

# The Implementation of The Lifelong Learning Micro-Credential Course Among Students from Universiti Tanjung Pura, Pontianak, Indonesia

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**Abstract:** *Micro-credential course is a short course which offers a flexible, targeted way to help people develop knowledge, skills, and competencies. Animation and Videos in Microsoft (MS) PowerPoint are under the lifelong learning category of the Micro-credential course. It is a short course that was developed to help users learn animation features and create videos using Microsoft PowerPoint 365 to make presentations and interactively prepare notes. This course was developed using the ADDIE model, with various kinds of tools and was compiled into one platform. The target users for this course are students, academicians, and anyone interested in making a more creative and dynamic presentation. Lifelong Learning Animation and Videos in MS PowerPoint is an intermediate course where students*

*will be taught how to create animation using text and images besides learning how to produce videos in Microsoft PowerPoint by using audio, slideshow, and screen recording. This course covers four topics with various learning materials and can be completed within thirty days. Activities and formative and summative assessments were provided to evaluate the student's understanding after they have learned every topic. There are forty-two students from the Medical Faculty, Universitas Tanjung Pura, who have enrolled in this course. Statistical analysis of the results shows that sixty-four percent of the respondents feel that the course is interesting and easy to understand. In the future, this course can be added with advanced features in Microsoft PowerPoint.*

**Keywords:** *Animation, Micro-credential, Videos*

## **1.0 INTRODUCTION**

Micro-credential is an online short course or module which is offered to achieve certification of learning. According to Caetano (2022), Micro-credential allows learners to join their preferred Micro-credentials course and do their training, according to their needs. Micro-credential focuses on bite-sized modules which allow learners to complete a set of modules in a shorter period compared to the traditional degree with three to four years of study duration (Che Ahmat et al, 2022).

This Micro-credential course is an intermediate course that is open to the public who are interested in learning how to create a more interactive presentation by using Microsoft PowerPoint. The course has been implemented for medical students from Universitas Tanjung Pura, Pontianak, Indonesia to help them in their presentation preparation.

## **2.0 PROBLEM STATEMENT**

The usage of Microsoft (MS) PowerPoint is most common as a traditional presentation tool using simple design techniques and animation. This program is utilised for corporate presentations as well as in university and secondary educational institutions for project presentations, effective teaching and learning slides, and video presentations, which can be readily

transmitted in mp4 format. This application is more versatile than free online presentation tools, making it the preferred alternative for students and teachers in preparing their presentations. Thus, the development of the Lifelong Learning Micro-Credential Animation and Videos in MS PowerPoint is to help users learn Microsoft PowerPoint to develop a unique presentation by adding creative animations and converting the presentation slides into interactive videos, providing an optimal solution for novices to acquire fundamental to intermediate skills. Besides that, learners will also learn how to use more advanced features such as the recording tab and create screen and audio recordings using MS PowerPoint.

### **3.0 OBJECTIVE**

1. Creative animation: to create a more creative animation
2. Interactive video: to create a more interactive video
3. Recording tab: use recording tab in MS PowerPoint

### **4.0 RELATED WORKS**

#### **4.1 MICRO-CREDENTIAL**

Micro-credential is a "...term that encompasses various forms of certifications, including 'nano-degrees', 'micro-masters', 'credentials', 'certificates', 'badges', 'licenses' and 'endorsements' (UNESCO, 2019). A Micro-credential (MC) is a component of a digital credentialing ecosystem that has been made feasible by digital communications technologies that have created communities of interest (Milligan & Kennedy, 2017).

Oliver (2019) offers a highly synthesised definition of Micro-credential as "...digital certification of assessed knowledge, skills, and competencies which is additional, alternate or complementary to or a component of formal qualifications". This definition addresses the various uses of Micro-credentials, including the potential for Micro-credentials to replace traditional credentials.

## **4.2 INTERACTIVE MULTIMEDIA, ANIMATION, AND VIDEOS**

Interactive multimedia is a learning medium which consists of a combination of several multimedia aspects such as images, videos, animations, and sounds in a platform, and allows users to interact directly (Tsoukala, 2021). It can attract students' attention while making the learning process more fun and enjoyable, besides being able to change students' interest in learning (Nugroho et al., 2020). Therefore, interactive multimedia could visualize learning materials which are hard to deliver in the traditional medium (Barianos et al., 2022).

