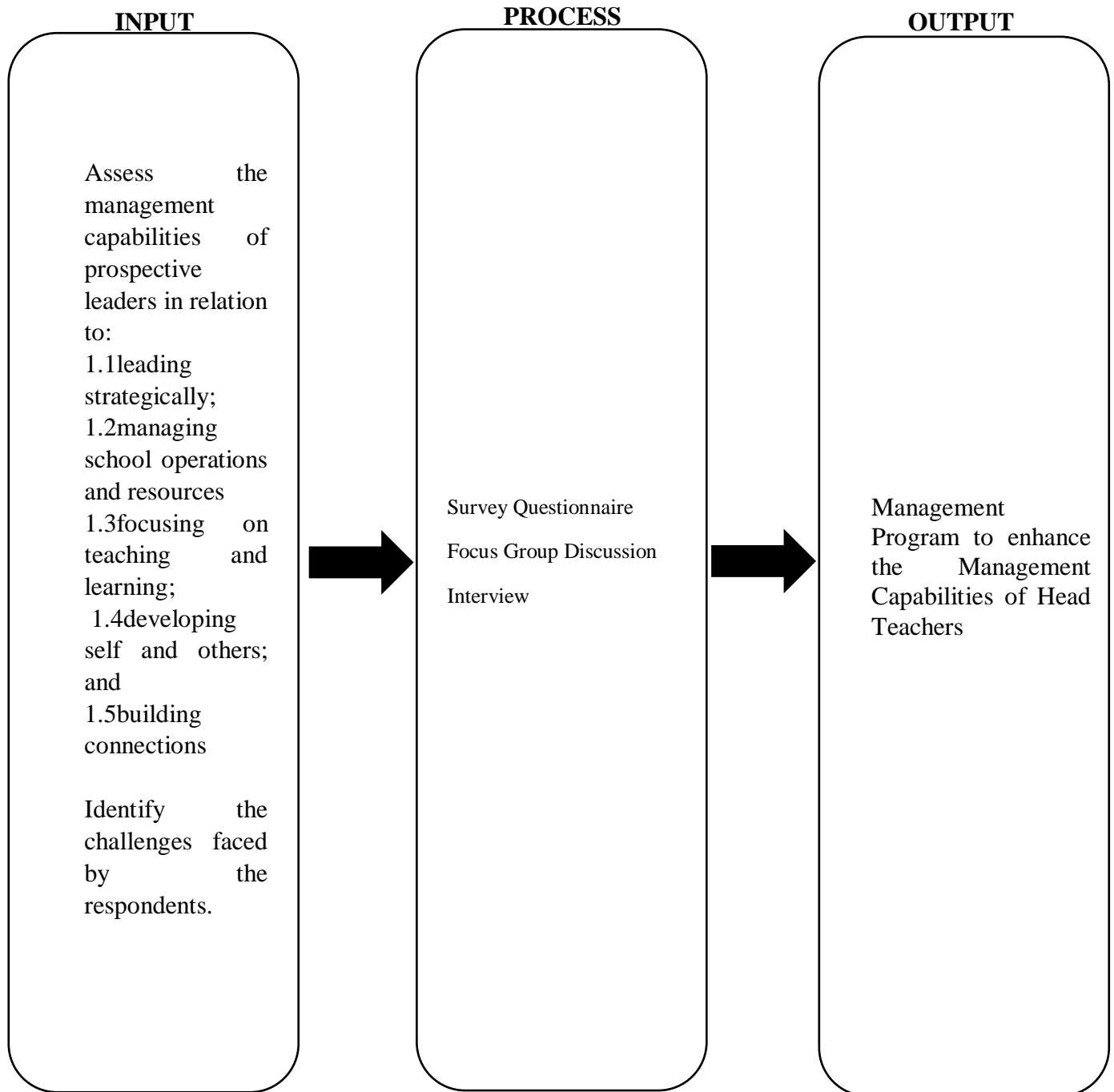
This approach is advantageous since it recognizes that anyone may become a leader and is skills-based. To acquire the required abilities, people merely need to locate pertinent resources and put in a lot of effort. This is encouraging news for individuals aspiring to become more effective leaders, even if they do not possess the characteristics proposed by other quality-based theories. A skills-based leadership theory also gives organizations a competency-based toolset to help them find, develop, and educate new leaders by evaluating each candidate's talents in the most important areas. The goal of this study is to examine the managing skills of potential school leaders, hence the notion of managerial

skills is pertinent. This study will apply the aforementioned notion to aspiring leaders who need a set of skills, knowledge, and abilities that can be learned and developed.

