e-Training With AI Prompts on Preparing Articles for International Academic Conferences and Publication in International Journals

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Abstract

This research aims to create e-training with AI prompts for international academic conferences and publication in international journals. To determine the efficiency of etraining. Find the effectiveness of the Learner's success through improved e-training and find satisfaction with e-training. The methodology used in the research consists of 5 main steps: analysis, design, course development, e-training development, and evaluation and summary, using AI prompts to help carry out each topic according to Interactive Multimedia Computerassisted Instruction (IMMCAI principles) to find Interval-test/Post-test (E1/E2), effectiveness, and Satisfaction. The sample group consisted of staff and students-faculty of Industrial Education and Technology (FIET), King Mongkut's University of Technology Thonburi (KMUTT), 30 people. The evaluation test results found that the e-training was created with an efficiency of 83.78/81.56 according to the specified criteria, which is 80/80. The training achievement of the trainees increased by 30.78 percent. The content quality score was equal to 4.11 and the participants' satisfaction with the online training was 4.38, which is considered good. It can be concluded that e-training for publishing articles can be used for individual learning and development. There will be a high number and quality results from AI prompts to help work more accurately, conveniently, and quickly.

Keywords: e-Training, International Conference, Journal Publication, Effectiveness (Post-test – Pre-test), Efficiency (E1/E2), AI Prompt



Introduction

The rapid advancement of computer technology can be seen today computers have played a significant role in business, communication, and even education because every organization, every industry, and every educational institution must use technology. This is because technology facilitates and makes every operation fast and flexible. E-learning is learning through the Internet. The teacher will present information and knowledge for the students to study through the World Wide Web service or website Pairoj Trironthanakol et al. (2011). It may allow interaction (conversation, response, sending news) between each other at any time and any place (Learn for all: anyone, anywhere, and anytime) Pairoj Teeronthanakool. (2001). E-learning can respond to and fit into the lifestyle of students in their teens. Therefore, electronic lessons are another development option that can promote students' self-research skills.

Online training (e-training) has become essential to education and professional development systems. Integrating artificial intelligence (AI) into e-training platforms promises to revolutionize how training programs are designed, delivered, and assessed. This paper explores the intersection between e-training and AI, aiming to identify how AI technologies can enhance e-training outcomes. Specifically, this study examines the effectiveness of AI-enhanced learning paths, automated feedback systems, and adaptive learning technologies.

The e-training field has evolved dramatically with the advent of digital technologies. An early study by Smith and colleagues (2015) highlighted the potential of e-training to provide scalable and flexible learning solutions. More recent research has focused on the role of AI in improving e-training platforms. Johnson and Roberts (2018) showed that AI algorithms can optimize learning experiences, resulting in better learner engagement and retention. However, there are still gaps in understanding the long-term impact of AI on learning outcomes and the specific mechanisms through which AI improves the effectiveness of e-training.

The purpose of the research is as follows: 1. To create and develop an e-training with AI prompts on preparing articles for international academic conferences and publication in international journals, 2. To find the efficiency of e-training with AI prompts on preparing articles for international academic conferences and publication in international journals, 3. The achievement of e-training with AI prompts on preparing articles for international academic conferences and publication in international academic conferences and publication in international academic conferences and publication in international journals, 4. Study of user satisfaction with e-training with AI prompts on preparing articles for international academic conferences and publication in international academic conferences and

Therefore, the researchers saw that increasing the achievement in the knowledge and skills of personnel and interested persons by using AI to help in important steps to be accurate, fast, and efficient, in line with the set goals, as well as making the work of better quality in order, is an essential function in the current business environment, education, research, and innovation that is constantly changing. To transfer knowledge effectively, we should find a way to make it easier for interested persons to come in and learn and lead to effective practices.

Methods

The methodology used in this research consists of five main steps: analysis, design, courseware development, e-training development, and evaluation and conclusion, as shown in Figure 1.

Sig Concept Chart V • <u>MindMap</u> • (Al Promot)	ତ୍ର Course Sig Flowchart • Module Presentation	Content U Validation • IOC • (Al Prompt)	S/W Selection W Multimedia Preparation • Authoring	S E1/E2 S • Effectiveness J • Satisfaction
	• (Al Prompt)		• (Al Prompt)	≥ • (Al Prompt)

Figure 1: Displays the e-Training With AI Prompt Methods

The details of each step have the following sub-steps (T. Maneepen et. al. (2001)):

1. Analysis

Created the initial mind map. This step was to find out all related topics concerned. Created the concept/final mind map. This step was to rearrange and regroup the related topics that will benefit from creating the final mind map.



Figure 2: Displays the Mind Map of Contents Analysis

2. Design

Created the strategic presentation plan and behavioral objective for the course curriculum analysis table. Created the module presentation chart. Created the chart for each module according to its importance for best learning effectiveness or achievement.



