

# UTILIZING INTERACTIVE MEDIA FOR LEARNING IN GENERAL EDUCATION COURSES: INSIGHTS FROM THE GENERAL EDUCATION IN HIGHER EDUCATION

**Rattanakul Kongpha<sup>1</sup>, Passawut Cheerapakorn<sup>2</sup>,  
Jarumon Nookhong<sup>3</sup>, Sittichai Pintuma<sup>4</sup>**

*<sup>1,2,3,4</sup>Suan Sunandha Rajabhat University, Thailand*

*Email: rattanakul.ko@ssru.ac.th<sup>1</sup>; passawut.ch@ssru.ac.th<sup>2</sup>;  
jarumon.no@ssru.ac.th<sup>3</sup>; sittichai.pi@ssru.ac.th<sup>4</sup>*

## ABSTRACT

The population used in this study was undergraduate students who enrolled in the GEN0102 course "The Aesthetics of Life" in the summer semester of the 2023 academic year. The data was collected using a questionnaire and analyzed using percentages and means. The questionnaire was divided into three parts: general information, satisfaction level, and suggestions.

The results showed that. The overall satisfaction across all four aspects was at a level of 4.59, which translates to 91.78%. The satisfaction with the system's display reached the highest level, scoring 4.65, equivalent to 93.00% satisfaction. The 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.

**Keywords:** Learning Material, Course Website, Interactive Media

## INTRODUCTION

The study of students' satisfaction when learning through interactive media relates significantly to enhancing their understanding of technology and various media in the learning process, especially in the context of online teaching. This is a rapidly evolving scenario in today's educational landscape. Additionally, research also delves into students' satisfaction in utilizing technology and different media for learning to improve the efficiency of learning and foster better learning development among students.

The digital technology policy is being employed to support education and develop students to meet the standards of 21st-century skills, which encompass digital literacy. These skills are being promoted to integrate new digital technology innovations into classrooms for lifelong learning. The content and supplemental content can be utilized for teaching in accordance with the National Digital Economy and Society Plan of 2018-2037. (Kunnu et al., 2022)

Studying students' satisfaction in learning through interactive media is highly crucial in improving the use of various media for learning. It aids designers and developers in enhancing and tailoring these media to better suit learners. Furthermore, understanding students'

satisfaction with these learning media helps individuals interested in learning and self-development choose effective and suitable resources. Additionally, this understanding assists educators in comprehending and adapting teaching methods to better suit the current learning environment. Moreover, the findings from studying student satisfaction with learning media can be used to create guidelines for developing media and technology suited for online learning and interactive learning in the future. Analyzing student satisfaction can significantly aid education providers in understanding and improving teaching methods to better fit the current learning landscape. Education providers can utilize these study results to analyze and find ways to enhance teaching methods effectively.

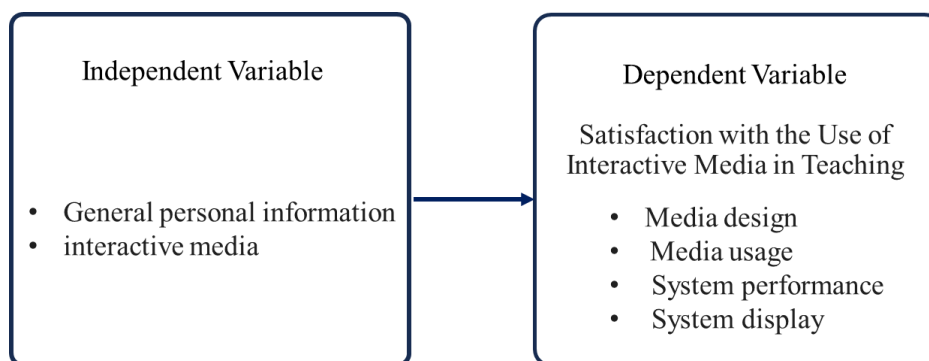
The Office of General Education and Electronic Learning Innovation has conducted online learning management. Researchers have therefore studied the use of interactive media in teaching and learning in the General Education subject category to investigate students' satisfaction when learning through interactive media.

### RESEARCH OBJECTIVES

This research study was aimed to:

- 1) To study the satisfaction of students learning through interactive media.

### CONCEPTUAL FRAMEWORK



**Figure 1.** Conceptual Framework of the Study

The conceptual framework of the study shown in the image is a model that describes the relationship between the use of interactive media in teaching and the satisfaction with the use of interactive media in teaching. The framework is divided into two parts: the independent variable and the dependent variable. The independent variable is the general personal information that students receive. This includes factors such as their age, gender, prior knowledge, and learning style. The dependent variable is the satisfaction with the use of interactive media in teaching. This is a measure of how much students enjoy using interactive media in their learning. The framework suggests that the satisfaction with the use of interactive media in teaching is influenced by both the independent variable and the dependent variable.

