

Acceptability of Artificial Intelligence Applications in Preparing English Lesson of Professional Teachers in Tuntungin-Putho Integrated National High School Los Banos Laguna

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Abstract: This study analyzed the acceptability of Artificial Intelligence (AI) applications in preparing and implementing activities/quizzes of English lessons at Tuntungin-Putho Integrated National High School in Los Baños, Laguna. The aim is to scrutinize if the demographic profile has a significant relationship to the Artificial Intelligence applications used in lesson preparation, implementation, and in quizzes/activities of professional teachers. The research investigated the relationship between the demographic profile of the teachers and the AI applications they use. All the findings contributed to understanding of the potential of AI integration in English teaching, providing insights and recommendations for educators, curriculum planners, and future research endeavors. The findings indicated that the majority of the selected professional teachers in Tuntungin-Putho Integrated National High School Los Baños Laguna were aged “40 to 49 years old,” and 33.3% of the sample size and the least frequency of respondents fall within the range between 22-29 years old and 50-59 years old. The AI applications used by the teacher in Tuntungin-Putho Integrated National High School in lesson preparation is Open AI (ChatGPT), Canva in lesson implementation, and Google form in activities/quizzes. Overall, the demographic profile has no significant relationship with the Artificial Intelligence applications used and therefore accepts the null.

Keywords: Artificial Intelligence, Professional Teachers, English Lesson.

1. Introduction

“Success in creating AI would be the biggest event in human history. Unfortunately, it might also be the last, unless we learn how to avoid the risks.”—Stephen Hawking

Teachers in the new normal setting have experienced a variety of challenges in terms of fulfilling the needs of the learners. Teachers are greatly challenged in terms of providing and administering the lessons, especially in teaching the English language. The demand for English language learning has led to the need of development of the teaching and learning tools. This development leads teachers to seek help to Artificial Intelligence (AI) that traditional teaching methods limits.

Artificial intelligence (AI) has been powerful to human lives in various ways. The swift advancement of AI technologies has important implications for learning and teaching. AI has been increasingly explored as a tool to enhance the efficiency and effectiveness of pedagogical processes. Specifically, it has potential to revolutionize traditional teaching practices. In fact, AI-supported instruction is expected to transform education, thus considerable investment has been made (Zawacki-Richter et al, 2019).

AI can generate dynamic and engaging content, incorporating interactive elements that stimulate student engagement and motivation. By exploring the acceptability of AI in preparing English lessons, this study aims to contribute to the growing body of knowledge on the effective integration of technology in education, especially in preparing lessons for the English subject.

The primary goal of this research is to evaluate the acceptability of Artificial Intelligence (AI) in developing English lesson for professional teachers. Through comprehensive analysis, the study aims to determine the effectiveness of AI-generated plans in enhancing language instruction, enabling personalized learning, and optimizing teacher workload.

2. Questionnaire

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Thank you for participating in our survey. This questionnaire aims to collect information about your demographic profile. Your responses will help us gain a better understanding of our target audience and ensure that our research meet the needs.

Please answer the following questions to the best of your knowledge and comfort level. All information provided will be kept confidential and used for research purposes only.

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I. Demographic Profile

Age: _____

II. The top three most frequently used Artificial intelligence application of professional teachers in Tuntungin-Putho Integrated National High School Los Baños Laguna

Direction: Put a check in a blank space before your top three most frequently used artificial intelligence application.

<input type="checkbox"/> PlanbookEdu	<input type="checkbox"/> Slides.go
<input type="checkbox"/> Common Curriculum	<input type="checkbox"/> Google Classroom
<input type="checkbox"/> OpenAi (ChatGpt)	<input type="checkbox"/> Google Form
<input type="checkbox"/> Teachers.io	<input type="checkbox"/> PrepAI
<input type="checkbox"/> PPT Speaker Coach	<input type="checkbox"/> Canva
<input type="checkbox"/> Slidesai.io	<input type="checkbox"/> Others: _____

III. Artificial Intelligence used by the professional teachers in Tuntungin-Putho Integrated National High School:

Direction: Put a check in the Artificial Intelligence application that you use for each area.