Figure 3: Displays the Module Presentation

3. Development of Course

Script development. This step was written according to the plan for each frame using images, colors, graphics, video, etc. Storyboard development. The frames of content were reviewed by experts for content correctness. This step produced the content accuracy and validity which was represented in terms of appropriateness of content as compared with the concept chart according to the subject. Development of Test Items. This step was to analyze the behavioral objective and the contents of test items.

4. Development of e-Training With AI prompts

Select an appropriate program. Such as Moodle programs to edit. To select and prepare resources. Such as text, graphics, images, video, animation, etc. The correct content and quality test items. This step was to create a web-based platform. E-training checked by the media's expert. Three experts in media to check the quality.



Figure 4: Displays the Content With AI Prompts on the International Journals



Figure 5: Displays the Content With AI Prompts on the International Conferences

Table 1: Essence Prompt for Research Writing Using Generative AI

I	able 1. Essence FIC	mpt for Research wh	ung Using Generativ	
Item Introduction	Prompt#1 Prompt. Write "research background, motivation the important of this research why it is needed" the research topics and information is "	Prompt#1 Prompt_Generate the paragraphs to address the "research gap "using "advantage, disadvantage and draw back of the following article "" (Search for 3-5 closely relate article, summarize Advantage disadvantage, drawback by using other AI tools such as "chatwithanypdf, Scispace, paper digest".	Prompt#1 <u>Prompt</u> : Re write the previous information to "Pin out more clear research gap of this research (has to directly follow the previous prompt)	Prompt#1 Prompt_: Generate the paragraphs to explain the "research contribution and expected implication " using the following information "" (add the result from the first two prompts in "introduction section (background and research gap))
Relate Literature	Prompt: Use the following information "" (add the introduction section of the research) to organize the "literature review section and also suggest me the sub-topics that I should integrate in this section.	<u>Prompt.</u> ; Find 5-7 articles form your own knowledge using "scholar AI plug in" to discuss in direction of "" (the direction obtained from sub topics of the previous prompt) [4.0]	Prompt: Generate the paragraphs to discuss in direction of $\frac{m}{2}$ " (add detail of selected sub topics). The information and detail of researches that you can use is as follow $\frac{m}{2}$ " (add summary of research here). Please cite the article in "intext" citation form [3.5]	
Method	Prompt: Use the following information to Organize the "Research Method section" of this research is as follows "" (information need Introduction, relate literature)	<u>Prompt</u> : Generate the paragraph to explain detail of the following topic " " (add topic that you need information), write the paragraph in academic English for research paper writing and make it smooth to read and easier to understand.	Prompt: If I perform the experiment to test for the effectiveness of the my method and model which as the following detail "" (add detail of experiment), could you please suggest the "Performance measure metrics for this experiment" and guide me how to collect the data for these KPIs.	<u>Prompt could</u> you please design the questionnaire to use to survey to reveal the "SUS-score" of the system that has following detail "" (add detail of the developed system)
Result	Prompt: Use the following information Organize the "result section" of this research (information <u>need :Introduction</u> , relate literature, method)	<u>Prompt</u> : Generate the paragraph to explain more detail about "" (add the topic information)	Prompt .: Generate the paragraph to write introduction to the reader to know about the experiment that has result shown in the following information "" (add Table)	Prompt Generate the paragraphs to write "in-dept analysis and result interpretation focusing on "" (add direction of discussion), and the is shown as follows "" (add result table)
Discussion	<u>Prompt</u> : Please use the following information to organize or suggest the discussion sub topic for this research paper ""(information uploaded with this prompt: Introduction, relate literature, method, Result)	Prompt: Discuss in dept, and rational discussion of this research paper in direction of "	Discuss every sub <u>topics</u> , each sub topics each time	
Conclusion	Prompt: Generate paragraphs explaining the conclusion of this research paper, covering the following elements: (1) research motivation and problem restatement, (2) detailed research methodology, (3) significant results, (4) important findings, (5) research implications, and (6) potential future research directions. (information uploaded with this prompt ; Use all "introduction", "literature review, Research method, Result, discussion			
Abstract	Prompt: Generate paragraphs elaborating on the 'abstract' of this research paper, covering the following elements: (1) research motivation and problem restatement, (2) detailed research methodology, (3) significant results, (4) key findings, and (5) research implications. (information needed to be update with this prompt: Upload whole article from Introduction to conclusion; or only conclusion).	<u>Prompt</u> : Rewrite the information using a total of 200-250 words		
Title	Upload whole research paper then <u>Prompt</u> : Please suggest a research title for the uploaded research paper to be published in the journal " Expert systems with applications" (information uploaded with this prompt: Whole article and "title of target journal)			<u>Prompt</u> : Rewrite the title to make it more concise
General Prompt for Research	(generate new paragraphs for specific topics)	Prompt: To ensure the overall content flows smoothly and coherently, both between paragraphs and sentences, rewrite the following information to make it <u>more smooth</u> to read.	<u>Prompt</u> : Re write this information in paragraphs manner (when the AI provides you result that look like bullet points)	<u>Prompt</u> : Re write the following information to make it more smooth to read, To ensure the overall content flows smoothly and coherently, both between paragraphs and sentences. (use when you need to paragraphs more than one paragraphs)

From Table 1 This prompt is applicable for ChatGPT, Claude, Gemini, and Perplexity.

