**CHAPTER 1**

**INTRODUCTION**

This chapter introduces the central argument and thesis statement, explores their significance and impact. It identifies the research gaps that the study aims to address, and clearly outlines the objectives of the research.

Despite technological advancements, education often lags behind, even with the introduction of gamification. Traditional methods of distribution of learning materials to students remain prevalent. However, by integrating a Learning Management System (LMS), many issues associated with the current approach to distributing educational content can be effectively addressed.

A Web-Based Learning Management System (LMS) can help facilitate a more organized learning experience. It can save students time by bridging access to information on specific topics within their curriculum. Additionally, it can also help reduce the workload for teachers by allowing them to directly utilize these materials for their teaching since these materials already follow the school’s curriculum.

The study of its practicality will help with the implementation of such system. The implementation will benefit the education system as a whole. It will positively impact its population, be it learners or teachers. This study will also help the people researching about this topic in the future as it helps serve as a foundation for their research.

However, the current gaps in this area are in technology utilizing the Department of Education (DepEd)’s curriculum. Additionally, it also has a gap in knowledge on its importance and need inside the Academy of St. Joseph (ASJ). Addressing these gaps is crucial for enhancing the educational experience.

The aim of this study is to collect data and assess the practicality of the usage of the Learning Management System inside the Academy of St. Joseph. The findings will provide valuable insights for future researchers considering the development of such a system for the institution. This would then help future researchers with the decision to create such a system for the Academy of St. Joseph.

**A. RESEARCH PARADIGM**

INDEPENDENT VARIABLE DEPENDENT VARIABLE

1. Students in ASJ
2. Learning Management System
3. Practicality of Learning Management System

* Ease of Use / Efficiency
* Accessibility
* Scalability

**B. CONCEPTUAL FRAMEWORK**

The study's foundation is the IV - DV model. Two frames make up the research paradigm. The relationship between the study's independent and dependent variables is shown in the figure.

The inputs for the Independent Variables are the respondents' profiles which is described in terms of their age, sex and their grade level, as well as the Learning Management System. The input for the Dependent Variables, is the practicality of the usage on Learning Management Systems (LMS), which can be described by its ease of use and scalability.

**C. STATEMENT OF THE PROBLEM**

The objective of this study is to assess the practicality on the Integration of a Learning Management System on the Academy of St. Joseph. As educational institutions increasingly adopt LMS platforms and it blooming with potential, it is essential to evaluate whether such a system is suitable and effective for ASJ students.

Specifically, this study seeks to answer the following questions:

1. Demographic Profile:
   1. Age
   2. Sex
   3. Grade Level
2. How would the practicality of LMS affect its usage?
3. How practical is a Learning Management System on the Academy of St. Joseph?

**D. SIGNIFICANCE OF THE STUDY**

The primary objective of this study is to determine the practicality of using a Learning Management System (LMS) on the Academy of St. Joseph in their academics. By examining how the integration of a Learning Management System (LMS) would benefit the school, this research addresses the evolving landscape of education in the digital age. In addition, this study seeks to develop a tool that can assist students and enhance the quality of education. Moreover, this study contributes to a better tomorrow where all will have access to technology driven education.

**The students,** will benefit from having easier access to course materials and other resources on their curriculum online at any time, allowing them to study on their own schedule or go back to old lessons.

**The Schools,** Integration of a Learning Management System (LMS) in local schools offers students easy accessibility to information of its curriculum.

**The Teachers,** a Learning Management System (LMS) can help present information in more engaging and understandable ways. These materials, like textbooks, workbooks, visual aids, and digital resources, support the lesson plans and make abstract concepts more concrete

**The Future Researchers,** can use this study as a basis and reference for their future studies. This study can serve as a foundation for future research.

**E. SCOPE AND DELIMINATION**

This study assesses the usefulness of utilizing a Learning Management System (LMS) in improving the learning and development time of students at the Academy of St. Joseph. Additionally, the research examines the practicality and efficiency of the LMS among the participants involved in the study.

The subjects of this study consist of students of the Academy of St. Joseph enrolled the academic year 2024-2025. The Academy of St. Joseph has a total of 752 total enrollees in the academic year 2024-2025 and one hundred twenty (120) will be selected. The respondents are limited to 20 students from each grade level; twenty (20) from the 7th grade, twenty (20) from the 8th grade, twenty (20) from the 9th grade, twenty (20) from the 10th grade, and twenty (20) each also from the Senior High School Department, the 11th and 12th grade.