The concepts on total quality management theory and skill-based theory of leadership form part of the conceptualized theoretical framework. Applying the mentioned theories to this study, TQM provides a foundation for assessing the extent to which school heads demonstrate the leadership and management capabilities necessary to drive quality improvement in schools while skill based leadership theory applying this theory helps evaluate the specific skills and competencies school heads need to lead their schools effectively. Meanwhile, the application of these theories is substantial in this study because of the need to make the management program which should be considered useful guide for obtaining the development of leadership and managerial skills of the prospective leaders in leading and managing of the school.



Conceptual Framework



METHODOLOGY

Research Design

The study utilized a descriptive quantitative research design to determine the management capabilities of head teachers in secondary schools within the Division of Batangas.

Research Design

The study utilized a researcher-made questionnaire as the primary data gathering instrument, complemented by interviews and focus group discussions. The research utilized descriptive design to provide a comprehensive understanding of the current state of management capabilities among head teachers, which can be beneficial to future research, policy and practice.

Part I dealt with the respondents' assessment of their management capabilities. Followed by a questionnaire, which determined the challenges met by the respondents.

Construction. The instrument was developed based on the study's objectives, interviews, and relevant literature related to the management capabilities and skills of head teachers. The first draft of the questionnaire was presented to the adviser for feedback, which was then incorporated into the second draft. After several refinements, the questionnaire items were approved by the adviser. Multiple copies of the questionnaire were then prepared for validation by the panel members.

Validation. The researcher was advised to present the draft questionnaire to experts in the field for validation. A pilot test was also conducted in the Division of Lipa City to assess the reliability and acceptability of the questionnaire. This pilot test helped identify any potential issues that might arise during the actual distribution of the questionnaire. The reliability of the instrument was tested using the Cronbach Alpha Test, which yielded a result of 0.937, indicating a very high reliability coefficient. With the instrument validated, the adviser approved the final version for distribution to the respondents

Administration. The researcher sought permission to conduct the study by submitting a formal letter to the Schools Division Office of Batangas Province. Once permission was granted, the researcher personally approached district supervisors and school principals to request approval for administering the questionnaire. The survey was then distributed online via Google Forms to selected head teachers from the Division of Batangas Province. In compliance with the Data Privacy Act of 2012, the researcher informed the respondents that their information would be kept confidential.

Scoring of Responses. The questionnaire items were graded on a 4-point scale, with 1 representing the lowest score and 4 representing the highest. The following scale was used to assess the management capabilities and challenges encountered by the respondents

Interview. Informal interviews with head teachers were conducted to validate and enrich the responses from the questionnaires. These interviews took place after the retrieval of the completed questionnaires.

Focus Group Discussion. To gather additional insights, a focus group discussion was conducted with head teachers of public secondary schools. Focus group discussion agenda served as a guide for discussion with the selected six (6) head teachers, focusing on their perceptions regarding the development of a management program for enhancing management capabilities.

Data Gathering Procedures

To collect data, a formal request letter was written and addressed to the Schools Division Superintendent, seeking permission to conduct the study in various schools within the Division of Batangas Province. The letter was personally delivered to provide further clarification regarding the purpose of the study. Upon receiving approval from the Schools Division Superintendent, arrangements were made with the district supervisor of the concerned district for the distribution of the questionnaire. Once the respondents had completed the questionnaires, the researcher promptly retrieved the forms. The responses were then tallied, tabulated for statistical analysis, and interpreted based on the items outlined in the questionnaire. The researcher also conducted the informal interview and focus group discussion to gathered qualitative support and for the confirmation of the quantitative data.

