

The Importance of e-Pedagogy for a Successful e-Learning Implementation

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Abstract: One of the Critical Agenda Projects (CAPs) under the National higher education strategic planning in Malaysia is e-learning. What this suggests is the direct emphasis on all higher learning institutions in Malaysia to transform the process of teaching and learning from a traditional mode to a more digital-based mode. Before the announcement of the National strategic planning in 2007, most tertiary providers in Malaysia have taken the steps to integrate e-learning in their learning environments. For them, implementing e-learning appears to be easy. On the other hand, this can be the opposite for young institutions such as the National Defence University of Malaysia (NDUM). The aim of this study is to analyse the importance of e-pedagogy towards a better adoption of e-learning at the Defence University. The utilisation of e-learning is still at its infancy at the NDUM. As such apart from gauging the awareness level of the academics, their understanding of the pedagogy involved when using e-learning must be identified. This study uses a quantitative method of research by analysing data collected from questionnaires distributed to academics at the NDUM. Preliminary findings show that similar to the hypothesis of the researcher, almost all respondents fail to appreciate e-learning because their understanding of e-pedagogy is limited. This is a massive challenge for the centre for professional development to tackle because the academics must be given ample and appropriate training in order to ensure that the Defence University is able to fulfil its CAP for e-learning.

Key words: Critical Agenda Project (CAP), e-learning, e-pedagogy, Malaysian higher learning institutions, quantitative method, NDUM, Malaysia

INTRODUCTION

An effective 21st century classroom teaching and learning relies on a number of tools and one of these tools is technology (Stevenson, 2010). In Malaysia, following the introduction of the National higher education strategic planning in 2007, all tertiary education providers are expected to provide their students with a technologically rich learning environment. The understanding is that the education providers equip the campus with e-learning technologies. In actual fact before the strategic planning came into the education landscape, steps have already been taken by higher learning providers to utilise technology in education and training. The 1st tertiary institution in Malaysia to adopt e-learning is Universiti Tun Abdul Razak (UNITAR) in 1998, a private institution and after a few years, public universities started to invest in e-learning technologies. The question addressed in this study is whether academics are able to grasp the concept of e-pedagogy when e-learning becomes a more critical supplementary tool for teaching and learning at the Defence University. In order to fulfil the Key Performance Index (KPI) set by the Ministry of Higher Education, Malaysia for the Critical Agenda Project (CAP) for e-learning, the National Defence University of Malaysia

(NDUM) has invested about USD59,000 (RM200,000) to purchase its 1st Learning Management System (LMS). Bought from a Malaysian private company at the end of 2009, the LMS called my classroom online e-learning is at its infancy since, training for academics and technicians is still in progress. As such this study provides a critical intervention to gauge academics' understanding of e-pedagogy and the importance of it. Perhaps, the other critical question that must be addressed is whether there are differences between traditional pedagogy and e-pedagogy.

The hypothesis of this study is that academics at the Defence University are not able to appreciate e-learning because they lack understanding of e-pedagogy and its underpinning theories. The researcher's hypotheses is based on the age of the LMS as well as the profile of the academics.

The National Defence University of Malaysia (NDUM): The pressures brought by the neighbouring countries about establishing a military academy in Malaysia had initiated serious discussions from the 1970s between the Ministry of Defence, Malaysia and the Malaysian armed forces. These discussions were based on the current security issues of the time and the fact that countries

such as Indonesia, the Philippines and Thailand had already established their military academies (the Indonesia Military Academy was established in 1945; the Philippines Military Academy in 1936 and the Chulachomklao Royal Military Academy Thailand in 1887).

However, only in 1995, the cabinet approved the formation of the Military Academy of Malaysia, now known as the NDUM. During the early years of establishment, programmes at this academy were supported by the Ministry of Defence, Malaysia which provided military training programmes and Universiti Teknologi Malaysia (UTM) which provided the academic training component. UTM was a natural choice as the academic partner because of its reputation in engineering degrees. This reflected the demands on the armed forces to ensure that the training of new military manpower included a large number of well-trained engineers. The 1st cohort of undergraduate cadet officers totalling 172 started their military and tertiary education at this military academy in June, 1995.

Before analysing further, it is critical to note that the NDUM has not yet implemented e-learning technologies across the campus with the exception of one academic programme, the Maritime technology programme (Juhary, 2010).

