Lecturer e-Training Program to Support University Teaching

Programme d'e-formation pour les chargés de cours pour appuyer l'enseignement universitaire

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Abstract

This article attempts to explore the extent to which Lecturer e-Training Program (LeP) supports lecturers in their preparation for student-centred teaching. LeP was conducted in a blended mode, that is, it involved an online self-paced learning module followed by an interactive online discussion and ended with a face-to-face action learning. It was compulsory for all lecturers in this university to enrol in LeP. The data collection involved distributing questionnaires to all 36 lecturers. After that, 16 lecturers were selected at random for one-to-one structured interviews. In this study, it was found that LeP contributed significantly to the lecturer preparation for student-centred teaching, in particular, Stage 2 (Online Discussion) and Stage 3 (Face-to-Face Action Learning). Lecturers in this university were mostly homogeneous with regard to culture. It would be interesting to test LeP across cultural diversity as it was believed Asians and Westerners think differently.

Résumé

Le présent article vise à explorer la mesure dans laquelle le Programme d'e-formation (Lecturer e-Training Program) appuie les chargés de cours dans leur préparation pour un enseignement centré sur l'étudiant. Le Programme a été réalisé en mode hybride, c'est-à-dire avec un module d'apprentissage en ligne à rythme libre, qui a été suivi d'une discussion interactive en ligne et finalement d'un apprentissage par l'action réalisé en personne. Tous les chargés de cours de cette université devaient s'inscrire au Programme. La collecte de données a consisté à distribuer des questionnaires aux 36 chargés de cours. Ensuite, 16 d'entre eux ont été choisis au hasard pour des entrevues structurées en tête-à-tête. Dans cette étude, on a conclu que le Programme contribuait de façon importante à la préparation du chargé de cours pour un enseignement centré sur l'étudiant, particulièrement le deuxième stade (discussion en ligne) et le troisième (apprentissage par l'action réalisé en personne). La culture des chargés de cours de cette université était surtout homogène. Il serait intéressant de tester le Programme à travers une diversité culturelle, car on croit que les personnes asiatiques et occidentales pensent différemment.

Introduction

Universities are shifting learning away from the traditional behaviourist perspective where students are passive rote-learners (partly due to teacher-centred teaching) to a modern collaborative, constructivist paradigm where students are actively involved in their learning (Garrison, 2016). Explicitly, students learn through learning activities designed by their lecturers, and they construct knowledge via collaboration and experiences gained in the activities. In fact, Kolb, Rubin, and McIntyre (1984) argue that "learning is the process whereby knowledge is created through the transformation of experience" (p. 38). Thus, students are encouraged to build on their prior knowledge and experiences to attain a deeper understanding of the events and to capitalize on their peers' shared experiences. In this perspective, according to Mayer (1998), the role of the student has transformed from a recipient of knowledge to a constructor of knowledge; they need to acquire metacognitive skills for controlling the cognitive processes during learning.

In the initial stages of the conversion from a teacher-centred approach to a student-centred approach, numerous issues arise. Among them, the lack of some support resources, such as, the lack of skills training for lecturers and students to navigate information technology, and the lack of technology knowledge to facilitate delivery (Beadle & Scanty, 2008; Harris, Connolly, & Feeney, 2009). Usually, universities handle this kind of predicament by providing training to the lecturers. According to Sloman (2001), training is a process of acquiring the knowledge and skills related to work requirements using formal, structured, or guided means, but excluding general supervision, job specific innovations, and learning by experience. The knowledge and skills needed in student-centred teaching would be, among others, how to host an online forum, how to design learning activities, and how to facilitate and assess students' learning. Hence, to achieve the desired outcomes, the training must accommodate both hardware and software technology. Besides using computers in training, lecturers must acquire first-hand experiences in online forum discussions, so that when they eventually post topics for their students to discuss online, they are aware of the technical issues involved as well as the difficulties in maintaining the flow of discussions. Therefore, to reach the desired outcome, a private university in Malaysia decided to provide training in a blended mode known as Lecturer e-Training Program (LeP) to the lecturers. This article attempts to explore the extent to which LeP supports lecturers in their preparation for a shift towards student-centred teaching.