**F. DEFINITION OF TERMS**

**Curriculum** - is the formalized collection of teaching strategies, and learning objctives that academic institutions organize to direct teaching and learning.

**Gamification** - refers to the use of game-design components and principles to improve learning outcomes, motivation, and engagement in non-gaming situations, such as education.

**Implementation** - is the process of implementing a system or plan. This entails setting up the program, educating users, and incorporating the LMS into current teaching methods.

**Learning Management System (LMS)** - is a web-based platform or software program created to organize, and provide learning experiences and instructional content.

**Practicality** - is used to describe how practical and efficient a method or concept is in practical applications. Regarding the LMS study, it speaks to the LMS's applicability and utility for the Academy of St. Joseph's instructors and students.

**Web-Based Learning Management System (LMS)** - refers to an online-based learning management system (LMS). It enables users to access educational resources and materials from any location with an internet connection.

**CHAPTER II**

**REVIEW OF RELATED LITERATURE**

AI chatbots shook the world not long ago with their potential to revolutionize education systems in myriad ways. This comes in agreement with a study by SpringerOpen in 2023, which also mentioned that it can provide immediate support by answering questions, offering explanations, and providing additional resources. On top of this, AI chatbots can also act as virtual teaching assistants, supporting educators through various means.

In the same study by SprigerOpen, AI-powered chatbots are designed to mimic human conversation using text or voice interaction, conversationally providing information. Chatbots' history dates back to the 1960s, and over the decades, chatbots have evolved significantly, driven by advancements in technology and the growing demand for automated communication systems. Created by Joseph Weizenbaum at MIT in 1966, ELIZA was one of the earliest chatbot programs (Weizenbaum, 1966). ELIZA could mimic human-like responses by reflecting user inputs as questions. Another early example of a chatbot was PARRY, implemented in 1972 by psychiatrist Kenneth Colby at Stanford University (Colby, 1981). PARRY was a chatbot designed to simulate a paranoid patient with schizophrenia.

And more recently, more sophisticated and capable chatbots have amazed the world with their abilities. Among them, ChatGPT is one of the most profound AI-powered chatbots. ChatGPT is an artificial intelligence chatbot developed by OpenAI. It was first announced in November 2022 and is available to the general public. ChatGPT is sizable language model chatbots that undergo training on extensive datasets of text and code. They possess the ability to generate text, create diverse creative content, and provide informative answers to questions, although their accuracy may not always be perfect. With this, ChatGPT is trained on a dataset that includes text from books and articles, meaning that it is more likely to be accurate in its responses to factual questions (AlZubi et al., 2022; Rahaman et al., 2023; Rudolph et al., 2023).

Since its breakthrough in November 2022, ChatGPT has sparked significant conversations among educators. Some issued worries regarding its use in the classroom, arguing that students may exploit it to cheat on tests and assignments or even that it could undermine teachers’ position as it can provide detailed and helpful feedback.

The revolutionary approach of transformers has been considered the most recent breakthrough in AI. Indeed, Chance (2022) describes transformers as deep learning models that allow expressing inputs in natural language to generate outputs like translations, text summaries, grammar and writing style correction, etc. Bellapu (2021) highlights the singularity of transformers as the amalgamation of convolutional neural networks and recurrent neural networks, with advantages such as better accuracy, faster processing, working with any sequential data, and forecasting.

Since its 2022 launch, AI chatbots like ChatGPT have sparked concerns in education. While risks about students’ independent thinking and language expression skills deteriorating exist, banning the tool from academic institutions should not be the answer (Dwivedi et al., 2023). Teachers and professors are uneasy about potential academic fraud with AI-driven chatbots such as ChatGPT (Meckler and Verma, 2022). The proficiency of ChatGPT spans from assisting in scholarly investigations to finalizing literary compositions for learners (Roose, 2022; Shankland, 2022). However, students may exploit technologies like ChatGPT to shortcut essay completion, endangering the growth of essential competencies (Shrivastava, 2022). Coursera CEO Jeff Maggioncalda believes that ChatGPT’s existence would swiftly change any education using written assessment (Alrawi, 2023).