The upgrade of this academy to a university in 2006 marks the importance of educating future military officers hence, the need to fulfil the requirements of a 21st century military. According to Singh, a 21st century military relies on multiple facets including technology equipped weaponry and the ability of its soldiers to handle technology comfortably.

In addition, this university is expected to pioneer the creation of academically trained military leadership capable of placing the nation's security interests into a broader regional and global framework. To support this vision, the defence university has mixed categories of lecturers including ex-military officers in service officers, experienced lecturers seconded from other Universities or those who migrated from industries and young academics. One way or the other, these differing profiles of lecturers have contributed to the hypothesis of this study. This is because exposure to e-learning technologies may only be the privilege of experienced lecturers and not the rest of the academic population at the Defence University.

MATERIALS AND METHODS

Data for this study were gathered at the NDUM by means of questionnaires. The questionnaires were adopted from Jones *et al.* (2004) and the items in the questionnaires focus on academics' understanding of teaching and learning processes. Although, the items

asked do not directly relate to e-pedagogy and e-learning, academics' understanding of related theories will ultimately determine their teaching preferences. The survey was conducted from April to June, 2010. The researcher left 215 questionnaires in the mailboxes and rooms of the academics.

The academics were then asked to place the questionnaires outside of their rooms. The researcher collected the questionnaires after 2 days of placing them daily for about 2 weeks. Nonetheless, only 86 questionnaires were filled. As explained earlier, the Defence University has four main categories of academic staff. The distribution of questionnaires included all categories but not equal in the number of respondents.

This is because the 1st two categories are a small population on campus. The details of returned questionnaires are shown in Table 1. The questionnaires were analysed using a Statistical Package for Social Sciences (SPSS) Version 14. Due to the nature of the study and its hypothesis and the questions that are addressed in this study, a simple statistical analysis is employed which only involves descriptive statistics. Given the main concern of this study is on the academics' understanding of e-pedagogy as well as e-learning, it is of the utmost importance that this study examines these concepts first.

The importance of e-pedagogy and learning

e-pedagogy: e-pedagogy is the enabler for e-learning but what could be discerned from the term e-pedagogy? To some educators, this term may not be of any difference to the term traditional pedagogy. On the other hand, some educators view e-pedagogy as new challenges of teaching a 21st century classroom. The most critical understanding of e-pedagogy is that it ensures a successful implementation of online teaching. Kuriloff (2005) suggests six features of good e-pedagogy as shown in Table 2.

Many scholars view e-learning as a way forward for one aspect of e-pedagogy which is collaborative teaching. Okamoto for example, puts 4th that collaborative teaching has redefine the nature of lecturers and students' roles in the teaching and learning processes. Through technology, academics could venture out of the classroom to share resources and students could also learn from people who are thousands of miles away from

Table 1: The number of returned questionnaires

Categories	Frequency
Ex-military officers	6
In service military officers	5
Experienced lecturers	35
Young academics	40
Total	86

Table 2: Features of good e-pedagogy

Features	Explanation
Establish a highly structured, positive learning environment that encourages individual responsibility and creates high expectations	Self expression; more students' autonomy
Teach collaboratively	SCORM; sharing of learning objects
Create spaces for student	Peer collaboration
Redefine the instructor's role	Instructors become facilitators
Build community	Online community; complementing weaknesses and strengths
Exploit time	Learning anywhere and at anytime

Table 3: Levels of Technology implementation (LoTi)

Levels	Categories	Description
0	Non use	A perceived lack of access to technology-based tools or a lack of time to pursue electronic technology implementation. Existing technology is predominately text-based
1	Awareness	The use of computers is generally one step removed from the classroom teacher. Computer-based applications have little or no relevance to the individual teacher's instructional programme
2	Exploration	Technology-based tools serve as a supplement to existing instructional programme (e.g., tutorials, educational games, simulations). The electronic technology is employed either as extension activities or as enrichment exercises to the instructional programme
3	Infusion	Technology-based tools including databases, spreadsheets, graphing packages, probes, calculators, multimedia applications, desktop publishing applications and telecommunications applications, augment isolated instructional events
4	Integration	Technology-based tools are integrated in a manner that provides a rich context for students' understanding of the pertinent concepts, themes and processes. Technology is perceived as a tool to identify and solve authentic problems relating to an overall theme/concept
5	Expansion	Technology access is extended beyond the classroom. Classroom teachers actively elicit technology applications and networking from business enterprises, governmental agencies, research institutions and universities to expand student experiences directed at problem solving issues resolution and student activism surrounding a major theme/concept
6	Refinement	Technology is perceived as a process, product (e.g., invention, patent, new software design) and tool to help students solve authentic problems related to an identified real-world problem or issue. Technology in this context, provides a seamless medium for information queries, problem solving and/or product development. Students have ready access to and a complete understanding of a vast array of technology-based tools