Nowadays, there are many software which can be used to create animations and videos. The availability of free or low-cost tools to create this animation and videos is most favored by designers, teachers, and students. Instructors need to emphasize developing meaningful content with a clear storyboard and apply educational theory-based instructions to make animation and videos more creative and interactive (Kurniawati, 2020).

## **4.3 MICROSOFT POWERPOINT**

Microsoft PowerPoint is a software incorporated in Microsoft Office which is specifically used for presentations (Movitaria & Shandra, 2020). There are many versions of Microsoft Office but compared to other versions, Microsoft Office 365 is a subscription service that has the most up-to-date modern productivity tools from Microsoft. This version comprises the latest features, fixes, and security updates (Microsoft, 2023).

Apart from that, Microsoft PowerPoint is regarded as one of the most suitable software not only for presentation but also for creating learning content. Besides its main functionality used for slideshow presentations, MS PowerPoint also provides other means of presenting instructional content in the most creative way (Mittelman, 2023). As such, MS PowerPoint can be a preparation software where instructors can create animation or add video recordings to make content more interactive.

## 5.0 METHODOLOGY

Currently, several methods can be used in developing instructional design. The ADDIE model is used in developing this Micro-credential course which consists of Analysis, Design, Development, Implementation, and Evaluation (Setiyani et al., 2020). ADDIE model provides a streamlined, structured framework that helps users create an effective learning product (AIHR, 2023). Figure 1 shows the steps involved in the ADDIE model.



**Figure 1** Steps in the ADDIE model

The analysis involves the problem statement where most of the Microsoft PowerPoint users only used it to create simple presentations. They are unaware of the new features provided by Microsoft PowerPoint 365. Thus, to enhance their presentation skills, a Lifelong Learning Micro-credential course was developed to help users create more creative and interactive presentations using animations and video recording in Microsoft PowerPoint.

In the design phase, a storyboard was developed to identify the tools to be used, plan the teaching materials formats, and outline activities and assessments that will be implemented in the course. Learning hours were also identified to ensure the course follows the suitable learning time according to the Malaysian Qualification Agency (MQA) specifications.

Meanwhile, in the development phase, the Lifelong Learning Micro-Credentials Animation and Videos in MS PowerPoint used Microsoft PowerPoint 365 as the main tool for creating learning materials. Besides that, various free online tools were also used such as Canva, to design images, logos, and backgrounds, Capcut, Clipchamp, Kapwing, and Filmora, used to edit videos while AnyFlip, functions to create eBooks. On top of that, videos were uploaded and published on YouTube while UFuture, known as a Learning Management System, was developed to facilitate students' and instructors' engagement towards all the courses being offered in UiTM acted as the main platform to integrate all materials.

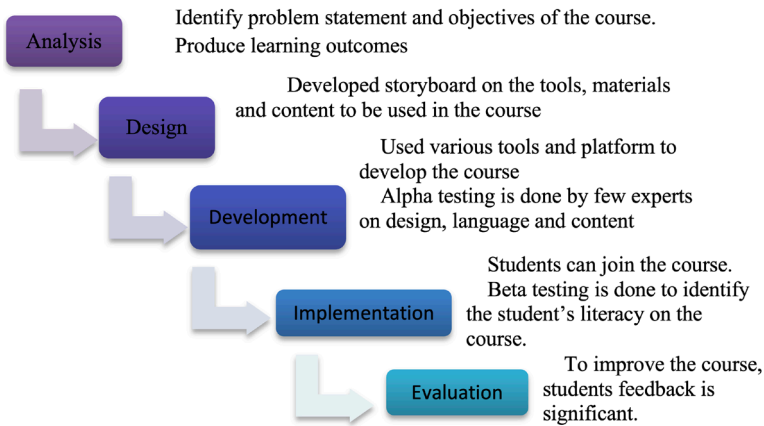
Once the development stage had been completed, Alpha testing was performed to evaluate the course according to certain requirements. This evaluation process involved experts in assessing the course content, language, and design. The course will be made available to users once it fulfills all the requirements in the testing process.