What is the Artificial Intelligence application you used in the preparation of your lesson?

- Open AI (Chat GPT)
- Canva
- Google Form

What is the Artificial Intelligence application you used in the implementation of your lesson?

- Open AI (Chat GPT)
- Canva
- Google Form

What is the Artificial Intelligence application you used in activities/quizzes?

- Open AI (Chat GPT)
- Canva
- Google Form

3. Research Methodology

A. Research Design

Descriptive research design is non-experimental. Its purpose is to describe individuals, events or conditions. Descriptive design can be purely descriptive and also can be descriptive comparative. The researcher does not manipulate any of the variables rather only describes the samples and/or the variables, Siedlecki, S. L. (2020).

In line with this, the researchers used descriptive design to assess the acceptability of Artificial Intelligence in preparing English lessons, specifically the Artificial Intelligence used by the target population such as PlanbookEdu, Common Curriculum, OpenAi, Tachers.Io, Canva, PPT Speaker Coach, Slidesai.Io, Slides.go, Google Classroom, Google Form, and PrepAi. The number of the research subject is 15 professional teachers out of 20 or 75% of the total population. All of the participants were from Tuntungin Integrated National Highschool Los Banos Laguna. The professional teachers were given validated questionnaire that were necessary in the data

gathering process.



Fig. 1.

The study was conducted in Tuntungin-Putho Integrated National High School. Tuntungin INHS is located at Apitong Street, Brgy. Tuntungin-Putho, Los Baños, Laguna, Philippines. Fifteen (15) professional teachers were the respondents of this research paper.

B. Population of the Study and Sampling Technique

The researchers used purposive sampling technique in selecting the participants of the study. Fifteen (15) teachers from Tuntungin-Putho Integrated National High School were the target population and the respondents chosen were professional teachers who use the English language in making their lesson. In view of this fact; the researchers were able to identify the kind of Artificial Intelligence application the professional teachers used in lesson preparation, implementation and activities/quizzes.

C. Research Instruments

In this research, the data collection method tool used to get the appropriate data needed was the research questionnaire. The researchers divided the chosen instrument into three parts: Part I is consisted of questions in regards with the demographic profile of the professional teachers; The part II consisted of questions in regards with the top three most frequently used Artificial intelligence application by the professional teachers; And part III is consisted of questions in regards with the Artificial Intelligence used by the professional teachers in terms of preparing the lesson, during the implementation of the lesson and assessments/ quizzes. The said research instrument undergone validation by another professional teacher to ensure the quality of survey questionnaire.

D. Data Gathering Procedure

Researchers conducted initial research, secure an approved letter from the office of the program chair of the Department of Education in Laguna University, and proceeded with the study. The study was conducted during the academic year 2022-2023 at Tuntungin-Putho Integrated National High School Los Baños Laguna. The following technical procedure were administered.

The researchers crafted a self-made questionnaire to

determine the acceptability of using Artificial Intelligence in preparing English lessons of professional teachers. The survey questionnaire was validated by doctor of education in Social Sciences, at Laguna State Polytechnic University. After the questionnaire validation, the questionnaire were distributed to the respondents which were the teachers in Tuntungin-Putho Integrated National High School Los Baños Laguna.

E. Treatment of Data

The interpretation of data was acquired by applying several statistical treatments. The following formula were used to analyze, arrange, and determine the data gathered.

1. The formula of frequency and percentage were used to determine the age level of Artificial Intelligence application users in terms of preparing English lesson, implementing, activities and quizzes of professional teachers in Tuntungin-Putho Integrated National High School Los Banos Laguna.
2. Percentage formula was used to measure the Artificial Intelligence application used in preparing English lessons, Implementing, activities and quizzes.
3. Chi square formula was used in the study in examining the relationship between the demographic profile and the Artificial Intelligence applications used by the professional teacher in preparing English lessons, Implementing, activities and quizzes.