The independent variable can influence the satisfaction with the use of interactive media in teaching in a number of ways. For example, students who are older or have more prior knowledge may be more likely to be satisfied with the use of interactive media. This is because they may be more familiar with technology and more likely to find interactive media engaging. The dependent variable can also influence the satisfaction with the use of interactive media in teaching. For example, students who are more satisfied with the use of interactive media may

be more likely to engage with the content and learn more. This is because they may be more motivated to learn when they are enjoying the learning process. The framework also includes two mediating variables: media design and media usage. Media design refers to the way in which interactive media is created. Media usage refers to the way in which students interact with interactive media. The framework suggests that media design and media usage can influence the relationship between the independent variable and the dependent variable. For example, interactive media that is well-designed and easy to use may be more likely to be enjoyed by students of all ages and learning styles.

## METHODOLOGY

The purpose of this research is to study the satisfaction of students who learn through interactive media. The research methods are as follows:

1) Population and sample. The population of this study is undergraduate students at Suan Sunandha Rajabhat University. The sample of this study is 30 students who are enrolled in the GEN0102 course in the Summer semester of 2023. The sample was selected using cluster sampling. Cluster sampling is a type of sampling in which the population is divided into groups, or clusters, and then a random sample of clusters is selected. In this study, the clusters are the undergraduate classes that are offered in the GEN0102 course. A random sample of 3 classes was selected, and then all students in those classes were invited to participate in the study. The sample size of 30 is considered to be a reasonable size for this study. This is because it is large enough to provide reliable results, but it is not so large that it would be difficult to manage.

2) Research tools. The instruments used in this study were divided into two types: First, the iSpring Suite 11 user manual was used as the primary instrument. This manual provides instructions on how to use the iSpring Suite 11 software. Second, a satisfaction survey was developed by the researcher to measure the satisfaction of students with the iSpring Suite 11 user manual. The survey consisted of 20 questions that asked students about their overall satisfaction with the manual, their satisfaction with specific aspects of the manual, and their perceptions of the effectiveness of the manual.

3) Creation of research tools. data analysis In this research The researcher used the following criteria for data analysis:

3.1 Qualitative data analysis involves analyzing survey data using content analysis to derive percentages and averages.

3.2 Quantitative data analysis Participation assessment form by analyzing the average values as follows:

Average rating 1.00 - 1.49 means very low satisfaction level.

Average rating 1.50 - 2.49 means low satisfaction level.

Average rating 3.00 - 3.49 means moderate satisfaction level.

Average rating 3.50 - 4.49 means high satisfaction level.

Average rating 4.50 - 5.00 means very high satisfaction level.

4) Data collection Statistics used in research

4.1 Analysis using questionnaires to survey satisfaction with learning through interactive media.

4.2 Analysis of participation in strategic planning using the arithmetic mean.

4.3 Percentage Value Finding percentage value is calculated from proportional value.

By comparing with a base value of 100

## RESULT

The main objective of this research is to understand the satisfaction patterns of online learning among students. The assessment of satisfaction covers four aspects: 1. System presentation, 2. Interactive media design, 3. Effectiveness of interactive media, and 4. Satisfaction in using interactive media. The survey was conducted with 30 respondents, and the results are presented in the table below.

**Table 1. Summary of satisfaction assessment in all 4 areas**

Satisfaction assessment	Mean	Percent	Interpret results
<b>1. System presentation.</b>			
1.1 The system's graphics and animations are sharp and visually appealing.	4.50	90.00	very high
1.2 The system's fonts and text are easy to read.	4.67	93.33	very high
1.3 The system has eye-catching colors and design.	4.80	96.00	very high
1.4 The system promptly responds to user interactions.	4.63	92.67	very high
<b>2. Interactive media design.</b>			
2.1 Interactive media is interesting and engaging for users.	4.53	90.67	very high
2.2 Interactive media contains accurate and comprehensive content.	4.83	96.67	very high
2.3 Interactive media presents clear and easily understandable step-by-step procedures.	4.77	95.33	very high
2.4 Interactive media offers diverse learning formats.	4.70	94.00	very high
2.5 Interactive media can assess users' learning outcomes.	4.60	92.00	very high
<b>3. Effectiveness of interactive media.</b>			
3.1 Interactive media operates smoothly without interruptions.	4.23	84.67	high
3.2 Interactive media efficiently utilizes system resources.	4.57	91.33	very high
3.3 Interactive media can resize to accommodate usage on various devices	4.67	93.33	very high
3.4 Interactive media can function on networks with low speeds.	4.37	87.33	high
<b>4. Satisfaction in using interactive media.</b>			
4.1 Users find enjoyment and pleasure in using interactive media.	4.20	84.00	high
4.2 Users feel that interactive media enhances the efficiency of their learning.	4.80	96.00	very high
4.3 Users feel that interactive media is user-friendly and not complex.	4.40	88.00	high
4.4 Users feel that interactive media can cater to their individual learning needs.	4.53	90.67	very high
4.5 Users would recommend interactive media to others for use.	4.87	97.33	very high
<b>Average</b>	<b>4.59</b>	<b>91.78</b>	very high