In the implementation phase, Beta testing was done in which students who have enrolled in the course are required to answer an online Entrance survey for a literacy test on the course. A Partially Completion Certificate will automatically be generated for students who have completed the course. However, to get a full certification, students must complete all the assessments provided. The assessments will then be evaluated by instructors and students must pass and achieve a certain range of marks for them to be awarded a Fully Completion Certificate. Figure 2 shows the sample of Partially Completion Certificates and Fully Completion Certificates achieved by students from Universitas Tanjung Pura, Pontianak, Indonesia.



**Figure 2** Partially Completion Certificate and Fully Completion Certificate achieved by students.

Lastly, the evaluation stage serves to ensure the developed product is suitable or needs some improvement. Students will need to answer an online Exit survey to reflect their understanding and feedback on the course. The results of the survey were discussed in the Results and Discussions sections. Figure 3 below shows the development of the Lifelong Learning Micro-Credential Animation and Videos in MS PowerPoint based on the ADDIE model.



**Figure 3** Development of the Lifelong Learning Micro-Credential Animation and Videos in MS PowerPoint based on the ADDIE model.

## 6.0 RESULTS AND DISCUSSIONS

This study involved 42 undergraduate students aged 19 to 25 years old from the Medical Faculty, Universitas Tanjung Pura, Pontianak, Indonesia. To examine the impact of the Lifelong Learning Micro-Credential Animation and Videos in MS PowerPoint courses on these students, a self-rating process was undertaken. This involved the participants completing the Entrance Survey before commencing the courses and the Exit Survey upon course completion. The online survey consists of questions about the respondent's background and the students' software literacy. The data collected from the Entrance-Exit Survey (EES) was subsequently employed to evaluate the effectiveness of the teaching and learning methods employed in the courses. Figure 4 shows the respondents' background based on their age.



**Figure 4** Respondents' background based on age.

All participants (100%) reported having prior experience using Microsoft PowerPoint. Interestingly, a substantial majority (78%, n=33) of the students utilized Microsoft PowerPoint for creating slide presentations. Furthermore, a noteworthy subset (21%, n=9) of the participants demonstrated a more advanced usage of MS PowerPoint, employing it for both slide and video presentations.

Table 1 presents the score differences between participants' EES for each research question. The scores range from -4 to +4, where negative values indicate a decline in proficiency, zero signifies no change and positive values represent an improvement. The survey covers five research questions (RQ1 to RQ5), with the number of respondents for each score difference recorded.

Referring to the RQ1, which assesses general proficiency in using MS PowerPoint, most respondents (19) showed improvement (+1). Additionally, (14) respondents demonstrated improvement (+2), (3) showed improvement (+3) and (2) indicated improvement (+4). Four respondents remained constant with no change in proficiency (0).

Meanwhile, for RQ2, which focuses on literacy in creating text animation in MS PowerPoint, a significant number of respondents (14) showed improvement (+3). Moreover, (7) respondents demonstrated improvement (+1), (11) showed improvement (+2) and (2) indicated improvement (+4). Four respondents remained constant with no change in proficiency (0).

With regards to RQ3, exploring proficiency in creating image animation in MS PowerPoint, many of the respondents (17) showed improvement (+4). Additionally, (4) respondents demonstrated improvement (+1), (8) showed improvement (+2) and (11) indicated improvement (+3). Two respondents remained constant with no change in proficiency (0).

RQ4, which assesses proficiency in screen recording using MS PowerPoint, a significant number of respondents (13) showed improvement (+3). Moreover, (7) respondents demonstrated improvement (+1), (9) showed improvement (+2) and (11) indicated improvement (+4). Two respondents remained constant with no change in proficiency (0).



Finally, based on RQ5, which focuses on exploring proficiency in slide show and audio recording using MS PowerPoint, a significant number of respondents (16) showed improvement (+2). Additionally, (13) respondents demonstrated improvement (+1), (7) showed improvement (+3) and (3) indicated improvement (+4). Six respondents remained constant with no change in proficiency (0).