In most universities, lecturer training was predominantly in the face-to-face mode. It was regarded as an effective intervention for enhancing lecturer performance to achieve a competitive advantage in the marketplace (J. Lee, 2010). Unfortunately, less than 20% of the corporate investment in training resulted in performance improvement or transfer of training to the workplace (Holton, Bates, & Ruona, 2000). As a result, a hybrid model of training, one which incorporated online computer-based training with classroom time for the practice exercises, was considered. Thompson Learning (2002) reported in a study of 128 employees from various industries, there was a 30% increase in performance from the employees when using a blended approach. Other research concluded that blended training was an ideal approach when the training involved complex human performance skills, such as interpersonal communication (McFeely, 2002). Ng and Cheung (2007) pointed out that blended learning integrating online discussion into the classroom instruction might provide students with ample time to foster critical thinking, reflection, and articulation of their viewpoints. It was for these motives that this university subscribed to e-training in a blended mode as lecturers were adult learners who

learned best by actively creating meaning out of their experiences. It was in line with an adult learning theory, known as transformative learning, which was based on a constructivist assumption, according to Cranton (2006). Usually, adult learners had developed a schema for understanding the world before they accepted any training. For them to accommodate new learning into their worldview, they had to actively seek to understand new concepts and reflect on how the new learning might support or disorient their current view (Hardman & Robertson, 2012). In this study, LeP was developed according to the skill-driven approach of blended learning which combined self-paced learning with facilitator's support in order to develop specific skills.

In agreement with Cranton's (2006) constructivist assumption, LeP lecturers constantly shared their professional and teaching experiences in online forum discussions, and they reflected on their peers' postings. These approaches encouraged collaboration, provided opportunities for self- and peer assessment, and offered explicit instruction on learning skills. Moreover, they were inherently displaying a student-centred teaching approach (Weimer, 2013). Lecturers also had more control over the pace of the training, content selection, and the depth and breadth of the training content they picked to explore. However, they had to complete the training modules in the ordered sequence from Module 1 to Module 6. This self-paced feature was a plus for the e-training program, as indicated by Berge's research (2007), which stated that the priority in the workplace was to solve work issues, while training inadvertently took a back seat, especially for full-time staff.

There is a distinctive difference between e-training and e-learning. E-training is also referred to as web-based training or online training. The letter "e" is an abbreviation of the word "electronic" which relates to the process of training, or learning, using an electronic medium. The term "training," according to Horton (1999), emphasizes the practical or vocational direction of the learning and typically is used on a professional or corporate level. On the other hand, the term "learning" emphasizes a learner activity in the learning process where the learner is free to select what will be studied and in which sequence (Anohina, 2005).

Having sorted out the difference between e-training and e-learning, the findings from one study expressed concerns that e-training conducted entirely online might miss out on users' interactions and tasks that required group work (Suraya, Nur Azizan, Mohamad Taha, Leong, & Hong, 2008). The present study managed these concerns by conducting LeP in a blended mode, providing face-to-face personal interactivity and the intimacy of the classroom. In Malaysia, particularly in the University of Hospitality, there was a paucity of e-training and this study desired to provide some insights into how LeP might fill the training scarcity, predominantly in the student-centred approach.

Before LeP was introduced, lecturers were trained in the traditional manner, that is, in face-to-face mode running from 9:00 a.m. to 5:00 p.m. daily for five consecutive days. Training was usually conducted one week before the commencement of a new semester. New lecturers needed to be trained within very ambitious timelines. While struggling to train lecturers quickly, universities were also facing decreasing budget and human resources that were once available to develop and deliver training (Taran, 2006). Khademi, Kabir, and Haghshenas (2011) concurred that traditional training practices were costly because of time and money spent on travelling and

accommodation. Traditional training was also less flexible as the training courses could only be held at a given time and place.

As a result, LeP was designed and implemented. New lecturers could sign up for the training as soon as they joined the university, and there was no need to wait for a training launch date like in the traditional practice. One of the advantages of LeP was that lecturers could harness knowledge gained right away in the teaching, and brought it back to the forum and face-to-face sessions to discuss any problems and difficulties they encountered in their teaching. According to a report, the adoption rate of blended training was rapidly increasing (Bonk, Kim, & Zeng, 2006). It was because the evolution of blended training and approaches to instruction leveraged the emerging power and potential of new approaches to teaching and learning (Chakravarty et al., 2016). In fact, e-learning had emerged as a significant addition to traditional models of workplace training. In a survey of 800 Australian employers, 50% indicated that their organization had already been using e-learning, and 60% expected their usage to grow in the next two years (Australian Flexible Learning Framework, 2010).