them. The needs for e-pedagogy are high simply because the learners have changed their ways of learning. The new breed of students today known as the digital natives and net gen (Oblinger and Oblinger, 2005a), responds better to multimedia gadgets, interactive interfaces and the like. Academics should start to rethink and invent teaching methodologies for the digital natives for all subjects and at all levels using the students as the guidelines (Prensky, 2001a). This is further supported by Garrison and Anderson (2003) who also claim that educators must rethink their pedagogy.

This is because all too often educators put technology 1st rather than the pedagogy. In particular, the problem of how to teach and deliver content has been insufficiently attended to on the assumption that the technology itself will explain the many facets of teaching and learning (Blinco *et al.*, 2004). Many scholars note that appropriate channels for content delivery are as important as the selection of appropriate materials (Woodill, 2004; Bonk and Wisher, 2000). Indeed in many ways technological progress has exceeded the capacity of educators to develop pedagogical models that meet current needs (Bracewell *et al.*, 1998). Salomon (1998) notes, this dysfunctional gap between technology and pedagogical principles represents an unprecedented moment in human history. The traditional custodians of knowledge, the teachers, now find that the possibilities of technology are outstripping advancements in pedagogical and psychological theory. According to Garrison and

Anderson (2003), students are not getting the experiences crucial for their development of critical, analytical and independent learning at tertiary level. The current passive-information transfer approaches especially in Malaysian higher education, also known as didactic teaching are an opposite to the interactive and constructive potential of e-learning (Juhary, 2010).

e-Learning: Since, the invasion of digital technologies in classrooms three decades ago, many education providers have been streamlining their education philosophies. Further as new technologies allow for democracy in education for all, Information Communication Technologies (ICTs) have become the enabler to ensure access to education. For the purpose of this study, the term e-learning refers to a range of activities that use ICT including internet-based, CD-ROM-based and interactive online teaching (Bonk and Wisher, 2000). The e-learning scenario in Malaysian educational setting is best described as a blended approach (Ali, 2004). This is because the students' learning experiences are also very much dependent upon face-to-face interactions. This method when it is blended with a technologically supported environment may provide students with more learning options.

For instance, all public institutes of higher learning in Malaysia are expected to utilise My Learning in English or MyLinE. Originally prepared for students of UTM, the Ministry of Higher Education, Malaysia quickly

researcherised this support system to learning English for all public universities' students in 2008. Realising this advantage too the ministry has injected financial support to UTM as the gatekeeper to monitor MyLinE. However, the success or failure of language learning does not totally rely on MyLinE or technology for that matter. Rather many public higher learning institutions complement MyLinE to the existing face-to-face structures. The above summary of e-pedagogy and e-learning has provided an overview of one of the keys to an effective e-learning implementation. As suggested by Moersch, there are seven levels of technology implementation (Table 3). Currently, the NDUM is at the levels between 0 and 2 because of two reasons. Firstly, the awareness level about e-learning at the NDUM amongst the academics is still low and secondly, the lecturers and technicians alike are still undergoing training to use the e-learning portal. It is critical now to analyse the findings and further discuss the importance of e-pedagogy at the Defence University.

RESULTS AND DISCUSSION

The questionnaires have only two sections; the demographic information with only two items and the main section with 13 items. Table 4 shows the demographic details of the respondents. Based on Table 3, it can be concluded that most of the respondents are lecturers. The differentiation between lecturers and tutors are clear at the Defence University, although there may be variations across Malaysian Universities in terms of the operations of job assignments. Firstly, lecturers are either permanent or contract in nature; on the other hand, tutors are temporary and within 1 year of that transitory appointments, they must pursue their Masters degree. Thus, this goes without saying the academic qualifications of these two posts; the former has postgraduate degrees and the latter has yet to obtain one. Secondly in many instances, the tutors are only assisting the lecturers to conduct tutorial. By definition, tutors are

not allowed to lecture. They are to concentrate on finding places to study and to leave as soon as they are permitted to do so. Table 5 shows the 13 items asked to the respondents. Each item has two different statements at each continuum and respondents would choose the scale that they felt would represent their views accurately.