Study Limitations and Ethical Considerations

The study was limited to head teachers only and focused on the aforementioned research variables, as well as the responses of the participants to the prepared and administered questionnaire. Participants were fully informed of what will be asked of them, how the data will be used, and what are the consequences there could be. They were provided with clear, active, signed consent to participate in the research, which included an understanding of their rights to access their information and the option to withdraw at any time. They were also informed that their individual questionnaire responses would remain private and would solely be used for research purposes. All of their information was kept confidential throughout the entire research process. All of their information were kept confidential throughout the entire research process.

RESULTS AND DISCUSSION

SOP 1. Assess the management capabilities of prospective leaders in relation to leading strategically, managing school operations and resources, focusing on teaching and learning, developing self and others; and building connections

1.1 Leading Strategically. The head teachers were capable to a very great extent in providing a clear and motivational mission that is anchored to DepEd mission and vision to achieve its goal. As a whole, the head teachers assessed their ability to lead strategically as being highly capable, rating their management skills in this area to a very great extent. This confirms Padmadisastra (2015)statement that strategic leaders should comprehensively understand their environment, including the latest technological developments and how they impact the company.

Table 1
Management Capabilities in terms of Leading Strategically

ITEMS	WM	VI
1. provides a clear and motivational mission that is anchored to DepEd mission and vision to achieve its goal	3.81	VGE

2. promotes a positive learning climate by communicating goals, establishing expectations and conducive learning environment	3.73	VGE
3. focuses on the positive climate which is believed to transform into an institutional success	3.69	VGE
4. implements policies that sustain school improvement	3.66	VGE
5. sustains a learning environment that motivates support	3.66	VGE
6. facilitates productive collaboration	3.64	VGE
7. enforces learners' discipline policies that are developed collaboratively with stakeholders	3.63	VGE
8. motivates the school community towards high educational standards	3.62	VGE
9. utilizes proactive and strategic thinking in the best interests of learners and the whole school community	3.57	VGE
10. implements programs that are consistent with the school's strategic vision	3.57	VGE
11. introduces new policies to enable teacher to perform their task with competence	3.56	VGE
12. conducts monitoring and evaluation mechanism as part of the decision- making process of the schools	3.55	VGE
13. establishes optimum partnership among stakeholders	3.48	ME
Composite Mean	3.63	VGE

1.2 Managing School Operations and Resources. Based on the assessment of the respondents, managing resources in accordance with the DepEd policies was revealed to a very great extent. In general, the respondents rated their management capabilities in terms of managing school operations and resources as being highly capable, to a very great extent. The management capability of school leaders includes effectively managing school operations and resources. This involves maintaining efficiency, effectiveness, and justice in carrying out duties to maximize organizational health (Beckers 2021).

Table 2
Management Capabilities in terms of Managing School Operations and Resources

ITEMS	WM	VI
1. manages resources in accordance with the DepEd policies	3.74	VGE
2. monitors those facilities and resources are always accessible, sufficient and in good working condition	3.59	VGE
3. creates an environment that supports continuous improvement leading to the achievement of the institution's goals	3.57	VGE
4. develops a school budget and ensures that the fund allocation and procurement are aligned with the SIP/AIP	3.55	VGE
5. utilizes school budget to ensure a conducive learning environment	3.55	VGE
6. provides inclusive learning environment	3.54	VGE
7. monitors the implementation of the resource allocation process within the school	3.52	VGE
8. employs technology to improve the efficiency of operations	3.51	VGE
9. evaluates the performance of the school in terms of its resource plan	3.50	VGE

10. oversees the recruitment process within the school	3.50	VGE
11. monitors the school expenditure	3.47	ME
Composite Mean	3.55	VGE

1.3 Focusing on Teaching and Learning. In the assessments of head teachers, they expressed capable to a very great extent in facilitating instructional supervision. As a whole, the composite mean revealed that the head teachers as being highly capable, with a very great extent in focusing on teaching and learning. As mentioned (Qiu, 2022) by leading strategically promotes a positive learning climate by effectively communicating goals, setting clear expectations, and fostering a conducive learning environment.

