

# Introducing a New Teaching Information System through Workshop: Experiences of Participants

Kew Si Na, Ong Chan Kwan

**Abstract:** *As the information and communications technology becomes more advanced, various new information and education systems are implemented in universities. Hence, universities often conduct workshops to introduce on how to use the new systems. In this respect, one challenge might be faced by universities is how a workshop can be conducted effectively to ensure that participants master the new teaching information systems. Thus, this paper aims to share (i) the ways of an instructor introducing a new system, and (ii) the experiences of participants to learn a new system in the workshop. A total of 13 participants attended the workshop, but only 9 of them voluntarily filled in the questionnaire form. The result shows that participants agreed that the workshop content is useful for them and they learned how to use the new system.*

**Index Terms:** *Information and Education System, Teaching Data, Workshop*

## I. INTRODUCTION

With the growth of information and communication technologies, the use of information technology in educational management has brought benefits to the higher education institution. With its advantages, it is important to come out better ways of enhancing the quality of education. In this respect, more innovators have designed different new technologies to maximize the teaching and learning practices. This can be observed that new and developing technologies have gradually substituted the traditional education [1] and more promising technologies have been emerged in educational field [2]. Besides that, 21st century education needs more innovative and advanced system to support the teaching and learning practices and administrative processes in higher education. Thus, different information and technology systems are introduced and implemented in higher education.

It is fact that information technology has a major impact on educational field, as different technologies are utilized by educators and learners to accomplish academic goals and reduce the cost of education. Nonetheless, when implementing a new information technology system to higher education, it is a challenge to teach the users to master the system and to ensure they can use the system effectively. Thus, this study intents to show the ways of an instructor introducing a new information teaching system in a

workshop, and to examine the participants' experiences in learning this new system from the workshop. The workshop aims to deliver clear instructions and information to the participants on a certain topic.

This paper is organized as follows: in literature review, information technology, workshop and related works are stated in Section II. Section III presents the methodology used in this study, while Section IV shows the results and the discussion of the review. Finally, the conclusion and limitations are shown in Section V.

## II. LITERATURE REVIEW

### A. Information Technology

The application of IT has brought advantages to society and organization, as it has different functions to collect and analyze information, and is important to assist in knowledge management and organizational learning [3]. One of the system examples is teaching information system which is implemented to evaluate teaching and learning in university. It also helps to collect teaching information and data related to the quality of teaching and to provide a fairer assessment based on teaching data evidence. The data from information technology can help to solve learning issues and provide learning analytics intervention for them [4]. Moreover, based on the literature review, the organization memory can be improved by implementing IT [5] [6], which will then help to enhance the organizational effectiveness.

### B. Workshop

The purpose of workshop is to explore and deliver the knowledge and techniques to the participants [7], which are applicable to their work. Besides that, workshop involves lectures and hands-on practices for individual to carry out their practices so as to apply it in their work. Moreover, a workshop also gives the good chance for participants to get used with new techniques and to practice these new knowledges during the workshop.

### C. Related Works

There is one previous study about how to conduct a successful workshop conducted by [8]. The study was defining the success of a workshop from participant's perspective with the aim of presenting updated knowledge and to teach medical skills to the participants.

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This research studied about 30 articles from the Medline search, reporting basic characteristics of a successful workshop. For example, to conduct a successful workshop, clear and defined objective must be delivered to the trainees. It is the responsible of the organizer to make sure they are covering all trainee’s expectation.

III. METHODOLOGY

The quantitative research was used to study the experiences of participants to learn a new system in the workshop. A set of questionnaires was adapted from the sample workshop evaluation questionnaire [9] ([http://enhancinged.wgbh.org/pdfs/wkshop\\_evaluation.pdf](http://enhancinged.wgbh.org/pdfs/wkshop_evaluation.pdf)) and portfolio development participant feedback form [10] (<https://www.locs.on.ca/wp-content/uploads/2015/10/Workshop-portfolio-feedback.pdf>). In the questionnaire, there were (i) workshop content, (ii) workshop design, (iii) workshop instructor, and (iv) workshop results. Additionally, there was an open-ended question with the purpose to allow the respondents to freely write their additional comments regarding the workshop.

The data collected in the questionnaires were keyed in to an excel form for data analysis process. A total of thirteen participants attended in the workshop, but only nine of them filled in the questionnaire. In other words, an overall response rate of 69% was achieved. An instructor was involved in this workshop to introduce the new system to the participants. The demographic profiles of participants are shown in the Table 1.

Table 1: Demographic profiles of participants

Demographic Profiles	Number	Percentage (%)
<b>Gender</b>		
Male	3	33.33
Female	6	66.67
<b>Working Experiences</b>		
Less than 1 year	1	11.11
2-5 years	0	0.00
6-10 years	1	11.11
More than 10 years	7	77.78

A. Workshop procedure and design to introduce a new system

The workshop was carried out to introduce the new teaching information systems to the university staffs. The procedure of workshop was shown in Figure 1.