The Likert scale used in the survey is divided into eight options. For example for item 1, respondents have to choose between emphasis on learning and emphasis on teaching. Where 1-4 will be nearer to agree with emphasis on learning and 5-8 will be nearer to emphasis on teaching. From the simple statistical analysis of the data using SPSS, the researcher could sum up that >70% of the respondents chose variations of answers towards the teacher centred approach to learning. Especially for the ex-military and in service military officers, all respondents chose only the scales between 5-8. The researcher argues that given the age and previous experience of these cohorts, they could be feeling comfortable with the ideas of controlling the classrooms and knowledge.

The nature of the relationship between the students and these groups of lecturers too has been pre determined by the military hierarchy. This indirectly will hinder their conceptions of e-pedagogy because, they are still believers of the traditional pedagogy that puts teachers as the providers and keepers of knowledge. A break out of the data is shown in Fig. 1-4 and it is based on the categories of academics at the NDUM. As shown in Fig. 1 and 2, the respondents only chose options 5-8. Ideally, this trend reflects their teaching preferences at the Defence University. Some of the items even have only two preferences such as items 2, 4, 9 and 10 for

Table 4: Demographic information of the survey respondents

Categories	No. of respondents	Academic appointment
Ex-military officers	6	Lecturers
In service officers	5	Lecturers
Experienced lecturers	35	Lecturers
Young academics	15	Lecturers
Young academics	25	Tutors
Total	86	-

Table 5: Items in the survey

Items	Student centred learning-adopting the constructivist approach to learning	Teacher centred learning-adopting the behaviourist approach to learning
1	Emphasis on learning	Emphasis on teaching
2	Learning based experience	Theory based learning
3	Knowledge construction	Knowledge acquisition
4	Previous knowledge and skills used in new situations	Knowledge is external and independent of the minds which created it
5	Guidance rather than prescription	Pre specified and focussed goals
6	Negotiated learning	Teacher centred low learner
7	Multiple paths to learning	Incremental learning and logical
8	Learner control	Directed instruction
9	Flexible structures	Fixed structures
10	Authenticity and contextual learning	Decontextualised learning; instructional goals
11	Collaborative, teamwork	Individual learning
12	Favours higher order skills	Favours lower order skills
13	Emphasis on case studies, multimedia	Emphasis on written word

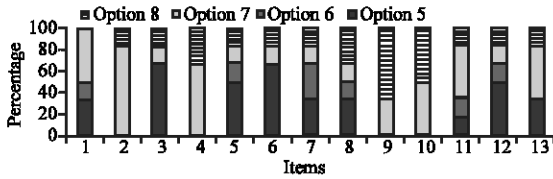


Fig. 1: Data for all items in service ex-military officers (6 respondents)



Fig. 2: Data for all items in service military officers (5 respondents)

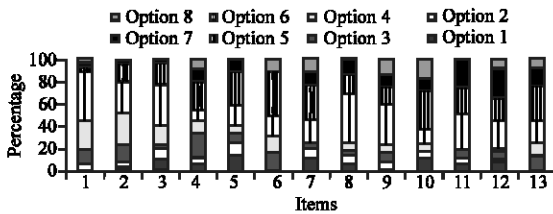


Fig. 3: Data for all items in experienced lecturers officers (35 respondents)

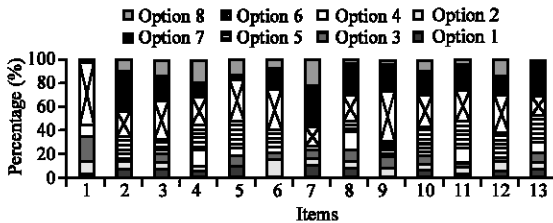


Fig. 4: Data for all items in young academics officers (40 respondents)

ex-military officers and items 1, 3, 7 and 11 for in service military officers. While, it is difficult to discern the thought processes of these cohorts, the researcher argues that this trend is prominent because rank and hierarchy play a more critical role than the academic values and inputs themselves. This suggests that academic freedom for students to be more articulate and critical in classrooms may be hard to achieve, albeit possible. Thus, this signals the lack of understanding of how students of the 21st century learn; these digital natives as argued by Prensky (2001a) are those who have spent their entire lives surrounded by and using computers and all the technologically sophisticated hardware and software. As a result, they think and

process the information differently from their teachers, who in Prensky's term is called digital immigrants. From Fig. 3 and 4, the respondents have chosen almost all the options given to them. Nonetheless, the trend also slightly favours options 5-8. It is remarkable that the experienced lecturers and young academics also supported the teacher centred learning approach.