Lecturer e-Training Program (LeP)

This training was conducted in a blended mode, that is, it involved an online self-paced learning, followed by an interactive online discussion, and ended with a face-to-face action learning. That is, the training blended the online mode (Stage 1: Online Self-Paced and Stage 2: Online Discussion) with the offline mode (Stage 3: Face-to-Face Action Learning). The compulsory modules (CM) in LeP were as follows:

CM 1: Classroom Management and Teaching Strategies

CM 2: Blended Learning in Hospitality School

CM 3: Problem-Based Learning in Hospitality School

CM 4: Learning Outcomes

CM 5: Teaching and Learning Theories

CM 6: Assessment and Evaluation

This e-training program was registered under the Malaysian Human Resources Development Fund (HRDF). It bestowed credence to this program as the Fund scrutinized, among other things, course content, training style, course objectives, and trainer information before giving approval for registration. HRDF was a part of the government's initiative to encourage private sector employers in the manufacturing and service industries to retrain and upgrade the skills of their employees in line with the needs of their business and industrialization strategy of the country. It was managed by a company under the Ministry of Human Resources Malaysia. It provided workers access to skills training and certification.

LeP was a required program for all lecturers at this university. They could sign up for this training at any time convenient to them. They could continue with their core teaching tasks while completing training, as the first two stages were online. New recruits could join the LeP program

almost immediately, and did not need to wait for the following training cycle. They interacted with the training materials as well as with each other in the forum. Hence, they shared knowledge and experiences in the training. It was through this sharing that they acquired in-depth learning and, at the same time, built friendships. As this e-training was conducted in a blended mode (online and offline interactions), the lecturers gained first-hand experience in online communications which they subsequently applied in their teaching. Also, the lecturers acquired an insight into blended learning which was promoted by the government of Malaysia in its five-year e-learning strategy.

The time taken to complete each module varied according to the lecturer's availability and workload. Some of them required less than a month while others needed longer. Nonetheless, the average time to complete all six modules was 7.7 months. During this period, whatever they learned from the training could be immediately applied to their teaching. When they encountered any problems or issues, they could bring them up for discussion in the forum or refer to the trainers. In this manner, lecturers acquired what was termed on-demand knowledge.

All of the six modules were available in a purpose-built training portal, and lecturers could access these modules 24 hours a day, 7 days a week. Each module was self-contained. Stage 1 and Stage 2 of a module received minimum supervision from the author, who was also the trainer. At Stage 3, lecturers met face-to-face to discuss real-world cases with the instructor. In LeP, the pace of progress from one module to another usually slowed down at Stage 2 (Online Discussion) and Stage 3 (Face-to-Face Action Learning). It was because there was a need to have a minimum of five lecturers to sustain productive interactions. In LeP, once started, lecturers must complete a module within a month. However, it was not necessary to move on to another module immediately upon completion of a module. A break in the training was allowed, but lecturers had to complete all the six modules within nine months.

The courses taught by the participating lecturers were in the areas of tourism, hospitality, culinary arts, and business. The majority of these lecturers had professional experiences in their respective field. Nevertheless, they were relatively new to teaching; 77.8% ($n = 28$) had less than two years of teaching experience. The lecturers were mostly homogeneous with regard to culture. Demographics of the sample were as follows: 55.6% ($n = 20$) of the subjects were male and 44.4% ($n = 16$) were female; 61.1% ($n = 22$) were bachelor degree holders, 27.8% ($n = 10$) were master degree holders, and 11.1% ($n = 4$) diploma graduate; ages ranged from 23 to 65 with a mean of 36.6 years.

There were three stages in each module of LeP, that is, Stage 1 (Online Self-Paced), Stage 2 (Online Discussion) and Stage 3 (Face-to-Face Action Learning).

Stage 1: Online Self-Paced

Lecturers completed this stage at their pace, but stayed within a one-week period. They were given online notes supported by Internet articles to read. After that, they took an online test which consisted of two multiple-choice questions, each with three difficulty levels, that is, low, medium, and high. In total, there were six questions in the test and the duration was 15 minutes. They needed to attain a mastery level of 75% before they could move on to Stage 2. Lecturers were allowed to re-take the online test numerous times. They could even refer to notes or discuss

among themselves as the purpose of the test was for learning and not of learning. In student-centred teaching, assessment and learning were blended. The assessment reinforced learning and students' contributions in the learning activities were assessed. According to Weimer (2013), student-centred teaching attempts to redress the imbalance of grades rather than a learning experience, which was the focus of students and lecturers in several assessments.

