Developing a Digital-Enriched Instructional Media Design Process for the General Education Course

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Abstract

This study aims to develop a process for designing instructional media for the general education course, intending to provide an effective learning experience for students. The sample group consists of 3,000 undergraduate students enrolled in the GEN0320 Digital Millionaire course in the 2023 academic year at Suan Sunandha Rajabhat University. This project seeks to gain a deeper understanding of students' needs and satisfaction by employing qualitative research methods, focusing on accessibility, diverse learning approaches, and enhanced communication between instructors and students. The overall satisfaction of participants is at the highest level, with an average score of 4.66. This research contributes to educational innovation and improves students' self-development, fostering a foundation for national development. Educational technology supports diverse learners, aligning with national education laws and 21st-century learning standards, emphasizing lifelong learning, critical thinking, collaboration, and adaptability. The study further aligns with Thailand's Education 4.0 strategy, preparing students with essential skills for future challenges.

Keywords: Instructional Media Design, User Satisfaction

1. Introduction

In the digital age, education is rapidly evolving to meet the diverse needs and learning styles of students. Traditional teaching methods are being replaced by more flexible, learner-centered approaches that leverage digital tools and interactive media. The GEN0320 Digital Millionaire course, developed by Suan Sunandha Rajabhat University, exemplifies this shift by equipping students with essential digital skills and knowledge applicable to both academic and personal contexts (Chen & Wang, 2021; Lail & Eissa, 2023).

This study explores the development of an instructional media design process that prioritizes accessibility and engagement for students in the GEN0320 course. By incorporating a variety of multimedia elements—such as text, images, animation, audio, and video—the design enhances interactivity and caters to different learning preferences. This approach supports better retention of complex concepts while providing on-demand access to materials in diverse formats (Chankham, n.d.; Phonklai, 2021).

A key focus of the course is its learner-centered approach, which allows students to tailor their learning experiences to their interests and career goals. This flexibility fosters intrinsic motivation and cultivates self-directed learning skills—both critical for success in the modern world. Supplementary materials further encourage deeper exploration of topics, broadening students' understanding and knowledge base (Amornrit, n.d.; Rattanapian, 2022). These learning skills will result in effective student learning and currently there is a Thai Education Strategy 4.0. and Thailand 4.0 And problem-solving skills are still skills. Important of the 21st

century That affects the Thai education strategy 4.0 and Thailand 4.0 (Chaiwat Jewpanich, 2019)

This research examines undergraduate students enrolled in GEN0320 to evaluate the course, focusing on their satisfaction and the effectiveness of the instructional media. The findings highlight how digital media and adaptable learning environments can enhance student engagement, comprehension, and overall satisfaction. Ultimately, the study contributes to advancing digital education practices that emphasize accessibility, learner autonomy, and the integration of globally informed yet locally relevant content.
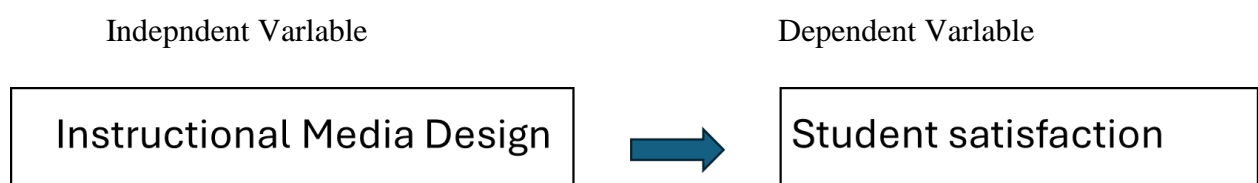
1.1 Research Objective

The objective is to develop a digital-enriched instructional media design process for the general education course and measure users' satisfaction. This study aims to achieve the following goals:

1. To enhance learning accessibility by developing a flexible, user-friendly instructional design that allows students to access course content and support services online at any time, meeting learners' needs for convenience and adaptability.

2. To stimulate student engagement by integrating various multimedia elements on the course website—including text, images, animations, audio, and video—to create an interactive and effective learning experience that facilitates understanding.