Table 3

Management Capabilities in terms of Focusing on Teaching and Learning

ITEMS	WM	VI
1. facilitates instructional supervision	3.87	VGE
2. ensures the effective delivery of high-quality teaching	3.82	VGE
3. practices equitable distribution of teaching loads	3.78	VGE
4. maintains an environment conducive for effective teaching-learning process	3.76	VGE
5. collaborates with fellow head teachers in sustaining teaching standards and pedagogies within and across learning areas	3.75	VGE
6. guides teachers in facilitating learning that is articulated in a coherent educational framework	3.71	VGE
7. provides appropriate teaching-learning resources to bring about improvement in the students' academic performance	3.70	VGE
8. develops measures to efficiently track students' academic progress	3.68	VGE
9. demonstrates best practices in teaching and learning	3.67	VGE
10. establishes assessment strategies in the teaching learning process	3.66	VGE
11. implements various classroom management strategies	3.60	VGE
12. utilizes validated feedbacks obtained from learners, parents and other stakeholders to help teachers improve their performance	3.57	VGE
13. supports a cultural shift employing more collaboration during the teaching learning process	3.55	VGE
Composite Mean	3.70	VGE

1.4 Developing Self and Others. The respondents rated themselves capable to a very great extent in fostering positive working relationships across the school and supportive environment for staff to realize full potential. As a whole, the composite mean revealed that the head teachers as highly capable, with a very great extent in developing self and others. As found out by the study of Kalane & Rambuda (2022)

they need to be provided with training and support in order to assist teachers and students in enhancing the quality of education. It is also recommended that they share classroom difficulties with parents to allow for parental support. Effective departmental management is considered essential through collaborative partnerships between schools and parents.

Table 4
Management Capabilities in terms of Developing Self and Others

ITEMS	WM	VI
1. fosters positive working relationships across the school and supportive environment for staff to realize full potential	3.82	VGE
2. promotes the personal and professional well-being and work-life balance of faculty and staff	3.78	VGE
3. cultivates leadership among teachers and staff for them to embrace their role in realizing the school vision and mission	3.77	VGE
4. creates opportunities for teachers to collaboratively share skills and experience	3.76	VGE
5. maintains open communication in order to develop staff members	3.74	VGE
6. initiates relationship building	3.72	VGE
7. conducts a mentoring program for new teaching staff	3.70	VGE
8. recognizes the significance of interpersonal relationship	3.69	VGE
9. creates a supportive environment that provides feedback	3.68	VGE
10.promotes a growth mindset amongst others by creating a low risk/high challenge environment for continues improvement	3.64	VGE
11.leads and supports the creation of a culture that sets high expectations for all establishes employees	3.61	VGE
12.establishes a reward mechanism to recognize teachers' Competence	3.57	VGE
Composite Mean	3.71	VGE

1.5 Building Connections. In the assessments of head teachers, they expressed capable to a very great extent in initiating activities that build meaningful relationships with all stakeholders. As a whole, the composite mean revealed that the head teachers as highly capable in building connections, with a very great extent in this area. This support the research findings by Gonzales et al. (2022) which found out in their study of school leadership preparation programs, that the strengthening of school and community partnerships, especially with parents, was a key factor in alerting school leaders and classroom practitioners to the issues faced by their pupils in the home learning environment.

Table 5
Management Capabilities in terms of Building Connections

ITEMS	WM	VI
1. initiates activities that build meaningful relationships with all stakeholders	3.65	VGE
2. communicates regularly the school accomplishments to stakeholders	3.63	VGE

3. establishes a platform that enables teachers to share resources	3.61	VGE
4. sustains optimum linkages that facilitates professional growth	3.59	VGE
5. strengthens referral mechanism for the welfare of the learners	3.53	VGE
6. creates a mutually beneficial system to achieve educational goals	3.53	VGE
7. fosters collaborative relationships with relevant educational institutions	3.51	VGE
8. initiates an open-door culture and shared commitment among stakeholders	3.43	ME
9. sustains strong connection with the school alumni	3.43	ME
10. coordinates with the prestigious universities for their extension program	3.20	ME
Composite Mean	3.51	VGE

SOP 2. Identify the challenges faced by the respondents.