AI offers the hope of increasing personalization in education, but risks of learning becoming less social accompany it. There is much that can be learned from previous introductions of new technologies in school to help maximize the likelihood that AI can help students flourish and learn powerful knowledge. Looking further ahead, AI has the potential to be transformative in education, and it may be that such benefits will be first seen by students with special educational needs (Reiss 2021). The surveys of Altarawneh (2023) suggest that ChatGPT helps students do better in school. Students' grades going up indicates that AI technology is helping them understand and use what they are learning. New technologies allow students to learn at their own pace by quickly sharing information and giving complete answers to many questions. Also, ChatGPT can help students who are far away or have trouble with logistics. There were more chances to learn, even for students who lived in rural areas or didn't have teachers. Because people are an essential part of learning, it was suggested that artificial intelligence tools like ChatGPT be used along with more traditional ways of teaching.

From a study conducted by Thi Thuy An Ngo in 2023, which investigated how students perceive using ChatGPT for learning, including benefits, barriers, and potential solutions. Students stated that using this application benefits them by providing information in various areas, personalized tutoring and feedback, and illuminating ideas in writing. However, the inability to assess the quality and reliability of sources, to cite sources accurately, to replace words, and to use idioms accurately are issues that student faced in using ChatGPT. Additionally, according to El-Seoud and Ayman in 2023, Chatbots can transform education by providing instant assistance to students, answering their questions, and improving their learning experience. ChatGPT may become personal tutors for students. Also, these chatbots deliver automatic responses without resolutions, can affect students' critical thinking, and may face incorporating any copyrighted content into interactions with ChatGPT that can potentially result in infringement upon the rights held by the copyright holder.

Montenegro-Rueda et al. (2023) stated that the use of ChatGPT in education has generated considerable interest due to its potential to enrich the learning experiences of students and that the system has the ability to address individual student needs, offer immediate feedback, and facilitate understanding for complex concepts. In addition to that, this tool promotes a student's active participation and cognitive advancement by adapting to their learning pace and offering continuous support in their knowledge acquisition process. Receiving grammatical corrections, suggestions for improvement, and detailed feedback on their writing allows them to improve their written communication and achieve greater effectiveness in their written expression. Ali Zeb et al. (2024) conducted research that examined the opportunities and challenges of using ChatGPT in higher education and discussed the potential risks and plunders of these tools. They concluded that while using AI tools, ChatGPT in higher education presents both opportunities and challenges.

A study by Majid and Lakshmi (2022) says that AI is one of the disruptive technologies that are being used in customizing the experiences of various learning groups, instructors, and tutors as it is considered the most in-demand technology in the education system. It is expected that AI will enhance the education system worldwide. However, educational institutions face challenges like high dropout rates, unavailability of smart content, lack of customized content as per the textbooks, lack of personalized learning systems, rigid examination patterns, and more, but AI brings hope in overcoming these challenges. It helps create personalized learning experiences, develop innovative content, expand the range of education, and facilitate the management and administration of education by integrating information and disseminating data per the target group's needs. Results from Nam and Bai (2023) showed that writers expressed various concerns and opinions about the potential conflicts and crises caused by ChatGPT in three areas: (a) academic research and publication, (b) teaching and learning, and (c) human resource management.

Moreover, according to Sidoti and Gottfried (2023), about 1 in 5 U.S. teens who have heard of ChatGPT have used it for schoolwork. 19% of teens have used this tool for school work in ages 13 – 17. Teens in higher grade levels are particularly likely to have used the chatbot to help them. About one-quarter of 11th and 12th graders have done this. This share drops to 17% among 9th and 10th graders and 12% among 7th and eighth graders.

Whereas from an article from New York Times in 2022, it shows a comparison of Google and ChatGPT. It states that unlike Google, ChatGPT doesn't crawl the web for information on current events, and its knowledge is restricted to things it learned before 2021, making some of its answers feel stale. Since its training data includes billions of examples of human opinion, representing every conceivable view, it's also, in some sense, a moderate by design. Without specific prompting, for example, it's hard to coax a strong opinion out of ChatGPT about charged political debates; usually, you'll get an evenhanded summary of each side's beliefs. There are also plenty of things ChatGPT won't do, as a matter of principle. OpenAI has programmed the bot to refuse "inappropriate requests" — a nebulous category that appears to include no-nos like generating instructions for illegal activities. But users have found ways around these guardrails, including rephrasing a request for illicit instructions as a hypothetical thought experiment, asking it to write a scene from a play, or instructing the bot to turn off its safety features.

