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Lecturers' Perspectives on using *KeLiP* as an E-Learning Tool

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Abstract: The aim of this paper is to investigate the use of an e-learning tool called *KeLiP* among lecturers in one of the public university in Malaysia, University Sultan Zainal Abidin (UniSZA). Specifically, this study is intended to achieve three main objectives: to examine the opinions of lecturers towards *KeLiP*, to investigate willingness to use *KeLiP* and to examine the challenges using *KeLip*. A total of 250 lecturers responded to the survey. Interestingly, the experiences on internet and computers as well as exposure on the use of *KeLiP* among lecturers were vast. The results on opinions revealed that *KeLiP* is cost effective and easy to understand. The results also indicate that the main challenge faced in using *KeLip* was related to technical problems and lecturers were willing to use *KeLiP* if appropriate support is given.

Keywords: *Lecturers, Perceptions, e-learning Tool, KeLiP*

1. Introduction

Nowadays, the development in Information and Communication Technology (ICT) is affecting many sectors including the education sector. In higher education, application of ICT in the form of e-learning is already changing teaching and learning processes (Sife *et. al*., 2007). E-learning ranges from the way students use email and accessing coursework online while following a course on campus to programmes offered entirely online (Commission on Technology and Adult Learning, 2001: OECD 2005). E-learning is defined as the use of new multimedia technologies and the internet to improve the quality of learning by facilitating access to resources and services as well as remote exchanges and collaboration (European Commission, 2001),. It is internet-enable learning and the components can include content delivery in multiple formats, management of the learning experience and a networked community of learners, content developers and experts (Gunasekaran *et. al.,* 2002). In November 2005, the Sloan Consortium published a report on e-learning and defined that "online learning" or "e-learning" as learning in which the internet is used in delivering 80-100% of the content (Charmonman, 2006). E-learning is another way of teaching and learning as it comprises instructions delivered through all electronic media including the internet, intranets, extranets, satellite, broadcast, audio/video tapes, interactive TV and CD-ROMs (Govindasamy, 2002).

The main objective of adapting an e-learning application is to improve the education processes and to become in line with the current market demands (Saany *et. al.,* 2006). The former Secretary-General of the Ministry of Education, Tan Sri Datuk Dr Johari Mat has explained there are many benefits of e-learning in Malaysia education system (Mat, 2000). First, e-learning provides more learning opportunities to adult who are no longer of the formal education age which range of from 17-25 years. Secondly, e-learning also ensures quality in education since technology is able to provide interactivity and active learning. E-learning can be a way to produce a quality and innovative generation (Mat, 2000). Lastly, compared to the conventional learning environment, e-learning can be a factor in changing the environment from brick to click. Many universities and educationally-based industries have set up portals to offer e-learning environments either as teaching aids to support conventional teaching approach as a teaching medium for long-distance or off-campus programs (Khalid *et. al.,* 2006). In addition, in the effort to enhance the use of ICT in e-learning in Malaysia; the Education Ministry had developed the following strategies (Hassan, 2002):

- The preparation of sufficient and up-to-date tested ICT infrastructure and equipment to all educational institutions.
- The roll-out of ICT curriculum and assessment, and the emphasis of integration of ICT in teaching and learning.

- The upgrading of ICT knowledge and skills in students and teachers.
- Increased use of ICT in educational management.
- The upgrading of the maintenance and management of ICT equipment in all educational institutions.

Consequently, the majority of the universities in Malaysia have their own e-learning system as one of the learning tools to support their learning activities. As example, Universiti Malaysia Kelantan (UMK) has their e-learning system called *ezylearn*, Universiti Putra Malaysia (UPM) has *PutraLMS,* Open University Malaysia (OUM) has *myLMS* and our university, Universiti Sultan Zainal Abidin (UniSZA) has *KeLip*. General e-learning offers learner-centred, self-paced learning environment, as opposed to traditional face-to-face classroom learning that focuses on the lecturers or instructors who have control over the learning contents and learning process (Hiltz and Wellman, 2002; Morales *et. al.,* 2001; Picoli *et. al.,* 2001; Fallah *et. al.,* 2000). Previous studies have shown that inadequately equipped e-learning systems can result in frustration, confusion and reduced learners' interests (Hara and Kling, 2000; Maki *et. al.,* 2000).