3. To support personalized learning paths by enabling students to select topics and course activities based on their individual interests and educational goals, fostering a learner-centered approach.

4. To provide access to additional resources through links to external sources on the website, allowing students to deepen their knowledge and understanding by exploring supplementary content in greater detail.

2. Conceptual Framework

This research synthesizes concepts, theories, and related studies, which can be summarized into a conceptual framework for the research.

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| Instructional Media Design | → | Student satisfaction |

3. Methodology

The population in this study includes instructors and teaching assistants (TAs) for the course "GEN0320 Digital Millionaire." The sample group consists of 3,000 undergraduate students enrolled in this course in the 2023 academic year at Suan Sunandha Rajabhat University.

4. Results

The results are shown in the following table.

Table 1 User Satisfaction

No.	Evaluation Details	Mean ($\bar{x}$)	Student Satisfaction Level
1	The instructor uses time and class activities effectively.	3.85	High
2	The instructor provides a clear course outline, specifying objectives, course topics, and learning activities.	4.26	High
3	The instructor explains concepts clearly and aligns them with learning objectives.	4.22	High
4	The instructor encourages student participation and allows opportunities for all students to engage.	4.20	High
5	The instructor is approachable, friendly, and respectful to students.	4.19	High
6	The instructor provides clear explanations, making the material easy to understand.	4.18	High
7	The instructor encourages students to express their thoughts and ideas, fostering a collaborative environment.	4.21	High
8	The instructor demonstrates an understanding of student needs and adapts teaching to support student learning.	4.23	High
9	The instructor uses diverse teaching methods, enhancing student interest and engagement in the course.	4.20	High
10	The instructor integrates moral and ethical considerations into the course content.	4.18	High
11	The instructor provides ample opportunities for students to practice skills and apply knowledge.	4.16	High
12	The instructor promotes critical thinking and problem-solving skills through active learning activities.	4.14	High
13	The instructor offers timely and constructive feedback on assignments and exams.	4.22	High
14	The instructor uses various types of media and instructional materials to support diverse learning styles.	4.23	High
15	The instructor supports online learning and e-learning effectively, enabling flexible study options.	4.21	High

- **Overall Satisfaction Evaluation**
- The project participants' overall satisfaction was rated at the highest level, with an average score of **4.66**, equivalent to **93.20%**.
- **Knowledge and Understanding Improvement**

Participants' knowledge and understanding showed a significant improvement after the training.

- **Pre-training Knowledge:** Average score of **3.95** (79.00%).
- **Post-training Knowledge:** Average score of **4.33** (86.60%).
- **Knowledge Improvement:** Increased by **7.60%**.
- **Instructional Media Design Process Satisfaction**

The instructional media design process for the GEN0320 course, *"Getting Rich with Digital,"* received high satisfaction ratings.

- **Overall Satisfaction Level:** Average score of **4.18** (83.60%).

5. Conclusion

This study highlights the successful development of a digital-enriched instructional media design process tailored for the GEN0320 "Digital Millionaire" course. By focusing on accessibility, interactivity, and learner engagement, the instructional design not only enhanced the learning experience but also aligned with the principles of 21st-century education. The integration of multimedia elements facilitated diverse learning preferences, while the learner-centered approach promoted autonomy and intrinsic motivation among students.

The findings demonstrate a significant improvement in students' knowledge, with overall satisfaction reaching the highest level, as evidenced by an average score of 4.66. This underscores the effectiveness of the design process in meeting educational objectives and supporting students' academic growth. Furthermore, the alignment with Thailand's Education 4.0 strategy positions this research as a pivotal step toward fostering skills necessary for future challenges, including critical thinking, collaboration, and adaptability.

Ultimately, this research contributes to the advancement of instructional media practices, offering a model that can be adapted across various general education courses to improve learning outcomes and satisfaction. Future studies may explore further refinements and broader applications of this process, ensuring its continued relevance and impact in digital education.

6. Acknowledgments

teaching and learning management process, achieving the goals set forth. I am also grateful for their assistance in data preparation and information gathering.

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