From the table showing the evaluation of satisfaction in all 4 areas, it was found that the satisfaction level was 4.59, accounting for 91.78 percent. Satisfaction was at the highest level. And when considering the level of satisfaction in all 4 areas, it was found that:

System Presentation: Graphics, animations, fonts, colors, and responsiveness were rated highly, averaging between 90 percent and 96 percent satisfaction.

Interactive Media Design: Users found the interactive media engaging, comprehensive, easy to understand, and diverse in its learning formats. Satisfaction ranged from 90 percent to 96.67 percent.

Effectiveness of Interactive Media: Smooth operation, efficient resource utilization, adaptability to various devices, and functionality on low-speed networks received ratings between 84.67 percent and 93.33 percent.

Satisfaction in Using Interactive Media: Users reported high enjoyment, efficiency in learning, user-friendliness, adaptability to individual learning needs, and a strong inclination to recommend the media to others. Ratings ranged from 84 percent to 97.33 percent.

Overall, the assessment indicates a high level of satisfaction across various aspects of the interactive media system, with most categories scoring above 90% satisfaction. Users seem to find the system visually appealing, effective, user-friendly, and efficient for learning purposes.

## CONCLUSION

From the assessment of satisfaction across the four aspects, it was found that the highest level of satisfaction was observed in the design aspect. Satisfaction in the design of interactive media was at the highest level, followed by satisfaction in the usability of interactive media, which also ranked at the highest level. Moreover, satisfaction regarding the effectiveness of interactive media was high.

According to the research findings, users exhibited high levels of satisfaction overall across all aspects of the media. The design aspect received the highest satisfaction rating, followed by system usability, system efficiency, and system presentation, in that order.

The results of this research are consistent with research on media development in many areas as follows:

In terms of design, media should be contemporary, visually appealing, and user-friendly, aligning with the research by Nattaya Wansai and Monsicha Rodekaew (2018), which found that modern, visually appealing, and user-friendly learning media can increase students' interest and engagement in the learning process.

In terms of system usability, media should be easy to use, convenient, and efficient, consistent with the research by Atthadaporn Suwannatri and Sariwan Palawong (2010), which found that user-friendly, convenient, and efficient learning media can enhance students' learning efficiency.

In terms of system efficiency, media should be stable, function correctly, and meet users' needs, aligning with the research by Phelan Krongthong (1999), which found that efficient learning media can significantly enhance students' learning efficiency.

In terms of presentation, media should display information clearly, be easy to understand, and engaging, consistent with the research by Somchit Rattanaphan (2012), which found that clear, understandable, and engaging learning media can enhance students' understanding of the content.

## ACKNOWLEDGMENTS

The author would like to thank Suan Sunandha Rajabhat University, Bangkok, Thailand (<http://www.ssru.ac.th/>) for providing funding to participate in the dissemination of research results on this matter. And thank you to family, friends, and co-workers. Students of Suan Sunandha Rajabhat University and the Office of General Education and Electronic Learning Innovation For everyone's cooperation and preparation of data sets for research.

## REFERENCES

- Attha Phon Suwan Trai, & Sriwan Na Palawong. (2010). Development of electronic learning media to promote learning in chemistry for Mathayom 4 students. *Khon Kaen University Academic Journal*.
- Kunnu, W., Nookhong, J., Kaewrattanapat, N., & Phunaploy, S. (2022). Cloud-based learning to promote higher education learning skills: Study on Suan Sunandha Rajabhat University. *Journal of Humanities and Social Sciences*, 5(2).
- Nattha Wansai, & Monsicha Rodkaew. (2018). Development of interactive learning media for learning about basic programming. *Bansomdejchaopraya Rajabhat University Academic Journal*.
- Plain Krong Thong. (1999). Development of computer learning media for sports science students. *Ramkhamhaeng University Academic Journal*.
- Somchit Rattanaphan. (2012). Development of interactive learning media to promote analytical thinking skills for Mathayom 3 students. *Academic Journal of Rajabhat Rajanagarindra University*.