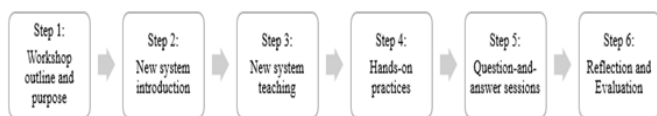


Figure 1. Workshop procedure

In step 1, instructor firstly explained the workshop outline

and purpose to the participants so that they could have an overall idea on the purpose of the workshop and how the workshop was carried out. In step 2, instructor asked the participants about whether they had learned or heard the new teaching information system before in order to understand the prior knowledge and background of the participants regarding the new teaching information system. It is important to understand their prior understanding before the workshop started. For example, in this workshop, the majority of the participants had no much knowledge about the new teaching information system; thus, instructors had to explain this system in a slow and detailed manner. In addition, the instructor used a video to do the introduction to grab the attention of the participants. This video was about 3-5 minutes. It was then followed by the further explanation on the new system.

In step 3, the instructor started teaching the new teaching information system by using Powerpoint Slides integrated with different multimedia features such as text animation, audio, video and graphic. For example, this new teaching information system has different components where the staff need to fill up the relevant teaching information. In this respect, instructor at first explained the function of the component by giving some real-life examples. This can help participants connecting it to their working experience that they can easily understand the function of this component of the new teaching information system. After making sure that they understood the function and way to fill up the relevant information, the instructor showed the participants some tutorial videos to deepen their understanding. This video can refresh and help them recall back what had been taught by instructor. Also, the use of video is great for participants with visual learning styles.

In step 4, after learning how to use the new system and watching the video, participants were given the certain time to do hands-on practice. Instructor moved around the classroom to monitor and provide the assistance for those who faced problem when using the new teaching information system. For example, some of them faced problem to find the button of “add new” and instructor taught them on the spot. This hands-on practice is a good session for participants to practice and apply the knowledge to use the new system. In step 5, after the hands-on practices, a question-and-answer session was carried out for participants to ask the questions. Lastly, reflection and evaluation session were conducted before the workshop ended. This session provided a chance for the participants to reflect what they had learned and then filled in the questionnaire.

IV. RESULTS AND DISCUSSIONS

This session shows the experiences of participants to learn a new system in the workshop. These include the workshop content, design, instructor and results.



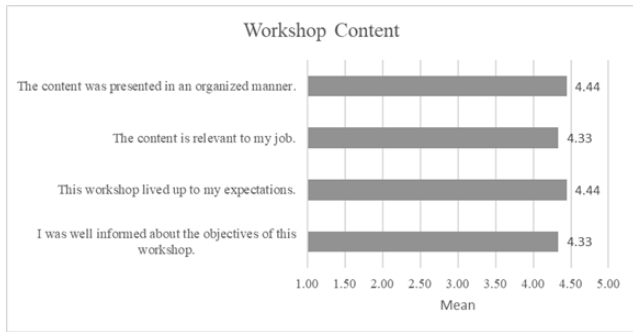


Figure 2. Workshop Content

Figure 2 show the result of the workshop content. All of them agreed that workshop contents were useful for them to learn this new teaching information system. In particular, they greatly agreed that the workshop lived up their expectations on how to use this new system and the content was presented in an organized manner. It is because instructor provided step-by-step guidance and some useful examples to broaden their understandings. For example, they mostly agreed that they were well informed about the objectives of the workshop, in which the instructor had explained the objective of the workshop in Step 1. In addition, the instructor also used Powerpoint slides integrated with different multimedia features such as text animation, audio, video and graphic when teaching this new system. These multimedia components made the workshop content lively and meaningful that helped to attract the attention of the participants. For instance, the tutorial video was used to cater visual learners.

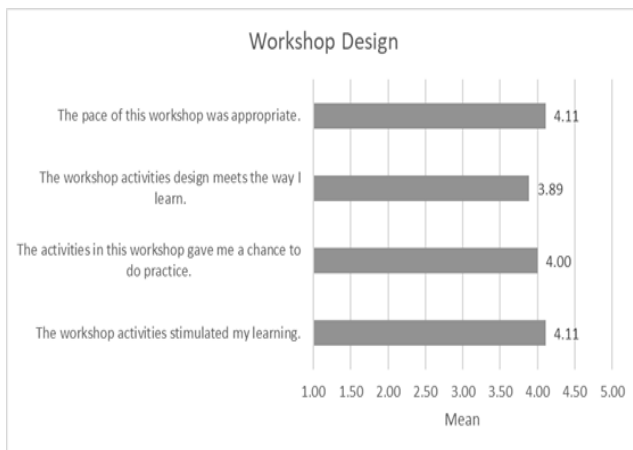


Figure 3: Workshop Design

The outcome of the study shown in Figure 3 demonstrated that the majority of the participants agreed that the workshop activities stimulated their learning and the pace of the workshop was appropriate. Besides that, they also mostly agreed that the workshop activities design meet the way they learn. In this respect, it is then believed that the workshop procedure with six steps used by the instructor was useful and correct. The workshop activities like showing tutorial videos, hands-on practice and so on have played an important role to engage and stimulate the interest of the participants to learn this new system. It is because most of them showed positive response on the item of “*The activities in this workshop gave*

*me a chance to do practice*”. It could be then concluded that a hands-on practice is essential when teaching a new system in the workshop.