KeLiP is an e-learning tool in UniSZA where users can be divided into three groups comprising of students, lecturers and administrators. *KeLiP* was developed using Moodle, course management software. It is a web-based system operated in client-server environment. The architecture can be classified into three layers, which are interface layer, component and database layers. User could access *KeLiP* by using any web browser such as Internet Explorer or Mozilla Firefox. In the interface layer, the chosen web server is Apache HTTP server in which Linux acts as the operating system platform. PHP is used as the programming language for the implementation of *KeLiP* in the component layer and for the last layer, database layer, *KeLiP* employs mySQL as the knowledge server. During the early inception of *KeLiP* in Kolej Ugama Sultan Zainal Abidin (KUSZA) (the former name of UniSZA before being established as a university in 2007), a study on students' readiness towards the adoption of *KeLiP* was conducted in 2006 (Saany, *et. al.,* 2006). At that time; *KeLiP* was just recently being introduced for two semesters and not widely used by lecturers and students in KUSZA, hence a set of questionnaire was distributed only to students undertaking diploma program under the KUSZA Information Technology Centre (KiTC) who have been using the system for at least one semester. Findings from the study revealed that despite their awareness of the convenience and flexibility of e-learning; the respondents were not keen on using the technology due to factors that include lack of encouragement from lecturers, incompleteness of learning materials, and limitation of access to computers and networking facilities. The results provided insights into the real problems associated with the use of *KeLiP* as an e-learning tool in KUSZA hence contributing to corresponding actions that should be taken by the authorities.

The objectives of the paper are as follows:

- To examine lecturers' perceptions on *KeLiP* as an e-learning tool;
- To investigate the opinions and challenges of using *KeLiP;* and
- To investigate the willingness to use *KeLiP* as an e-learning tool.

Overall, we anticipated that by examining the perceptions and identifying the enablers or even barriers to the use of *KeLiP* in UniSZA, the study could contribute to successful implementation of e-learning that could benefit all stakeholders.

2. Literature Review

Numerous researches had been conducted regarding students' perceptions or opinions regarding the implementation of e-learning. As in the case of KUSZA, problems associated with support from both lecturers and institution such as completeness of learning materials and encouragement to students, and limited computing and networking facilities proved to be hindrances to students' adoption to the technology (Saany *et. al.,* 2006). Similarly, a study to examine students' perceptions on e-learning conducted by Keller and Cernerud in Jonkoping University in Sweden suggested that the strategy of implementing e-learning system at the university was more important in influencing students' perceptions than individual background variables. The result was based on responses obtained from 250 students from two different schools at the university. It was discovered that the school that supported the implementation in an active way with a project group

supervising the implementation project yielded more positive responses from the students (Keller and Cernerud, 2002). On the other hand, although the overall perception towards e-learning at the time of study was discouraging where more than two thirds of the students disagreed that Web platform had facilitated their learning, improved the communication with other students and teachers, and improved the pedagogic value of the course or improved their possibilities to solve problems, they suggested that the findings were based on the situation at the university where they were in a situation at the beginning of a transition process of leading to the use of a Web platform to complement to regular on-campus education.

Recently, a study was conducted in Palestine with the intention to explore students' readiness towards e-learning by implementing an interactive Web-based application prototype called Alaws Educational Network (AEN) (Shraim and Khlaif, 2010). The network provides a variety of methods for student-centred learning such as virtual classrooms (VCR), discussion forum and e-learning courses. Questionnaires were distributed to higher secondary school students (average age of 18 years) who actively participated in VCR sessions in order to evaluate the aspects of VCR in terms of usefulness, self-efficacy, willingness and challenges. The survey was undertaken by 100 students and the authors concluded that even though the students have positive attitudes towards e-learning, they may not yet be ready to adapt them since the students used the VCR as a supplement to current learning method, not as a replacement to traditional face to face learning method. It is anticipated that researchers will always be overwhelmed by the questions so as to whether e-learning can replace traditional face to face method of learning, or it should be used as a blended or hybrid approach. Despite this concern, there is also the need to investigate the perceptions from the enablers of e-learning, particularly the lecturers who are collaborating with their students.