Stage 2: Online Discussion

Lecturers were allotted two weeks to discuss a given scenario in an online forum. There was a minimum of five lecturers per forum to support productive discussion. First, they offered their views and comments on the scenario. After that, each lecturer had to reflect and comment on at least three postings from their peers. They could not respond by saying "I agree" or "I disagree" without giving their reasons. In this forum, lecturers shared their experiences in the context of their disciplines when they responded to the scenario. Also, they had to substantiate and defend their postings as collaborative, constructivist learning set the conditions associated with deep and meaningful approaches to learning (Garrison & Archer, 2000).

Stage 3: Face-to-Face Action Learning

Lecturers applied knowledge gained in Stage 1 and Stage 2 to real-world teaching and learning cases when they had face-to-face discussions with the trainer. They were assigned a case to reflect on for at least two days before the face-to-face session began. Each session lasted at least two hours and had a minimum of five lecturers. The lecturers argued and discussed the cases presented to them, drawing on their personal experiences to support their argument. Occasionally, several selected lecturer postings in the forum were addressed in the face-to-face session. At this stage, the principal aim was to allow the lecturers to explore all possibilities and be involved in the discourse. The exploration process was extended beyond the face-to-face session leading to the integration of ideas and findings, which were subsequently tested by the group members for possible resolution or application. This happened so that the discussion might have led to deeper critical thinking through their collaborative work (Abrams, 2005), something germane to student-centred teaching.

Methodology

In this study, all lecturers who had completed LeP were given questionnaires. The return rate was 100%, even though they were told their participation was voluntary. One possible explanation was that the researcher and participating lecturers were colleagues and friends, and furthermore, the researcher was also their trainer.

After that, 16 lecturers were randomly selected for one-on-one structured interviews. Again, even though their participation was voluntary, all of them agreed to be interviewed. The researcher conducted all the interviews which lasted around 30 minutes per lecturer. The atmosphere was cordial and friendly. The lecturers shared their experiences and difficulties faced in the e-training. The interview data were used to support the quantitative data obtained from the questionnaires.

Data Collection

This study started in January of 2014 and lecturers were expected to complete all six modules by June 2015. However, there was a delay due partly to their teaching workload and other commitments. Data collection only commenced in August 2015, and even then, 14 lecturers were still in the process of completing the training. As a result, they were left out of the study, and the questionnaires were distributed only to the 36 lecturers who had completed all six modules. The items in the questionnaire touched on all three stages in LeP and lecturers' perception of student-centred teaching (refer to Appendix A). They were given sufficient time to respond to the items in the questionnaire and subsequently within three days all the surveys were returned. After that, four lecturers from each course (tourism, hospitality, culinary arts, and business), a total of 16 lecturers, were selected at random for a one-on-one structured interview (roughly 30 minutes per lecturer). They were asked whether they practised student-centred teaching, and if so, did they agree that LeP helped them in the implementation of the strategy, and the influence LeP had on their teaching. The structured interviews (refer to Appendix B) involving all 16 lecturers were conducted over a period of three weeks.

Measures

Stage 1: Online Self-Paced. The Online Self-Paced stage was measured using a four-item scale, and the score for each subject was a summed score across the four items, using a five-point Likert scale ranging from 1 (*strongly disagree*) to 5 (*strongly agree*). All the test questions were written by the subject matter experts who also developed the online notes. A sample question was "The online notes and tests are designed to provide facts and information for forum discussion and face-to-face interactions." The reliability of the four-item scale, computed using Cronbach's alpha, was 0.854.

Stage 2: Online Discussion. The Online Discussion was measured using a five-item scale, and the score for each subject was a summed score across the five items, using a five-point Likert scale ranging from 1 (*strongly disagree*) to 5 (*strongly agree*). The forum topics mimic the real-world situations in the classroom so that it was easier for the lecturers to relate, and it also created extra excitement in the discussion. A sample item was "I participate actively in LeP forum by giving feedback to my colleagues' postings." The reliability of the five-item scale, computed using Cronbach's alpha, was 0.723.