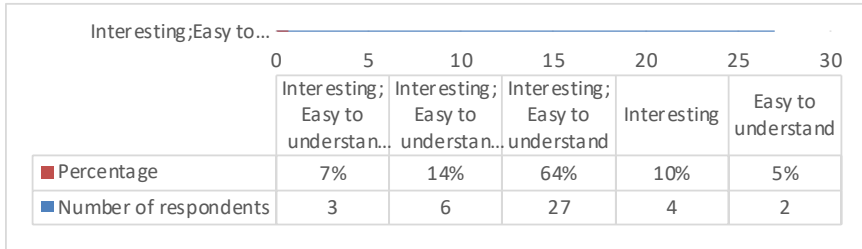
The positive difference scores indicate that the majority of the respondents experienced improvement in their skills and knowledge after participating in this Micro-credential course. However, the data also highlights variations in progress among participants, with some facing challenges or remaining constant in their proficiency. Table 1 shows the result of the Entrance-Exit survey.

Entrance-Exit Score		-4	-3	-2	-1	0	+1	+2	+3	+4
RQ1: How would you rate your literacy in using MS PowerPoint?	Respondents	0	0	0	0	4	<b>19</b>	14	3	2
	Percentage (%)	0	0	0	0	10	<b>45</b>	33	7	5
RQ2: How would you rate your literacy in creating animation using text in MS PowerPoint?	Respondents	0	0	0	0	4	7	11	<b>14</b>	6
	Percentage (%)	0	0	0	0	10	17	26	<b>33</b>	14
RQ3: How would you rate your literacy in creating animation using image in MS PowerPoint?	Respondents	0	0	0	0	2	4	8	11	<b>17</b>
	Percentage (%)	0	0	0	0	5	10	19	26	<b>40</b>
RQ4: How would you rate your literacy in screen recording using MS PowerPoint?	Respondents	0	0	0	0	2	7	9	<b>13</b>	11
	Percentage (%)	0	0	0	0	5	17	21	<b>31</b>	26
RQ5: How would you rate your literacy in slide show and audio recording using MS PowerPoint?	Respondents	0	0	0	0	3	13	<b>16</b>	7	3
	Percentage (%)	0	0	0	0	7	31	<b>38</b>	17	7

**Table 1:** Entrance-Exit Survey

Figure 5 illustrates respondents' feedback on the Lifelong Learning Micro-Credential Animation and Videos in MS PowerPoint course. Participants' opinions on the course's efficacy were assessed based on factors like interest and ease of comprehension. Notably, 64% found the content both interesting and easy to understand, indicating effective course design. Additionally, 14% noted that while interesting and comprehensible, the

tutorial contained substantial information. Notably, 10% found it interesting, while 5% emphasized its ease of understanding. These diverse responses highlight a generally positive course reception, while specific feedback provides insights for refining the learning experience and accommodating various learning preferences.



**Figure 5** Respondents’ feedback on the Lifelong Learning Micro-Credential Animation and Videos in MS PowerPoint course

## 7.0 CONCLUSION

Microsoft PowerPoint is commonly used to create slideshows mostly for presentation purposes. However, most users are not aware of the unique functions and features that MS PowerPoint provides. Therefore, the Lifelong Learning Micro-Credential Animation and Videos in MS PowerPoint was developed for those who are interested in learning and using Microsoft PowerPoint to make presentations more powerful and interactive. As Micro-credential is a short course, this course can be done within a month with the completion of a few learning hours per week. Currently, more than 100 students have enrolled in this course including 42 students from the Medical Faculty, Universitas Tanjung Pura, Pontianak, Indonesia. Some of the students managed to complete the course with a Partially Completion Certificate while few of them were awarded the Fully Completion Certificate. The result of the research shows that most students found that this course is interesting and easy to understand. In the future, additional modules can be added to enhance the reliability of this course.

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## **10.0 AUTHORS' CONTRIBUTION**

Wan Anisha led the writing of the manuscript, Azlina prepared the methodology, Syarifah Adilah focused on the related work, Rafizah conducted the survey and analysis, and Saifulnizam designed the figures.

## **11.0 CONFLICT OF INTEREST DECLARATION**

We certify that the article is the Authors' and Co-Authors' original work. The article has not received prior publication and is not under consideration for publication elsewhere. This research/manuscript has not been submitted for publication, nor has it been published in whole or in part elsewhere. We testify to the fact that all authors have contributed significantly to the work, validity, and legitimacy of the data and its interpretation for submission to IJELHE.

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