In 2008, James conducted an online self-administered survey at the University of Bangkok, targeting all lecturers conducting teaching assignments on all international masters' programs in the first semester in 2007 (James, 2008). 22 valid responses were collected where the participants were asked questions regarding six aspects in relation to the e-learning implementation in the university:

- University strategy
- University ICT provision
- Programme delivery and performance
- Funding/Costs
- University ICT support
- Collaboration

In sum, the findings indicated that e-learning is perceived by the lecturers as less effective than traditional pedagogic practices due to several factors. Among the factors are such that the university does not appear to have an integrated singular strategy for e-learning or a published strategic institutional policy for e-learning, hence contributing to its failure in its exercise of strategic intent though the lack of public policy development; the level of use of e-learning technologies in program delivery and consequent students interactions appear to be poor due to the university-wide system that is not effectively integrated into the learning sphere therefore created increasing pressures on the university quality system to deliver. Other contributing factors are since no lecturers has the responsibility to provide full-online access for postgraduate programmes, most of them (72.7%) appeared to believe that these only supplemental to the courses provided; and lack of university ICT support.

Similar findings were obtained in a study conducted at the Indira Ghandhi National Open University in 2007 by Panda and Mishra. Assuming that faculty attitude and motivation are of considerable significance to successful implementation of e-learning, the findings suggested that extensive use of computers and email has substantial relationship with positive attitudes towards e-learning. They have also discovered that the most significant barriers perceived by the faculty included poor internet access by the students and lack of training on e-learning, followed by lack of institutional policy and effective instructional design for e-learning. On the other hand, they discovered that important motivators to its use are related to personal interest to use the technology, intellectual challenges perceived by the users, and sufficient provision for technology infrastructure (Panda and Mishra, 2007). On a similar ground, Hashim (2009) conducted a study on lecturers'

competencies on online instruction and learning. The aims of the study were to identify lecturers' competencies on online instruction and learning and to assist Private Institutions of Higher learning to plan online instruction as an alternative approach to conventional face-to-face teaching. Results from the study showed that in order to successfully implement online instruction and learning, lecturers need to do the followings: improve technical and operational skills, create web page and use video conferencing, improve pedagogical skills and use of online learning technologies; and to do small maintenance, to share expertise and collaborate with others in and outside the institutions. In addition, it was suggested that the management of the institutions need to conduct training on online learning that include pedagogy and technical skills, the need for the ICT centre to set up hotline service and desk officer to solve online problems, Instructional technology Centre to give advice on instructional system design and Academic Division to plan online learning in stages. On top of that, it was also suggested that the teaching workload should be reduced and incentives should be provided in order to enculture online learning.

A research undertaken by the National Foundation for Educational Research (NFER) in 2006 had investigated the impact of e-learning in further education (FE) sector in England (Golden *et. al.,* 2006). They had targeted all further education and sixth form colleges and distributed questionnaires aimed to establish the scale and extent of e-learning use among FE lecturers in three subject areas, examine the associations between the use of e-learning and intermediate outcomes for learners and staff and explore the policy implications of the use of e-learning in FE. The researchers had managed to gather responses from 2,295 lecturers in 319 general FE and sixth form colleges in England. Based on their findings, the authors suggested that there were some possible barriers and enablers to the use of e-learning use in FE that included:

- Having an ethos and environment within an institution through which lecturers can improve their confidence, see the potential for e-learning, and have a positive attitude towards its use; could contribute to increasing its use among lecturers, and in turn learners.
- Ensuring that lecturers have sufficient access to e-learning resources to use in the classroom, in addition to outside class, could be a key enabler in developing lecturers' confidence in the use of e-learning and increasing its use at the teaching and learning interface. In turn, increased use by lecturers could lead to an increase in the use of e-learning in this way by learners.
- Providing sufficient support for lecturers, particularly in terms of providing enough time for them to develop an embed their use of e-learning in their everyday teaching practice, could be a key enabler for increasing the use of e-learning in FE and supporting the achievement of intermediate outcomes, such as the development of learner understanding and independent learning