Stage 3: Face-to-Face Action Learning. The Face-to-Face Action Learning was measured using a three-item scale, and the score for each subject was a summed score across the three items, using a five-point Likert scale ranging from 1 (*strongly disagree*) to 5 (*strongly agree*). A sample question was "I gain a variety of experiences on student-centred teaching through the face-to-face sessions." The reliability of the three-item scale, computed using Cronbach's alpha, was 0.764.

Preparation for Student-Centred Teaching (SCT)

A three-item scale was used to assess the lecturers' preparation for student-centred teaching after the completion of all six LeP modules. The items included whether the experiences gained from LeP forum interactions assisted the lecturers in conducting online forum

discussion for their students. The second item touched on preparing online teaching materials and forum topics for debate. The third question focused on applying the outcomes of the LeP forum discussion and face-to-face interactions in classroom teaching. The preparation for SCT score for each subject was a summed score across the three items, using a five-point Likert scale ranging from 1 (*strongly disagree*) to 5 (*strongly agree*). The reliability of the three-item scale, computed using Cronbach's alpha, was 0.831.

Results

Table 1 shows that 72.2% ($n = 26$) of lecturers agreed the experiences gained in LeP assisted them in conducting online forum discussion (Stage 2), which to them was a student-centred approach (80.6%, $n = 29$). Moreover, 47.2% ($n = 17$) of them also claimed that the online reading materials and forum discussion were some forms of learning activity they could utilize with their students. The majority of the lecturers (91.6%, $n = 33$) gained experiences to conduct student-centred teaching through the face-to-face session (Stage 3).

Table 1

Frequency Count (n = 36)

Item	Agree	Neutral	Disagree
Experiences in LeP Assist in conducting online forum	26 (72.2%)	9 (25.0%)	1 (2.8%)
Online forum discussion is student-centred learning	29 (80.6%)	7 (19.4%)	0 (0%)
Gain experiences on student-centred teaching from LeP face-to-face session	33 (91.6%)	3 (8.3%)	0 (0%)
Online reading materials and forum discussion are student learning activities	17 (47.2%)	16 (44.4%)	3 (8.3%)

A multiple linear regression analysis was used to determine the extent to which LeP supported lecturers in their preparation of student-centred teaching. The correlation coefficients shown in Table 2 conveyed an insight into the bivariate relationships among the variables used in the study. It indicated that their preparation for student-centred teaching (SCT, dependent) was significantly correlated with all the three predictor (independent) variables (Stage 1, Stage 2, and Stage 3, $p < 0.05$). Also, each of the predictor variables was in turn significantly correlated to each other. The highest correlation coefficient was between predictor variables Stage 1 and Stage 3 (0.656 at $p < 0.01$), followed by Stage 2 and Stage 3 (0.505 at $p < 0.01$). Stage 1 was also significantly correlated with Stage 2 (0.379 at $p < 0.05$).

Table 2

Correlations

	Preparation for SCT	Stage 1	Stage 2	Stage 3
Preparation for SCT	1	0.553^{**}	0.355^{*}	0.605^{**}
Stage 1	0.553	1	0.379^{*}	0.656^{**}
Stage 2	0.355	0.379	1	0.505^{**}
Stage 3	0.605	0.656	0.505	1

* Correlation is significant at 0.05 level (two-tailed)
** Correlation is significant at 0.01 level (two-tailed)

As the predictor variables were significantly correlated with each other, and the tolerance values of Stage 1 to Stage 3 were close to zero with the one variance inflation factor (VIF) greater than two (Stage 3), collectively it pointed to the possibility of a multicollinearity problem. Subsequently, collinearity diagnostics confirmed a multicollinearity problem as the eigenvalues close to zero indicates that the predictor variables were highly intercorrelated, and the condition index greater than 15 indicated a possible problem with collinearity. Hence, there was a re-run of the multiple linear regression with z-scores of the predictor variables followed by the factor analysis.

Table 3 shows the results of a re-run of the multiple linear regression which was a model with the adjusted R-square of 0.340, implying 34% of the total variations of the preparation for SCT could be explained by the predictor variables. The higher the value of R-square, the higher the explanatory power of the model. The smallest value of the standard error of estimate of 0.04058 was worthy enough to imply reliable prediction of the model. From the ANOVA printout, the value of F was 6.998 with $p < 0.001$. Together they suggested that the model was statistically significant.

Table 3

Model Summary and ANOVA

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.629	0.396	0.340	0.04058

ANOVA

Model	Sum of Squares	df	Mean Square	F	P
Regression	0.035	3	0.012	6.998	0.001
Residual	0.053	32	0.002		
Total	0.087	35			

Note: Significant at the $p < 0.05$ level.