Likewise, the use of ChatGPT in education has generated considerable interest due to its potential to enrich students' learning experiences. In a study conducted by MDPI, by providing quick and personalized responses, this system has the ability to address individual student needs, offer immediate feedback, and facilitate the understanding of complex concepts. In this way, it becomes a promising tool that promotes a student's active participation and cognitive advancement by adapting to their learning pace and offering continuous support in their knowledge acquisition process.

Under the same study, ChatGPT has proven to be a valuable tool to promote students' writing skills development. By interacting with the system, students can receive grammatical corrections, suggestions for improvement, and detailed feedback on their writing, allowing them to improve their written communication and achieve greater effectiveness in their written expression. Thus, this application presents itself as an invaluable assistance tool for scientific writing; however, it is essential to understand that it should not be considered as a complete solution for scientific content creation. Writers must exercise their knowledge and experience to validate and complement the information provided by the tool. However, it also facilitates group discussions and promotes collaborative student participation in projects and assignments. This fosters a sense of community among learners by allowing interaction and an exchange of ideas.

In the evolving landscape of online education, AI is proving to be a game-changer, with tools such as ChatGPT leading a radical transformation that ranges from assessment design to language learning (Science Direct, 2024). Many e-learning platforms, including Coursera, detect common assignment errors using AI. Using ChatGPT to produce material, instructors can develop unique assessments and learning content, while businesses (e.g., Course Hero) could see their paid homework assistance models disrupted by the AI's cost-effective versatility. AI chatbots can assist students in honing their understanding of the text by posing personalized queries and offering comments on their responses. It can also enhance a person's critical and analytical abilities. Another crucial aspect of ChatGPT is helping learners explore languages, enabling students to modify sentences, practice correct pronunciation and terminologies, grasp sentence structure, and give real-time interpretations. Perhaps the most significant and controversial application of ChatGPT is to produce written content in response to exam or essay questions. It enables educators and students to compose articles on any subject in response to input prompts to this software. Additionally, ChatGPT can offer suggestions on enhancing grammatical structures, brevity, or clarity of multiple drafts of the same essay, enabling users to get through barriers to writing and provide fresh viewpoints on their selected subject. Also, ChatGPT uses AI and Natural Language Processing (NLP) to respond to user input queries and generate human-like answers. It has drawn international interest because of its efficacy in generating cogent, orderly, and instructive answers.

However, in the same article stated that despite its popularity, ChatGPT has created fresh difficulties and risks for education. There are concerns regarding the potential misuse of AI-generated content (AIGC), as it could be employed to generate academic tests and assignments for students and provide tailored responses to coursework questions and assessments. As a result, several institutions have forbidden students from using ChatGPT – including a ban within an entire country. Researchers have examined the effects of ChatGPT on learning and found that teachers were worried about using it in the classroom. They voiced concerns that since ChatGPT can quickly produce appropriate content, learners may utilize it to outsource their assignments. Further, several issues have been identified, including copied content, wrong replies, and improper referencing (or no referencing). Hence, it is crucial to carefully examine the impact of ChatGPT-assisted education to leverage its benefits while fully mitigating any drawbacks. This is not a new phenomenon, as the launch of search engines led to similar concerns. However, with a search engine, a content user can cross-reference specific URLs that have been used to achieve a particular outcome. In ChatGPT, no specific references or URLs are included in the generated text.

ChatGPT has also had a positive impact on students’ mental health and well-being. Per Modern Philomacy in 2023, the pandemic has had a significant impact on students, with many experiencing increased stress, anxiety, and isolation. ChatGPT provides students with a friendly and supportive environment in which they can ask questions, express their concerns, and receive guidance and advice. This can help to reduce feelings of isolation and improve students’ overall well-being. However, it is important to note that ChatGPT is not a replacement for human interaction and should not be used as such. While ChatGPT can provide students with information and resources, it cannot replace the social and emotional benefits of human interaction. Students still need opportunities to interact with their peers and teachers, both online and in-person, to develop social and emotional skills that are essential for their overall development.