The research conducted by NFER is well supported by Bingimlas that had done a review on the barriers to successful integration of ICT in teaching and learning environments (Bingimlas, 2009). He argued that it is important to study the obstacles to the use of ICT in education since it may assist educators to overcome the barriers hence become more successful technology adopters in the future. From his review, Bingimlas had summarized that although teachers usually had a strong desire to integrate ICT into education; among the major barriers that they usually encountered were lack of confidence, lack of competence, and lack of access to resources. Since confidence, competence and accessibility have been found to be the critical components of technology integration in schools, ICT resources including hardware and software, effective professional development, sufficient time and technical support need to be provided to teachers. Another form of perceptions regarding the use of e-learning in an institution was done by Kaur and Abas in 2004, by performing a study to assess e-learning readiness at the Open University Malaysia (Kaur and Abas, 2004). Data were gathered from a sample of 93 receivers and 25 enablers (lecturers) using a tool called the e-learning Readiness (eLR) Research Tool. They found that apart from positive degree of technology readiness among both receivers and enablers, the receivers were more positive about their level of readiness in comparison to enablers' perception of the learners' readiness. Surprisingly, they found that there appeared to be a preference for non-electronic channels of communication and modes of learning as opposed to learning through the e-networks (Kaur and Abas, 2004).

Further, a case study was conducted at the International Islamic University (IIU), Malaysia (Agboola, 2006). The intention of the study was to assess the awareness and perceptions of lecturers in using e-learning tools for instructional delivery in IIU. He managed to get good responses from the respondents, where 98% (324)

respondents answered two types of questionnaires (Lecturer e-learning Perceptual Survey Questionnaire – answered by 324 lecturers, and e-learning Readiness Survey – answered by 26 Deans or Heads of Departments). His findings revealed that e-learning training and e-learning confidence were significant predictors of both e-learning adoption and e-learning readiness. Results from the study also disclosed that problems related to infrastructure and lack of personal capability requires considerable efforts in order to overcome the hindrances.

In addition, a study has been carried out to discover the success factors in the implementation of e-learning programs in Malaysia (Goi and Ng, 2009). Apart from distributing online and paper-based questionnaires to gather general opinions on e-learning, they had also conducted interviews with staffs from two universities that have been using e-learning for teaching and learning; the University of Tun Abdul Razak (UniTAR) and the Open University of Malaysia (OUM). Based on their findings, they concluded that there are five main criteria in implementing an e-learning program in Malaysia that included program content, web page accessibility, learners' participation and involvement, web sites security and support and institution commitment. They have also discovered three other criterions which have lesser importance; interactive learning environment, instructor competency and presentation and design (Goi and Ng, 2009). This research supported a previous study by Hussin in 2000 that discovered common elements that contributed to critical success factors in e-learning implementation in several Higher Education Institutions (HEIs) in Malaysia and Singapore are as follows (Hussin, 2004):

- The institution's strategic plan for ICT use in teaching and learning
- The specialized centre that translates the plans into reality and coordinates the strategies for e-learning success
- The right combination of human resources balancing the academic know how with technology savvy
- Sufficient infrastructure to enable e-learning platform
- Staff development plans and strategies to encourage the adoption of ICT in teaching and learning

She then conducted a project to further study strategic planning and implementation of e-learning in several HEIs in Malaysia. A SWOT analysis conducted in six HEIs revealed that although most have sufficient e-learning infrastructure, there were also some weaknesses in these areas:

- A lack of strategic planning for e-learning;
- E-learning is sporadic, yet there was an apparent need to bridge the gap between the content experts and the IT experts (in terms of instructional design);
- E-learning leadership is new; hence the need the need to establish guidelines and policies regarding e-learning;
- Insufficient funding to carry out a full blown project; and
- Lack of skills and experience among faculty members to use e-learning

She finally proposed that quality e-learning requires teamwork at all levels in the organizations and individuals involved. Undoubtedly, studying the perceptions; let it be from the students' point of view or from the lecturers' point of view would give insights into the real situation where e-learning is implemented. As for the case in UniSZA, we believe that it is imperative to perform this study since no prior research has been conducted in order to assess lecturers' perceptions on the use of *KeLiP* as an e-learning tool.

3. Data and Methodology

The data was collected during the semester break of May 2010. A total of 250 self-administered questionnaires were distributed to members of the lecturers through individual departments/schools. Respondents were asked to hand in the completed questionnaire to the general office of each department. As expected, the response was very poor. In addition, in order to encourage for more responses, we had to remind the staff through email and telephone calls. Finally 76 useable questionnaires were returned, yielding a response rate of about 30.7 %. Questionnaire for the study was adapted from an evaluation on students'

perceptions of E-learning in university education (Keller and Cernerud, 2002) and a recent study on a similar ground (Shraim and Khaif, 2010).