The beta coefficients in Table 4 reflected the relative impact of the dependent variable of a change in one standard deviation in either variable (Hair, Black, Babin, & Anderson, 2010). Hence, the beta coefficients could be used to compare the relative strength of the predictors in a model. The largest beta coefficient in this model was Stage 3: Face-to-Face Action Learning (beta = 0.440, $p < 0.05$), and it was followed by Stage 2: Online Discussion with a beta coefficient of 0.402 ($p < 0.05$). Stage 2 and Stage 3 were significant predictors of preparation for SCT with Stage 3 having a higher impact than Stage 2. But Stage 1 was not a significant predictor ($p > 0.05$).

Table 4

Coefficients

Model	Unstandardized Coefficients		Standardized Coefficients	t	p
	B	Std. Error	Beta		
Constant	0.897	0.007		132.686	0.000
Stage 1	0.010	0.007	0.202	1.470	0.151
Stage 2	0.020	0.007	0.402	2.926	0.006
Stage 3	0.022	0.007	0.440	3.205	0.003

Note: Dependent variable = Preparation for SCT. Significant at the $p < 0.05$ level.

All the 16 lecturers randomly selected for a structured interview disclosed that they practised student-centred teaching. The commonly used strategies were online forum discussion,

the immersion approach, project-based learning, case study, debate, and field trips (refer to Appendix C). The online forum discussion was based on articles read or videos watched, and occasionally this debate was extended to the classroom. As for the project-based learning, students went out to actual sites to collect data. The cases used in the case study were either written by the lecturer or obtained from the Internet. The students were sometimes given the debate topic impromptu. Otherwise, they were allocated two weeks to prepare. In a field trip, the students had to submit a reflective report based on the findings.

When the lecturers were asked "Do you agree that LeP helps you in the implementation of the strategy?" the majority (81.3%, $n = 13$) replied in the affirmative, while another three lecturers were to some lesser degree positive. They became more aware of the requirements and expectations of student-centred teaching. The program helped them to set questions at different difficulty levels and to apply different strategies to teach various topics which included scenario-based teaching. They began to respect students' opinions and to give them a say in the class. They learned to focus on students' learning rather than lecturers' teaching. They applied ideas and suggestions brought up in the forum discussions and face-to-face sessions in their teaching. One lecturer commented "Before that, I feel guilty when conducting student-centred teaching as I feel as if I am not teaching in the class."

On another question asked during the interview "Based on the modules completed in LeP, how much influence does it have on your teaching?" the response received was 60-70% impact on their teaching. Lecturers tended to have extra learning activities, and they interacted further with their students' learning. They realized that tests could be used to support learning and not just given to allocate marks. They had to make their students think. They also tried to understand their student's learning style and to use social media in teaching and learning. They received feedback and support from LeP participants, and they even applied ideas and suggestions mentioned in the forum and face-to-face sessions in their teaching, which included diploma students. One lecturer commented "There are improvements in the type of discussion questions set, that is, extra enquiry in nature leading to an additional way to tackle the problem."

Discussion

Lecturers are trained on how to teach with various instructional strategies; Now, this university is progressively moving towards student-centred teaching, and the lecturers need to be re-trained to focus further on students' learning. That is the reason why LeP was designed and implemented. The findings give some inclinations as to what to focus training on in order to support students' learning.

The results show that Stage 3 has the highest significant impact on the lecturers' preparation for student-centred teaching. It goes to show that the lecturers prefer direct contact with the trainer to articulate, negotiate, and defend their ideas. They need an authoritarian figure akin to the trainer to approve or disapprove whatever is put forward in the discussions and to show them the acceptable way to conduct student-centred teaching. This behaviour is probably due to several lecturers not having a certain form of formal educational training. The finding is consistent with literature reviews that state that the success of the classroom discourse depends on the facilitator (Anderson, Rourke, Garrison, & Archer, 2001).

This research indicates that to better prepare lecturers for student-centred teaching, the face-to-face component is indispensable in e-training programs. The implication here is that the lecturers favoured a blended form of student-centred teaching and not one that completely depends on online teaching. It augurs well for the students as they also prefer a blended mode. In a 2005 survey, Hong Kong adult students preferred the blended learning mode with extra face-to-face elements (P. W. R Lee, Dooley, & Chan, 2006). It appears that these students from Hong Kong perceive face-to-face sessions as highly valuable. This perception holds true for Malaysian students too. In a study on blended learning carried out in 2008, both the lecturers and students preferred a 50% online mode as compared to a 75% online mode (Chan, Yap, & Chong, 2010).