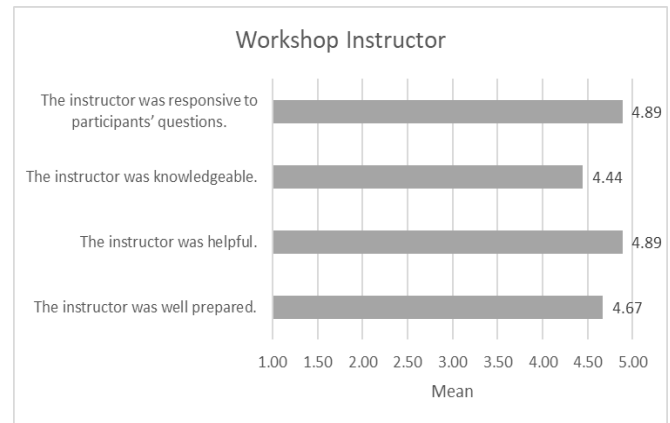


Figure 4: Workshop Instructor

In Figure 4, it shows the outcome of the workshop instructor. The majority of the participants equally strongly agreed that the instructor was responsive to their questions and the instructor was helpful respectively. In this workshop, the instructor designed the question-and-answer session, in which participants could freely ask the questions regarding the new teaching information system. Because of the instructor was helpful, the questions and problems faced by the participants when learning this new system were solved in the workshop. They also agreed that the instructor was well prepared and knowledgeable. In conjunction with this, it can be concluded that the role of instructor in the workshop is significant. Therefore, to ensure the success of a workshop on teaching a new teaching information system, the instructor must master the system function, prepare the teaching well and be help.

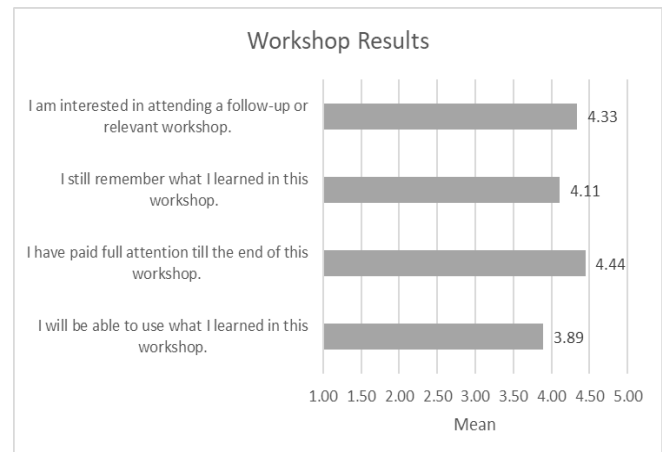


Figure 5: Workshop Result

Lastly, the workshop result is shown in Figure 5. Because of the integrations of multimedia components and video tutorials in the workshop, and also a good workshop procedure from step 1 to 6 designed by instructor when teaching the new system, the majority of the participants agreed that they had paid full attention till the end of this workshop, they were interested in attending a follow-up or relevant workshop, and they still remembered what they had learned in the workshop as well as they were able to use the new teaching information system.

This can also be supported by one additional comment in the open-ended question by a participant who wrote “*Everything was good and well delivered...*”. Through this workshop procedure, a clear and step-by-step teaching lecture integrated with videos tutorials on the new system was provided, and a hands-on session was applied with student-centred learning strategies. This strategy allowed the participants to take their own responsibility to practise the new teaching information system in the workshop. This has resulting in the participants to be more engaged to the workshop and fostered their motivation and attention to learn.

### V. CONCLUSIONS

Most higher education institutions have made investment in the technologies to implement different information technology systems to ease the administrative burdens and make education more effective. However, a well-designed information technology needs good teaching ways to introduce it to the users, where this paper has made contribution on how to introduce a new teaching information system in workshop. The outcome of the study shows that students had positive response on this workshop to learn the new system, as they agreed that the workshop content on teaching the new teaching information system was well presented and lived up their expectations, the instructor was helpful, the designed met their learning way, and they were able to use the system.

Nevertheless, there were still several limitations to the study. The number of respondents involved in this study is small and thus, a greater number of respondents are needed for future study. Besides that, only questionnaire was used in this study; therefore, more data instruments are needed for the future study, for example interview.

### ACKNOWLEDGMENT

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