The questionnaire consists of four sections. Section A is related to the staffs' demographic data. This part relates to demographic profiles of respondents. Information asked include gender, age, highest degree earned, normal hours of teaching load, years of full-time teaching and questions related to internet experience. Section B examines their opinions on *KeLiP* and Section C includes the challenges. The final section, Section D focuses on the willingness to use *KeLiP*. Table 1 explains the composition of the questionnaires in detail. Statistical Package of Social Sciences (SPSS) was used to analyse the data. In addition, frequency distribution was used to describe the sample and the mean and standard deviations of the perceptions towards *KeLiP* were also computed. Finally, one-way analysis of variance (ANOVA) procedures were applied to the data set to examine whether opinions, challenges and willingness in using *KeLiP* differ among users and non users.

Table 1: Sections in the Questionnaires

Sections	Subjects	Items	Number of Items
A	Demography Computer/Internet/*KeLip* Background	1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12 13, 14, 15, 16, 17, 18, 19	19
B	Opinions on *KeLiP*	B1, B2, B3, B4, B5, B6, B7, B8, B9, B10	10
C	Challenges Using *KeLiP*	C1, C2, C3, C4, C5	5
D	Willingness to Use *KeLiP*	D1, D2, D3, D4	4

4. Findings

Demographic Profiles: The majority of the respondents participating in this survey were female 41 (53.9%) and 35 (46.1%) were male. The study also indicated that majority of the respondents aged between 30 – 39 years (51.3%). The highest response rate was obtained from the Faculty of Islamic and Contemporary Studies (FKI) 16 (21.1%) while lowest responses gathered were from two faculties: Faculty of Agriculture and Biotechnology and Faculty of Food Technology, 2 (2.6%) respectively. Table 2 presents the respondents' demographic profiles in detail.

In terms of years of service, 28 (36.8%) of the respondents belong to the group that have 1 – 5 years of experience in service. Only 7 (9.2%) with experience of 15 years and above participated in the survey. For academic position, most of the respondents 51 (67.1%) do not hold any administrative works, in the lower grade of academic position (DS45), 48 (63.2%). Most of them i.e. 55 (72.4%) hold Masters Degree, 60 (78.9%) graduated since 2000 and mostly from local universities 67 (88.2%). In terms of teaching load, half of the respondents teach between 5 to 9 hours and majority 33 (43.4%) had between 1 to 4 years teaching experience.

Computer/Internet Background: Results pertaining to computer/internet background as shown in Table 3 reveals that, majority of the respondents had access to the computer and internet, either at home or in the office. Majority of the respondents i.e. 45 (59.2%) had more than ten years computer experience and half 38 (50%) had 6-10 years internet experience. Most of them 71 (93.4%) have heard of *KeLiP* and 56 (73.7%) of the respondents have attended workshop on using *KeLiP*. In contrast, only 34 (44.7%) of them have used *KeLiP* for the purpose of teaching. Despite the fact that they have attended workshop on using *KeLiP*, 34 (44.7%) have used the tool while 42 (55.3%) have not.

Table 2: Demographic profiles of Respondents

Categories	Items	Frequency	%
Gender	Male	35	46.1
	Female	41	53.9
Age (year)	Under 30	15	19.7
	30-39	39	51.3
	40-49	16	21.1
	50 and over	6	7.9
Faculty	Informatics (FIT)	12	15.8
	Languages & Communication (FBK)	8	10.5
	Islamic Contemporary Studies (FKI)	16	21.1
	Law & International Relations (FUHA)	15	19.7
	Innovative Design & Technology (FRIT)	3	3.9
	Business Management & Accountancy (FPPP)	13	17.1
		5	6.6
	Medicine & Health Sciences (FPSK)	2	2.6
	Agriculture and Biotechnology (FPB)	2	2.6
	Food Technology (FTM)		
Years of service	Less than a year	21	27.6
	1-5 years	28	36.8
	6-10 years	2	2.6
	11-15 years	18	23.7
	15 years and over	7	9.2
Status of service	Full time	54	71.1
	Contract/Temporary	22	28.9
Academic position	Lecturer	51	67.1
	Head of department	8	10.5
	Dean	3	3.9
	Deputy Dean	4	5.3
	Others	10	13.2
Grade of service	DS45	48	63.2
	DS52	11	14.5
	DS54	2	2.6
	VK	15	19.7
Highest degree earned	Bachelor	11	14.5
	Master	55	72.4
	PhD	10	13.2
Year of completion of highest degree	Before 1970	-	-
	1980-1989	3	3.9
	1990-1999	13	17.1
	Since 2000	60	78.9
Origin of highest degree obtained	Local	67	88.2
	Overseas	9	11.8
Normal hours of teaching load per week	5-9 hours	38	50.0
	10-14 hours	34	44.7
	15-19 hours	4	5.3
	20 hours and more	-	-
Years of full-time teaching	1-4 years	33	43.4
	5-9 years	12	15.8
	10-14 years	20	26.3
	15-19 years	6	7.9
	20 years and more	5	6.6