Apparently, blended learning is more favourable for Asian students than fully online learning. Ambient Insight (2011) predicts that Asia, after America, will become the second largest user of e-learning and blended learning products and services. Consequently, Asian universities need to ensure that they provide the necessary training on successfully blended learning pedagogical approaches and implementation. However, according to Chew (2009), there is neither a standard nor simple stage-like model of blended learning in higher education for all disciplines and all institutions. Blended learning has to be tailored to the individual, the discipline, and the organization's needs and requests. LeP designed for one university needs to be modified and tailored to the requirements of another university. One defining feature, the face-to-face component, is vital in e-training, at least in the Asian environment.

The average age of the lecturers of this study was 36.6 years. The majority of them were from the conservative school where they were taught the traditional way, and they adored their lecturers' presence. Their perception of training, whether electronic or otherwise, was still highly conventional; direct human contact was needed. If the mean age of the lecturers was lowered by ten years, the outcome might not be the same. Further research in this area might provide better answers.

This was the first time the lecturers at this university attended an e-training program. The experiences gained help them to execute student-centred teaching by enriching their skills and information on the current job. They also applied the ideas and suggestions learned to their classroom teaching. Since they were from different disciplines, the ideas put forward were unique when implemented in the learning activities, and students loved it. A structured interview comment from a lecturer:

> Yes, [I] apply the ideas discussed in face-to-face and in the forum to teaching in the class. As it is a mixed group of participants from different disciplines the ideas brought forward are unique and when I test it out in my class, my students love it.

Another key experience gained from LeP that lecturers can apply in their student-centred teaching is the sharing of ideas and reflecting on their experiences. The repercussion is that when lecturers design learning activities for their students they ought to be extra mindful of the group work and award marks that include learning processes besides learning outcomes. Moreover, they should place additional emphasis on reflection, which is one of the three dimensions of metacognition. In student-centred teaching, reflection is a powerful learning tool used to integrate facts already acquired with the recent lessons. Learning does not occur in isolation; Students need to interact with one another and with the content, discuss and collaborate with

their peers, and subsequently reflect on the materials learned. In LeP, lecturers studied in a community, both through Face-to-Face Action Learning (Stage 3) and Online Discussion (Stage 2). Therefore, they are familiar with the sharing of ideas and reflection of experiences.

In Stage 2, the lecturers had learned how to host a forum discussion for their students as they acquired first-hand experience themselves. They also realized that an academic debate in the forum was certainly different from the usual postings on Facebook and Twitter as they needed to substantiate their posts with their teaching experiences and readings. According to Perera and Richardson (2010), the learning outcomes of lecturers from forum discussions depend on the quality of actual time spent online. That is, it is not the number, but the significance of the posts that matter. The lecturers find this form of training transfer from LeP to their teaching useful for their current job and career. They are grateful that LeP offers them a chance to gain first-hand know-how and experience. Another comment from a lecturer supports this: "Yes, [I] learn how to apply the student-centred teaching in class, face-to-face and forum discussion in LeP is used in the class."

It is comforting to discern that the lecturers in LeP acknowledged the significance of online discussion to student-centred teaching. They indicate that they would most likely include online discussion in their learning activities. Since they attained the first-hand experience through LeP, they would be skilful and competent to handle some of the technical problems and potential complications their students may encounter. The lecturers also learned from LeP the importance of choosing suitable and relevant topics or scenarios for a forum discussion in order to stimulate dynamic interactions among students. However, Biggs (1987) cautions that interaction by itself does not promote deep approaches to learning, and it is through the facilitation and communication of specific design goals directed in a sustained manner that promotes deep approaches to learning. That is, the lecturers must enter the discussion forum to drive it forward to obtain higher order learning. In other words, having just a "guide on the side" in an online discussion forum may not be appropriate as it leaves many students adrift and faculty confused (Garrison & Vaughan, 2008). S. M. Lee (2014) concurs that active participation and interactions in a learning community may not be enough to promote higher order thinking skills. There is still a need for adequate and timely lecturer intervention to foster higher levels of reflecting. It is all right to shape the discussion through questions, nevertheless, it is not recommended to steer the debate to conclusions lecturers envision or take sides in the deliberations.