4. Results and Discussion

Table 1
Demographic profile of the professional teachers in Tuntungin-Putho integrated national high school

Age		
Age Range	Number of Respondents (f)	Percentage
20-29	3	20%
30-39	4	27%
40-49	5	33%
50-59	3	20%
Total	15	100%

Table 1 shows the Demographic profile of the professional teachers in Tuntungin-Putho Integrated National High School.

As indicated in the table, out of fifteen (15) respondents, 5 respondents or 33.33 percentage fall within the range of 40-49 years old and the least frequency of respondents fall within the range between 22-29 years old and 50-59 years old.

Table 2
Artificial Intelligence application used by the professional teachers of Tuntungin-Putho integrated national high school

AI Applications	Preparation of a Lesson		Activities/Quizzes		Implementation of Lesson	
	f	%	f	%	f	%
Open AI (Chat GPT)	9	60%	0	0%	1	7%
Canva	5	33%	7	47%	13	86%
Google Form	1	7%	8	53%	1	7%
TOTAL	15	100%	15	100%	15	100%

Table 3
Relationship between the demographic profile and the artificial intelligence applications usage by professional teachers in Tuntungin-Putho integrated national high school

	Artificial Intelligence Application			
	Degrees of freedom	Chi-square value χ^2	Critical Value at $\alpha = 0.05$	Analysis
Demographic Profile (Age)	6	12.56	12.59	Not Significant
	6	3.99	12.59	Not Significant
	3	1.81	7.81	Not Significant

* $\chi^2 >$ critical value, significant

Table 2 illustrates the AI Applications used in English lesson preparation, Implementation of English Lesson, and in activities/Quizzes. OpenAi (ChatGPT), Canva and Google form are the AI Applications used by the Professional teachers in Tuntungin-Putho.

In preparing lesson the OpenAi (ChatGPT) has the percentage of 60 which translates to being the most used application. Second is Canva with 33 percent, and lastly, Google form with 7 percent of the users.

In implementation of English lesson, Canva has the percentage of 86 which means the most used application. Second is OpenAi (ChatGPT) with 7 percent the same as with Google form that has 7 percent of equivalent users in terms of implementing English lesson.

Lastly, in the implementation of AI in assessment/quizzes, Google form has the percentage of 53 which means the most used application. Second is Canva with 47 percent. And lastly OpenAi (ChatGPT) with 0 percent which means it is the least used application in terms of the implementation of assessment/quizzes.

Table 3 shows the result in the test of significant relationship between the demographic profile and the Artificial Intelligence applications usage by professional teachers in Tuntungin-Putho Integrated National High School. Chi square was used in this table to determine the significant relationship between variables.

In Lesson preparation, since the computed χ^2 value 12.56 is less than critical value 12.59 with 6 degrees of freedom at alpha 0.05 level of significance we failed to reject the null hypothesis, therefore the null hypothesis is accepted. There is no significant relationship between the demographic profile and the artificial intelligence applications used by professional teachers in Tuntungin-Putho Integrated National High School.

In Implementation of Lesson, since the computed χ^2 value 3.99 is less than critical value 12.59 with 3 degrees of freedom at alpha 0.05 level of significance we failed to reject the null hypothesis, therefore the null hypothesis is accepted. There is no significant relationship between the demographic profile and the artificial intelligence applications used by professional teachers in Tuntungin-Putho Integrated National High School.

In Assessment/Quizzes, since the computed χ^2 value 1.81 is less than critical value 7.81 with 3 degrees of freedom at alpha 0.05 level of significance we failed to reject the null

hypothesis, therefore the null hypothesis is accepted. There is no significant relationship between the demographic profile and the artificial intelligence applications used by professional teachers in Tuntungin-Putho Integrated National High School.

The analysis of Table 3 indicates that there was no significant relationship between the use of Artificial Intelligence application in lesson preparation, implementation of lesson, and assessment or quizzes by professional teachers at Tuntungin-Putho Integrated National High School, when the data was grouped based on demographic profiles such as age.

5. Conclusion

Age has no significant relationship to the AI application used by the respondents in preparing, implementing, and assessing English lessons.

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