Table 3: Background Information on Using Computer/Internet/*KeLiP*

Categories	Items	Frequency	%
Access to computer	Office	18	23.7
	Notebook mobile	4	5.3
	Office and home	25	32.9
	All	29	38.2
Access to the internet	Office	25	32.9
	At home wired/wireless	2	2.6
	Broadband	3	3.9
	Office and home	14	18.4
	Office and broadband	26	34.2
	All	6	7.9
Computer experience	Less than a year	-	-
	1-5 years	5	6.6
	6-10 years	26	34.2
	11-15 years	17	22.4
	15 years and more	28	36.8
Internet experience	Less than a year	-	-
	1-5 years	7	9.2
	6-10 years	38	50.0
	11-15 years	17	22.4
	15 years and more	14	18.4
Have you heard of *KeLiP*?	Yes	71	93.4
Have you attended any workshop on	No	5	6.6
KeLiP	Yes	56	73.7
	No	20	26.3
Have you used *KeLiP* in your	Yes	34	44.7
teaching	No	42	55.3

Table 4: Summary of Responses on Opinions Using *KeLiP*

No	Statements	User		Non-Users		Overall	
		Mean	S.D	Mean	S.D	Mean	S.D
1	*KeLiP* is easy to understand and use	3.26	0.567	2.81	0.671	3.01	0.663
2	The use of *KeLiP* has increased flexibility in my teaching	3.26	0.618	2.71	0.636	2.96	0.662
3	The use of *KeLiP* has facilitated my teaching	3.26	0.618	2.62	0.539	2.91	0.657
4	The use of *KeLiP* has improved communication with students	3.03	0.627	2.60	0.544	2.79	0.618
5	The use of *KeLiP* has improved the pedagogic value of my course/s	2.97	0.674	2.52	0.552	2.72	0.645
6	The use of *KeLiP* has improved communication with other lecturers	2.38	0.697	2.57	0.630	2.49	0.663
7	The use of *KeLiP* has improved my possibilities to solve problems related to my course/s	2.82	0.716	2.40	0.544	2.59	0.657
8	I think using *KeLiP* is cost effective	3.35	0.485	2.83	0.621	3.07	0.618
9	I believe that *KeLiP* enhances the quality of my teaching	3.12	0.686	2.60	0.627	2.83	0.700
10	The use of *KeLiP* helps me in time management	3.00	0.739	2.67	0.477	2.82	0.626

Opinions Using *KeLiP:* Table 4 presents the descriptive statistics for items relating to opinions using *KeLiP* and Table 5 shows the analysis of variance (ANOVA) between opinions using *KeLiP* among users and non-users. Looking at the highest mean values, users of *KeLiP* had given a positive response pertaining to

statement no. 8, "I think using *KeLiP* is cost effective" (Mean = 3.35 and standard deviations of 0.485). On the other hand, non-users also ranked this statement as number one (mean = 2.83). The second most favourable response was in respect to statement no. 1: "*KeLiP* is easy to understand and use" (mean value = 3.26 for users and 2.81 for non-users), followed by that in respect to statement no. 2: "the use of *KeLiP* has facilitated my teaching" (mean value = 3.26 for users and 2.71 for non-users. Least of importance was in respect to statement no. 6: "The use of *KeLiP* has improved communication with other lecturers" (mean = 2.38) whereas non-users rated statement no. 7: "The use of *KeLiP* has improved the possibilities to solve problems related to my course/s" (mean = 2.40) as the least important. The results clearly show that there is no significant difference in terms of opinions between users and non-users as shown in Table 5.