Huzaif of The Companion (2023) stated that the use of ChatGPT by students has become a matter of concern for teachers because the students are using it to write their homework and complete essays for them, endangering students’ willingness to develop skills like writing and researching. This tool allows students to complete homework and assignments without much effort and raises concerns of cheating, academic disintegrity, and, above all, the loss of learning ability. Educators fear that it will make students lazy thinkers, and students will be unable to develop life-long skills like critical thinking, researching, or writing. Moreover, if students use technology to produce text that is not original, it may also be considered plagiarism, which is a serious offence in academic settings. This can have negative consequences for both the student and the institution, as it undermines the integrity of the educational system and the hard work of other students. Due to concerns about negative impacts on student learning, and concerns regarding the safety and accuracy of content, access to ChatGPT is restricted on New York City Public Schools’ networks and devices. The education department blocked access to the program, citing “negative impacts on student learning, and concerns regarding the safety and accuracy of content”.The chatbot’s ability to churn out pitch-perfect essay responses to prompts spanning a wide range of subjects has sparked fears among some schools and educators that their writing assignments could soon become obsolete — and that the program could encourage cheating and plagiarism.

As AI technologies become increasingly sophisticated, they offer many opportunities to enhance personalized learning experiences, optimize administrative tasks, and revolutionize educational outcomes. From adaptive learning platforms to intelligent tutoring systems, AI has the potential to cater to diverse learning styles, adapt content delivery in real time, and provide instant feedback, thereby fostering a more efficient and effective learning environment.

Advancements of AI such as ChatGPT have indeed made significant impacts on education worldwide, including in the the municipality of Claveria, Cagayan, as it holds immense potential to transform teaching and learning experiences. As a result, students at the Academy of St. Joseph are utilizing ChatGPT for their education and studies as a result of its growing popularity. They are aware of the application's benefits and are using it for their benefits, but at the same time, they are not considering its ethical considerations and applications.

**CHAPTER III**

**RESEARCH METHODOLOGY**

The purpose of this chapter is to present and explain the different research methods that will be implemented in this study. It targets to discuss the research design, research locale, population and sampling procedure, research instrument, data collection procedure, and data analysis.

**A. RESEARCH DESIGN**

Given that the study revolves around the applications and ethical considerations of AI sites, most especially ChatGPT among high school students at the Academy of St. Joseph, this conducted phenomenological research design, a type of qualitative research wherein it is based on the personal perspectives, subjectivity and impact to personal experiences and interpretations in students’ academics.

**B. RESEARCH LOCALE**

The study was conducted in barangay Centro-1, Claveria, Cagayan at the Academy of St. Joseph school campus. The location was chosen to determine the effectiveness of the study ChatGPT users. In this setting, we can compile the distinguished respondents who are familiar or have used ChatGPT in the past.

**C. POPULATION AND SAMPLING PROCEDURE**

In conducting the research, the researchers used the purposive sampling technique so that they can accurately choose and approach eligible respondents best suited to answer their research questions. A total of 60 individuals, with 10 respondents per grade level, coming from grade levels 7, 8, 9, 10, 11 and 12. Moreover, the respondents were described using variables such as name, age, and grade level.

**D. RESEARCH INSTRUMENT**

This study used questionnaires to acquire all the essential data needed for the study. The set of questions was primarily focused on the perceptions on ChatGPT and its effects, as well as its ethical considerations and applications in education. The research instrument was intended to generate higher responses and more accurate data. Furthermore, this was easier for the researchers to code and analyze the data.

**E. DATA GATHERING PROCEDURE**

In order to achieve the research’s objectives for this study, data were collected. First, the questions were reviewed by a few professionals and teachers. Before starting with the interview, authorization was obtained from the school, likewise the respective sections and students at the Academy of St. Joseph Following approval, the researchers collected data by interviewing the target respondents using structured questionnaires. Moreover, the respondents were granted ample time to respond and all the data pertinent to the study were gathered personally.

**F. DATA ANALYSIS**

The researchers used content analysis in this study to analyze the data which were gathered from structured questionnaires. The analyzed data was interpreted and summarized through visual representation and tallied using a frequency distribution table.