Development of Interactive Learning Media for General Education: A Case Study of GEZ0204 English for Careers

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Abstract

This research aimed to (1) develop interactive learning media for the GEZ0204 English for Careers course in the General Education program, and (2) examine students' satisfaction with the developed media. The findings revealed that overall student satisfaction was at the very high level (mean = 4.70). In terms of design, students were most satisfied with the appropriateness of layout (mean = 4.76) and the attractiveness of the media (mean = 4.72). Regarding usability, students were most satisfied with the applicability of the acquired knowledge to real-life situations and the quick access to information (mean = 4.72), followed by the appropriateness of the media for learners (mean = 4.69) and the clarity of content understanding (mean = 4.62). In conclusion, the developed interactive learning media effectively met learners' needs and achieved a high level of satisfaction, indicating its potential for application in general education courses to enhance teaching and learning effectiveness.

Keywords: Interactive Learning Media, General Education, English for Careers, Learner Satisfaction

1. Introduction

The Office of General Education and Innovative Electronic Learning at Suan Sunandha Rajabhat University has a primary mission to manage general education courses for undergraduate programs, conduct research and development on learning innovations using electronic media, and provide academic services to meet the needs of agencies and communities. This aligns with the university's policy of promoting the effective application of technology and information among students and staff.

The Electronic Learning Innovation Division, under the General Education and Electronic Learning Innovation Office, has been tasked with advancing technology and information systems, developing teaching and learning materials, and innovating learning management practices. These resources are designed to support general education courses and enhance technological and informational accessibility for students, lecturers, and staff of Suan Sunandha Rajabhat University. Recognizing the importance of integrating online learning innovations and technologies into current general education instruction, the Electronic Learning Innovation Division ensures that every course in the general education program has a dedicated learning management website each semester. In the modern world of social media, students can be reached by using social media more effectively than any other public relations. The main objectives of this research were to give an in-depth interview with sample groups of students to understand their needs and preferences as well as the best way to reach them more

effectively than any other public relations tools. The findings from the study revealed that the best way or the most effective way to reach students was by using social media, Facebook. It has no costs and can be shared among different groups of students instantly (Suksakul, N., & Wongleedee, K., 2023).

The Office of General Education and Electronic Learning Innovation recognizes the importance of online instruction and the development of modern, engaging, and effective educational media. Therefore, the researcher conducted a study titled "The Development of Interactive Learning Media for General Education Courses: A Case Study of GEZ0204 English for Careers Purposes" with the aim of creating instructional media for general education courses that align with online teaching and enhance instructional effectiveness.

2. Research Objectives

This research study aimed to:

1) develop interactive learning materials for the course GEZ0204 English for Careers Purposes in the General Education curriculum.

2) examine students' and staff members' satisfaction with the developed interactive learning media.

3. Conceptual Framework

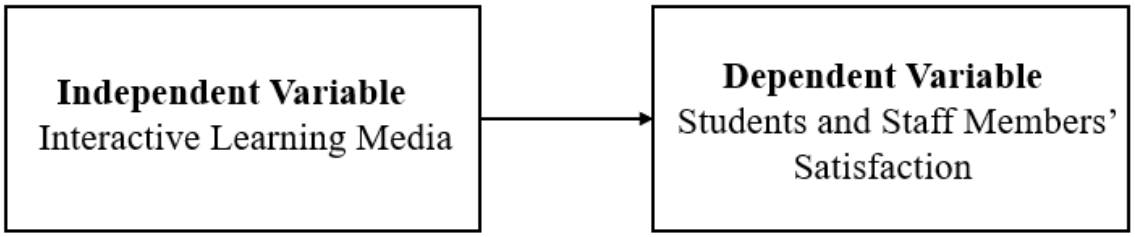

Figure 1. Conceptual Framework of the Study

Figure 1 illustrates the research model that guided the study. The independent variables included the study of components and processes for developing interactive learning materials, the development of interactive learning materials, and the evaluation of interactive learning materials. The dependent variable was the interactive learning materials developed for the course GEZ0 2 0 4 English for Careers. The arrow indicates the relationship between the development of interactive learning media and students' satisfaction, suggesting that well-designed and appropriately developed interactive learning materials contribute to higher levels of student satisfaction.

4. Literature Review

Instructional design for interactive learning is a multifaceted approach that enhances educational experiences through structured methodologies and technology integration. The ADDIE model is frequently employed, emphasizing stages such as analysis, design, development, implementation, and evaluation, which collectively foster effective learning

environments. This synthesis of research highlights key components and methodologies that contribute to successful interactive learning.

Key Components of Instructional Design

ADDIE Model: A systematic approach that guides the development of educational programs, ensuring that learning objectives are met effectively (Romisa, N. F., & Rosita, N. D., 2024; Cárdenas, M. Á. L., & Estrada, C. C. P., 2022).

Constructivism: This theory underpins many instructional designs, promoting active learner engagement and knowledge construction through participation (Addo, D. E., Efut, E. N., Akpo, D. M., & Egor, O. W., 2023).

Multimedia Integration: Incorporating various media types (text, images, video) enhances interactivity and caters to diverse learning styles (Romisa, N. F., & Rosita, N. D., 2024).