Table 5: Opinions Using *KeLiP* (Pearson one way ANOVA)

Statements		Sum of Squares	df	Mean Square	F	Sig.
S1	Between Groups	3.893	1	3.893	9.902	.002*
	Within Groups	29.094	74	.393		
	Total	32.987	75			
S2	Between Groups	5.693	1	5.693	14.432	.000*
	Within Groups	29.189	74	.394		
	Total	34.882	75			
S3	Between Groups	7.833	1	7.833	23.637	.000*
	Within Groups	24.522	74	.331		
	Total	32.355	75			
S4	Between Groups	3.542	1	3.542	10.447	.002*
	Within Groups	25.090	74	.339		
	Total	28.632	75			
S5	Between Groups	3.751	1	3.751	10.112	.002*
	Within Groups	27.447	74	.371		
	Total	31.197	75			
S6	Between Groups	.672	1	.672	1.538	.219
	Within Groups	32.315	74	.437		
	Total	32.987	75			
S7	Between Groups	3.295	1	3.295	8.391	.005*
	Within Groups	29.060	74	.393		
	Total	32.355	75			
S8	Between Groups	5.073	1	5.073	15.908	.000*
	Within Groups	23.598	74	.319		
	Total	28.671	75			
S9	Between Groups	5.128	1	5.128	11.990	.001*
	Within Groups	31.648	74	.428		
	Total	36.776	75			
S10	Between Groups	2.088	1	2.088	5.652	.020*
	Within Groups	27.333	74	.369		
	Total	29.421	75			

Table 6: Summary of Responses on Challenges Using *KeLiP*

No	Statements	Users		Non-Users		Overall	
		Mean	S.D	Mean	S.D	Mean	S.D
1	English as the medium of instruction	2.76	0.923	2.62	0.795	2.68	0.852
2	Time distraction	2.09	0.621	2.24	0.726	2.17	0.681
3	Lack of motivation	2.50	0.826	2.76	0.790	2.64	0.812
4	Lack of online experiences eg. uploading & downloading problems, use of forum	2.32	0.843	2.60	0.798	2.47	0.824
5	Technical problems eg. server breakdown	2.59	0.821	2.90	0.726	2.76	0.781

Table 7: Challenges Using *KeLiP* (Pearson one way ANOVA)

Statements		Sum of Squares	df	Mean Square	F	Sig.
S1	Between Groups	.399	1	.399	.546	.462
	Within Groups	54.022	74	.730		
	Total	54.421	75			
S2	Between Groups	.422	1	.422	.909	.343
	Within Groups	34.354	74	.464		
	Total	34.776	75			
S3	Between Groups	1.289	1	1.289	1.982	.163
	Within Groups	48.119	74	.650		
	Total	49.408	75			
S4	Between Groups	1.387	1	1.387	2.071	.154
	Within Groups	49.560	74	.670		
	Total	50.947	75			
S5	Between Groups	1.883	1	1.883	3.177	.079
	Within Groups	43.854	74	.593		
	Total	45.737	75			

Willingness to use *KeLiP:* Analysis on the challenges in using *KeLiP* shows that both users and non-users had chosen statement no. 4: "I am willing to use *KeLiP* if appropriate support is provided" (mean = 3.21) as the most important. It is interesting to discover that although users of *KeLiP* answered that they would adopt *KeLiP* in their teaching for the next semester (mean value = 3.15), non-users also gave an answer akin (mean value = 2.71). Both groups are willing to attend workshop on *KeLiP* (with mean value of 2.74 and 3.07 for users and non-users, respectively). In both aspects (adopting *KeLiP* in teaching and attending workshop), the differences between answers obtained from the two groups are significant (*t*-value of 0.001 and 0.039). Details of the results are shown in Table 8 and Table 9.