In this study, Stage 1 does not have a significant impact on the lecturers' preparation for student-centred teaching. It is probably because the lecturers believe they are familiar with the development of notes and tests (believing that all tests are the same). Nonetheless, the questions in the online tests in each module are incredibly different from the traditional test questions. One lecturer comments in the interview: "Your test questions do not test my understanding of the online notes."

The module test questions are designed for learning, offering support to the online notes and giving the lecturers a deeper understanding of the topic discussed. A test for learning supports learning, and it is not an evaluation of the content learned. Through LeP, at least one lecturer found an online test for learning advantageous to her students' learning as they could discuss and even refer to notes while taking the test. For the first time, her students did not

associate the test with anxiety. On the contrary, they enjoyed it, reinforcing that test for learning promotes learning indirectly.

Besides online tests, the notes were written in an interactive manner to trigger the lecturers to think, deliberate, and reflect when they read them. For instance, in Module 1, the lecturers were requested to watch a YouTube video on micro-teaching:

Let's look at a micro-teaching video

If you were to teach this lesson, how would you approach it? Do you agree with the method used in the video? Why?

What are the weaknesses you notice in the teaching? How would you improve them?

It was through discussions leading to possible responses to this series of questions that lecturers acquired confirmation of prior knowledge, clarifications of misunderstandings, and motivation and peer support in the learning process.

In this study, 44.4% ($n = 16$) of the lecturers who read the online notes and discussed with their colleagues before taking the online tests acquired added benefits regarding the preparation of their online notes. They realized it was not the same as the notes they developed in face-to-face teaching. Again through LeP, the lecturers understood that when they designed learning materials for student-centred teaching, the materials should engage students in active learning, inducing students to discuss in small groups, share ideas, and reflect on their experiences.

Conclusions and Future Research

In this study, LeP contributes significantly to the lecturer preparation for student-centred teaching, in particular Stage 2 (Online Discussion) and Stage 3 (Face-to-Face Action Learning), that have a significant impact on the preparation, while Stage 1 (Online Self-Paced) does not. These findings are meaningful for universities offering courses in hospitality, culinary arts, and tourism where lecturers are professionals in their respective fields. They are exceptionally skillful but may need individual assistance in teaching pedagogy. Training would be helpful, particularly e-training in the blended mode to provide them with further flexibility to toggle between teaching and professional commitments.

In future research, to ensure that the lecturers treat the online notes and tests in Stage 1 seriously, a few modifications to LeP may be necessary. One suggestion is to compel lecturers to respond to one or two questions in a blog which are directly linked to the notes and tests. Then the trainer will decide based on the responses whether the lecturers can progress to Stage 2. The questions posted to the blog may need to vary from time to time. Another suggestion is to produce three different sets of online test questions, where the lecturers are randomly given one set. These proposals may get lecturers to appreciate online notes and tests. Nevertheless, the ultimate aim is to develop an inclination among the lecturers to write and design online tests and notes. In student-centred teaching, these two items are crucial, and they are vastly different from traditional teaching notes and tests.

The literature presents a strong case for the increased adoption of e-based technologies within education. The most vocal advocates are even proposing a replacement of face-to-face delivery modes with Internet-based online technologies. The findings from Pillay and James (2014) suggest that cross-cultural diversity has a pervasive impact on the design of technology-enhanced learning systems. Lecturers in this university are mostly homogeneous with regard to culture, with two of them from outside Malaysia. However, they have worked in this country for several years. Therefore, in a subsequent study, it would be interesting to test LeP across cultural diversity as it is believed that Asians and Westerners think differently (Lauring & Selmer, 2010; Selinger, 2004). Moreover, Marquardt and Kearsley (1999) even claim that teaching methodologies suited for Western cultures may be totally ineffective in non-Western cultures.

Lecturers are fully aware that student-centred teaching is the way forward for the future of the students. All the 16 lecturers interviewed agree, and 94.1% ($n = 32$) of the respondents in the questionnaires also agree. These implications are favourable for the 21st century student, as they need to know how to learn, un-learn, and re-learn. As knowledge is constantly evolving, skills that they acquire to un-learn and re-learn would be very useful to them in their career advancement as well as academic enhancement. These skills are usually attained through learning activities in student-centred teaching.

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