Benefits of Interactive Learning

Enhanced Engagement: Interactive methods, such as problem-based learning and simulations, motivate students and improve retention.

Collaboration: Encourages teamwork and peer learning, fostering a community of inquiry among learners (Cárdenas, M. Á. L., & Estrada, C. C. P., 2022).

Skill Development: Focuses on cognitive, affective, and psychomotor domains, equipping learners with critical thinking and problem-solving skills (Addo, D. E., Efut, E. N., Akpo, D. M., & Egor, O. W., 2023).

While the emphasis on structured instructional design is crucial, some argue that overly rigid frameworks may stifle creativity and adaptability in teaching. Balancing structure with flexibility can lead to more innovative and responsive educational practices.

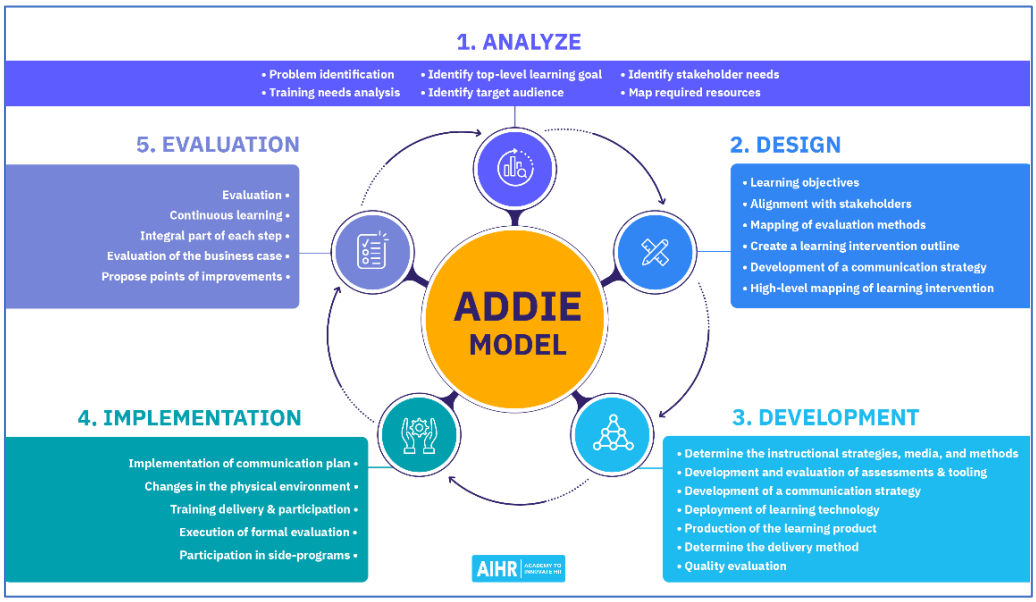

Figure 2. ADDIE Model
Source https://www.aihr.com/blog/addie-model/

5. Methodology

1. Population and Sample Group

The population of this study comprised personnel from the Office of General Education and Electronic Learning Innovation, instructors teaching general education courses, and students enrolled in general education courses at Suan Sunandha Rajabhat University.

The sample group consisted of the following participants, selected using purposive sampling:

- Educational services staff: 14 participants
- Electronic learning innovation staff: 4 participants
- General administrative staff: 5 participants
- Planning, budgeting, and quality assurance staff: 1 participant
- Students enrolled in general education courses: 1,422 participants

2. Study Methods

The researcher has planned the development of interactive learning materials for the general education course: A case study of GEZ0204 English for Careers as follows:

2.1 Needs Analysis

Conduct a study and analysis of the needs of students and instructors in the GEZ0204 English for Careers course to identify suitable content and formats for interactive learning materials.

2.2 Learning Materials Design

Plan and design interactive learning materials by defining learning objectives, content, presentation formats, and related activities to align with the needs and objectives of the course.

2.3 Learning Materials Development

Develop interactive learning materials according to the design plan using authoring tools within PowerPoint (iSpring Suite) to create effective learning experiences and enhance learner engagement.

2.4 Preliminary Testing and Evaluation

Test the use of learning materials with a sample group to assess their effectiveness and appropriateness. Collect feedback and suggestions through questionnaires or other evaluation tools.

2.5 Revision and Continuous Development

Analyze the results of the testing and feedback to revise and further improve the learning materials for greater effectiveness.

2.6 Implementation and Final Evaluation

Implement the revised learning materials in the GEZ0204 English for Careers course and evaluate user satisfaction as well as measure learners' learning outcomes.

3. Location

The Office of General Education and Innovative Electronic Learning, Suan Sunandha Rajabhat University.

4. Study Period

October 1, 2024, to August 31, 2025.

5. Data Analysis

This study used descriptive statistics, including frequencies, percentages, means, and standard deviations, to analyze general information and users' satisfaction with the interactive learning media developed for the English for Careers course (GEZ0204).

6. Result

The results of the study entitled "Development of Interactive Learning Materials for General Education Courses: A Case Study of GEZ0204 English for Careers" are presented as follows.