Table 8: Summary of Responses on Willingness to Use *KeLiP*

No	Statements	User		Non-Users		Overall	
		Mean	S.D	Mean	S.D	Mean	S.D
1	I would prefer face to face method than online method to assist my teaching	2.79	0.845	3.14	0.718	2.99	0.792
2	I would adopt *KeLiP* in my teaching for next semester	3.15	0.558	2.71	0.554	2.91	0.593
3	I am willing to attend workshop on *KeLiP*	2.74	0.790	3.07	0.601	2.92	0.707
4	I am willing to use *KeLiP* if appropriate support is provided	3.21	0.729	3.21	0.470	3.21	0.596

Table 9: Willingness Using *KeLiP* (Pearson one way ANOVA)

Statements		Sum of Squares	df	Mean Square	F	Sig.
S1	Between Groups	2.285	1	2.285	3.783	.056
	Within Groups	44.702	74	.604		
	Total	46.987	75			
S2	Between Groups	3.519	1	3.519	11.404	.001*
	Within Groups	22.836	74	.309		
	Total	26.355	75			
S3	Between Groups	2.123	1	2.123	4.437	.039*
	Within Groups	35.403	74	.478		
	Total	37.526	75			
S4	Between Groups	.001	1	.001	.004	.952
	Within Groups	26.630	74	.360		
	Total	26.632	75			

The aim of this study is to examine the perceptions of lecturers with regards to using an e-learning tool called *KeLiP*. Specifically, there are three main objectives to be achieved; to investigate the opinions, challenges and willingness in using *KeLiP* among lecturers in UniSZA. Results from the findings are summarized in Table 10 shown below.

Table 10: Summary of Results

Issues	Statements	User		Non-Users		Overall		ANOVA
		Mean	S.D	Mean	S.D	Mean	S.D	Sig.
Opinions on the Use of *KeLiP*	The use of *KeLiP* has improved communication with other lecturers	2.38	0.697	2.57	0.630	2.49	0.663	.219
	I think using *KeLiP* is cost effective	3.35	0.485	2.83	0.621	3.07	0.618	.000*
Challenges to Use *KeLiP*	Technical problems eg: server breakdown	2.59	0.821	2.90	0.726	2.76	0.781	3.177
Willingness to Use *KeLiP*	I would adopt *KeLiP* in my teaching for next semester	3.15	0.558	2.71	0.554	2.91	0.593	.001*
	I am willing to attend workshop on *KeLiP*	2.74	0.790	3.07	0.601	2.92	0.707	.039**
	I am willing to use *KeLiP* if appropriate support is provided	3.21	0.729	3.21	0.470	3.21	0.596	.952

***Note**: *, **Significant at the 0.01 and 0.05 level.*

The *t*-values from one-way ANOVA show that both users and non-users believe that using *KeLiP* is cost effective, they would adopt *KeLiP* in their teaching in the following semester and they are willing to attend workshop on *KeLiP*. Such opinions and statements are expected of those who had already used *KeLiP*. As for non-users, we believed that such positive responses might be due to prior knowledge and anticipation of non-users especially in terms of cost effectiveness and willingness to attend workshop and use *KeLiP* in their teaching.

5. Conclusions

Outcomes from this study are relevant and appropriate to new university like ours since it provided the perceptions, opinions and current practices regarding E-learning by lecturers in our institution. Although it seems that the progress in terms of the deployment of e-learning is rather slow, the findings would be of assistance to the management of the university. This is because, they could identify the problems related to using *KeLiP* and further could take appropriate actions to overcome the problems so that *KeLiP* could be used extensively by all lecturers. Even though half of the respondents did not adopt *KeLiP* as an e-learning tool in their teaching, it is encouraging to get a positive response from both users and non-users. Furthermore, it could be used as a positive indication towards adopting *KeLiP* as an e-learning in teaching.

A study of this kind is imperative since it provides insights into e-learning implementation especially in Universiti Sultan Zainal Abidin (UniSZA). This survey was done five years after the inception of *KeLiP* in UniSZA. Since this is the first study of its kind to be conducted in UniSZA, it is anticipated that findings from this study could be used for the management of the university to act upon. First, acknowledging the positive responses from both users and non-users of *KeLiP* in terms of *KeLiP* being cost effective, their willingness to use *KeLiP* in the following semester and to attend workshop on *KeLiP*. Moving on, management of the university could take advantage of this situation to enforce the use of *KeLiP* as part of the university's policy on teaching and learning. In parallel to enforcing the use of *KeLiP*, the university must also geared upon providing full support in terms of technical capabilities and continuous improvement on the e-learning content. This study has its limitations. Future research should be extended to other universities so that we can identify the patterns and make comparison.

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