5. Evaluation and Summary

Determine efficiency. To make a pilot test with a small group representation from the sample. Test efficiency with the sample. E-training was conducted on staff who were interested in Article preparing, FIET, King Mongkut's University of Technology Thonburi.

Results and Discussion

1. e-Training With AI Prompt

The results of e-training development are as follows:

Production Technology Education Division



Figure 6: Displays e-Training With AI Prompt: Module 1 for Example



Figure 6: Displays e-Training With AI Prompt: Module 1 for Example. (Cont.)

2. Contents and Media Quality

		Person	Person Satisfaction I		on level
ltem	1	1 2		Average	S.D.
1. The content is consistent with the objectives and topics.	4	5	4	4.33	0.58
2. The content is presented in a way that is easy to remember and understand.	5	4	4	4.33	0.58
3. The content can make trainees understand the process in real life.	4	5	4	4.33	0.58
4. Sequencing and continuity of content.	4	4	4	4.00	0.00
5. Completeness of content.	4	5	4	4.33	0.58
6. Accuracy of content according to academic curriculum.	4	4	5	4.33	0.58
7. The content is complete according to academic principles.	4	5	4	4.33	0.58
8. The content is consistent with the picture.	3	3	4	3.33	0.58
9. Content is appropriate for the purpose.	4	3	4	3.67	0.58
SUM(∑)				37.00	4.62
Average(X)				4.11	0.51

Table 2: Result of Contents Quality by Experts

When considering the quality level in the assessment that the 3 experts assessed, the average value was in the Good range, with a score of 4.11. It can be used to create e-training lessons. When considering the quality of the lesson, Therefore, it can be concluded that the e-training lesson for use is good quality and suitable for testing with the target group.

3. e-Training Satisfaction



Figure 7: Displays Satisfaction of e-Training With AI Prompt

The learners' satisfaction with the lessons showed that the results of the evaluation of the media quality of the learners at the attitude level were at a high level. In the assessment of the quality of the content, the learners have a high level of satisfaction, with an average value of 4.38.

4. e-Training Efficiency and Effectiveness

Table 5. Shows the Average of the Tre-test, interval Test, and Tost-test						
Pre-test		Interv	Interval test		Post-test	
(D)		(1	(E1)		(E2)	
Point	%	Point	%	Point	%	
457	1523.33	754	2513.33	734	2446.67	
15.23	50.78	25.13	83.78	24.47	81.56	
4.00	13.32	2.08	6.93	2.70	9.00	
	Pre Pre Point 457 15.23 4.00	Pre-test (D) Point % 457 1523.33 15.23 50.78 4.00 13.32	Table 3. Shows the Average of the He-test Pre-test Inter (D) (I) Point % Point 457 1523.33 754 15.23 50.78 25.13 4.00 13.32 2.08	Table 5: Shows the Average of the Fre-test, interval res Pre-test Interval test (D) (E1) Point % 457 1523.33 754 2513.33 15.23 50.78 25.13 83.78 4.00 13.32 2.08 6.93	Table 5: Shows the Average of the Fre-test, interval rest, and Fost-te Pre-test Interval test Pos (D) (E1) (I Point % Point 457 1523.33 754 2513.33 734 15.23 50.78 25.13 83.78 24.47 4.00 13.32 2.08 6.93 2.70	

Table 3: Shows the Average of the Pre-test, Interval Test, and Post-test

The efficiency result of e-training with AI prompts was shown at 83.78/81.56, higher than the standard requirement set at 80/80. Finally, the effectiveness of learners who studied the e-training with AI prompts was shown at 30.78%. (Table 1)

Conclusions

The conclusion of the research follows:

- 1. Evaluation of the content and media quality of e-training lessons. The results from the evaluation by 3 content experts had a total average of 4.11, considered a good evaluation result. The content evaluated by experts can be used to create online lessons.
- 2. Efficiency of lessons. The results of the e-training lessons in the test during the learning were 83.78 percent and the post-learning test was 81.56 percent. Therefore, the efficiency of the online lessons was 83.78/81.56, which is in line with the criteria set at 80/80, which is effective enough to be used.
- 3. The learners' satisfaction with the lessons showed that the results of the evaluation of the media quality of the learners at the attitude level were at a high level. In the assessment of the quality of the content, the learners have a high level of satisfaction, with an average value of 4.38. Therefore, it can be concluded that the learners' attitudes are at a good level.
- 4. The learning achievement of the learners who passed the e-training lesson is 30.78, the achievement value of the pre-test is 50.78 percent and the achievement value of the post-test is 81.56 percent. After studying each module, it resulted in knowing the results of their development.

The next development suggestion is to track the productivity, and results from individual development according to the agreed goals and performance Agreement to achieve the mission and future objectives.

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