The respondents consisted of participants who completed the satisfaction questionnaire regarding the interactive learning materials developed for the GEZ0204 English for Careers course. The sample included 1,422 undergraduate students from Suan Sunandha Rajabhat University during the first semester of the 2025 academic year and 24 staff members from the Office of General Education and Innovative Electronic Learning. The demographic details of the respondents are presented in Tables 1 and 2.

Table 1: Respondents

Category	Number	Percentage
Student	1,422	98.34
Staff	24	1.66
Total	**1,446**	**100**

Table 2: User Satisfaction Levels

Evaluation Criteria	Mean ($\bar{x}$)	Standard Deviation	Satisfaction Level
1. Design			
1.1 The design of the learning materials is visually appealing.	4.72	0.45	very high
1.2 The layout is appropriate for the learning materials.	4.69	0.46	very high
1.3 The structure is suitably arranged for the learning materials.	4.76	0.43	very high
1.4 The design of images aligns with the learning materials.	4.69	0.46	very high
1.5 The materials are easy to use.	4.66	0.48	very high
2. Usability			
2.1 Learners can learn how to use the learning materials independently.	4.69	0.46	very high

Evaluation Criteria	Mean ($\bar{x}$)	Standard Deviation	Satisfaction Level
2.2 The content linking and navigation within the learning materials are convenient and not complex.	4.62	0.49	very high
2.3 The structure is suitably arranged for the learning materials.	4.62	0.49	very high
2.4 The design of images aligns with the learning materials.	4.72	0.45	very high
2.5 The materials are easy to use.	4.72	0.45	very high
Overall Satisfaction	**4.70**	**0.46**	**very high**

From Table 2, the results of the satisfaction analysis of users of the interactive learning media for the General Education course GEZ0204: English for Careers Communication revealed that the overall satisfaction was at a very high level, with an average score of 4.70. In the design aspect, the highest-rated item was “the layout is appropriate for the learning media,” with an average score of 4.76. This was followed by “the media design is visually appealing” with an average score of 4.72, “the structure is suitably arranged for the learning materials” and “the image design is consistent with the learning media,” both with an average score of 4.69, and “ease of use” with an average score of 4.66. In the usability aspect, the highest-rated items were “the knowledge gained can be applied in real-life situations” and “the speed of accessing information in the media,” both with an average score of 4.72. These were followed by “the learning media is appropriate for the learners” with an average score of 4.69, and “the content is easy to understand after viewing the media” with an average score of 4.62.

7. Conclusion

From the study on developing interactive learning materials for general education courses: A case study of GEZ0204 English for Careers, the researcher developed interactive learning materials to support online teaching for the Office of General Education and Electronic Learning Innovation. The materials were tested with 1,422 students enrolled in general education courses during the first semester of the 2025 academic year and 24 staff members from the Office of General Education and Electronic Learning Innovation. The interactive learning materials were integrated into the office's online learning system for testing.

The results showed that students and staff who used the interactive learning materials expressed very high satisfaction, with an average score of 4.70. This indicates that using interactive learning materials, such as a case study of GEZ0204 English for Careers, in online teaching for students and staff, was effective, modern, and aligned with current needs. As with previous research of Kongpha, R., Cheerapakorn, P., Nookhong, J., & Pintuma, S. (2024, March) has studied the Utilizing Interactive Media for Learning in General Education Courses: Insights from The General Education in Higher Education and found that the overall satisfaction across all four aspects was at a level of 4.59, which translates to 91.78%. Satisfaction with the system's display reached the very high level, scoring 4.65, equivalent to 93.00% satisfaction. Satisfaction with the interactive media design scored 4.69, marking a 93.78% satisfaction level. In terms of satisfaction with using interactive media, it scored 4.56, indicating a 91.20% satisfaction level. Lastly, satisfaction with the effectiveness of the interactive media attained a score of 4.46, representing an 89.17% satisfaction level. This

research indicates that interactive media is an effective learning tool, capable of engaging learners, fostering participation, and facilitating efficient learning. However, in developing interactive media, considerations should be given to design, system usability, system efficiency, and presentation factors. This ensures that the media aligns appropriately and meets the users' needs to the highest extent possible.

The development of these materials fostered collaboration among all departments within the Office of General Education and Electronic Learning Innovation, promoting mutual learning and exchange. This process required close coordination with the instructors, including discussions and meetings to gather relevant data for developing the interactive materials. These efforts ensured that the materials provided maximum benefit to the learners and promoted happy learning. As with previous research of Kongpha, R., & Chatwattana, P. (2023) has studied the Virtual Interactive Learning Model Using Imagineering Process via Metaverse and found that the results, which are in consistence with the expectation of the researchers, show that (1) this research can be used as a guideline to develop the virtual interactive learning system using imagineering process via metaverse, which can promote happy learning, and it consists of six steps of imagineering process integrated with learning through virtual environments via metaverse; thereby, users can interact in the virtual world and exchange knowledge with one other through virtual reality technology, (2) the overall suitability of the development of the virtual interactive learning model using imagineering process via metaverse (overall elements) is at the very high level, and (3) the overall suitability of the development of the virtual interactive learning model using imagineering process via metaverse is at the very high level.

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