The head teachers identified several significant challenges related to their leadership and management capabilities. Based on the assessment of the respondents, they strongly agreed that preserving high levels of discipline was the most prominent challenge they met. In general, the composite revealed strong agreement to the challenges met by the respondents. Ontong (2022) discovered that the school climate was affected by the surrounding school culture. and school heads' transformational leadership and emotional intelligence. Implications of the findings include the need for principals and or school heads to review their approaches, programs, and projects that are directed towards the development of the desired learning environment that promotes and supports academic growth of both teachers and students. By doing these things, challenges may be prevented.

Challenges Met by Respondents

Items	WM	VI
1. preserves high levels of discipline	3.77	SA
2. improves and maintains high academic performance	3.73	SA
3. demonstrates work-life balance	3.72	SA
4. manifest heightened responsibility	3.71	SA
5. sustains a conducive physical learning environment	3.71	SA
6. facilitates evaluation of faculty performance	3.70	SA
7. builds strong partnerships with other stakeholders	3.67	SA
8. resolves existing systemic inequities	3.66	SA
9. monitors learning continuity with limited resources	3.65	SA
10. keeps abreast with recent technological advancement	3.64	SA
11. manages people and resources	3.62	SA
12. promotes collegiality among staff members	3.56	SA
Composite Mean	3.68	SA

SUMMARY

The study aimed to assess the management capabilities of head teachers in secondary schools within the Division of Batangas, with the ultimate goal of proposing a management program to enhance their effectiveness. Utilizing a descriptive research design, data were gathered through a researcher-made questionnaire, supported by focus group discussions (FGD) and interviews. A total of 152 head teachers from public secondary schools in Batangas Province participated in the study. Data were analyzed using statistical tools such as the weighted mean and Pearson r correlation.

Results revealed that head teachers rated themselves as highly capable in all areas assessed. They demonstrated strong competence in leading strategically by aligning their school goals with the Department of Education's mission and vision. They also showed proficiency in managing school operations and resources, adhering to DepEd policies efficiently. In terms of focusing on teaching and learning, head teachers reported being very capable, particularly in conducting instructional supervision. Similarly, they rated themselves highly in developing self and others by fostering positive working relationships and supporting staff development. Additionally, they excelled in building connections, effectively engaging with stakeholders such as parents and community members to support school initiatives.

Despite their strengths, the study identified challenges, particularly in maintaining high levels of discipline while balancing leadership and management responsibilities. In relation to this, in the research conducted by Castañeros et.al (2023), it was found that newly appointed school principals encounter challenges such as supervising staff, balancing work and personal life, managing the school, and handling the previous leader's legacy. The recently promoted school principals addressed leadership obstacles by being open-minded, seeking support, relying on themselves, and managing their time effectively. To address this, a comprehensive Management Program was proposed, aimed at enhancing management skills through structured objectives, strategies, and measurable outcomes tailored to the evolving needs of school leaders.

CONCLUSIONS

The findings of the study reveal that head teachers in the Division of Batangas Province are highly skilled and proficient in managing school operations, resources, and personnel. They also excel in creating and sustaining a productive learning environment. Despite these strengths, the respondents experience challenges in balancing their management responsibilities, particularly in maintaining high levels of discipline among students and staff. To address these challenges and further enhance their competencies, a comprehensive management program was developed. This program includes clearly defined projects, specific objectives, strategic approaches, and measurable outcomes aimed at strengthening the leadership and management capabilities of head teachers.

RECOMMENDATIONS

Based from the findings and conclusions of the study, the following recommendations are suggested:

Based on the findings and conclusions of the study, several recommendations are presented. The proposed management program may be reviewed, refined if necessary, and

adopted to support the continuous development of effective leadership competencies and management capabilities among head teachers, ultimately ensuring the delivery of high-quality public service. It is also recommended that head teachers maintain and further enhance their skills through ongoing professional development. This may include participating in workshops, seminars, and specialized training sessions that focus on advanced leadership and school management strategies. Lastly, future researchers are encouraged to conduct studies related to or expanding upon this current research. They may use the findings, methodology, and literature presented in this study as valuable reference material for their investigations.

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