Given that the exposure at other institutions, the researcher expects that the experienced teachers would be more agreeable towards student centred learning. Similarly, the researcher assumes that the young academics, who are digital natives (graduates of 2004 and onwards) would understand what makes the best teaching environment and what works in 21st century classrooms. Therefore, it is sufficient to conclude that almost all respondents fail to grasp what will work in an e-learning environment; they lack understanding of e-pedagogy. A different view of the data is shown in Table 6 where selected items are presented across all four groups of academics at the NDUM.

The selected items are items 1, 3, 4, 8, 12 and 13. These items were chosen because they symbolise the key concepts of e-pedagogy and e-learning in a modern classroom. It is clear that from these 6 items both options 5 and 6 received the highest scores of 108 and 122, respectively. These two options are closer to the teacher centred learning approach and this approach clashes with the students' needs as digital natives who are prone towards the use of technology. Perhaps, a better understanding of e-pedagogy could be achieved by exploring its basis.

The underlying basis for e-pedagogy: Before discussing further, it is good to be reminded of this question on whether there are differences between traditional pedagogy and e-pedagogy. Researcher opines that it would be more beneficial to analyse the basis of e-pedagogy as part of the findings and discussions. Based on the features of good e-pedagogy (Kuriloff, 2005), the researcher strongly argues that in order to ensure a successful implementation of e-learning, academics must first and foremost understand that e-pedagogy depends very much on the understanding of how students learn now-a-days.

The most popular approach and to some extent effective approach to teaching in 21st century classrooms is student centred learning (Global Education, 2008).

Student centred learning revolves around one learning theory, constructivism. The items in the questionnaires were in accordance to this theory and one of the opposite theories, behaviourist approach to learning. Nevertheless, only constructivism will be

Table 6: Results for selected items

Learning approaches	Options	Items						Total responses
		1	3	4	8	12	13	
Student Centred Learning	1	1	7	4	5	5	3	25
Teacher Centred Learning	2	6	5	3	5	4	2	25
Learning	3	14	4	8	6	3	8	43
Teacher	4	13	7	10	8	3	8	49
Teacher Centred Learning	5	17	21	12	21	19	18	108
Learning	6	25	20	19	17	22	19	122
Teacher	7	9	14	15	19	19	22	98
Learning	8	1	8	15	5	11	6	46
Total respondents	-	86	86	86	86	86	86	516

Item 1: Emphasis on learning vs. teaching; Item 3: Knowledge construction vs. acquisition; Item 4: Previous knowledge and skills vs. knowledge is external; Item 8: Learner control vs. directed instruction; Item 12: Favours higher order skills vs. lower order skills; Item 13: Emphasis on case studies and multimedia vs. emphasis on written word

examined since its roles in e-pedagogy are significant. Constructivism is not a teaching theory, it is a learning theory. It looks at the relationship between student-teacher and student-student discourse that occurs in the classroom (Jaworski, 1993). Mitchell's concise definition provides an important way of moving through the vast quantity of research reports that have been written on constructivism much of it is misleading because it oversimplifies the implications of the teaching philosophies that emerge from it. Mitchell establishes two important arguments of categories of teachers: transmissive and interpretative teachers. The latter is learner-sensitive.

Underlying Mitchell's approach is one of the central assumptions of constructivism namely that knowledge must not be considered an objective representation of an external observer-independent environment or world (Von Glasserfeld, 1989). Rather knowledge is constructed by the thinker or the person who is learning namely by students and teachers. Again to quote Von Glasserfeld (1989), knowledge is a mapping of what in the light of human experience, turns out to be feasible. Given this constructivists insist that knowledge is never finite but forever evolving into expanded, deeper and more significant meanings. It is the role of the teacher to guide that process of learning.

Perhaps, Dewey is the 1st to talk about a new learning environment that throws the emphasis away from what the teacher is teaching (Mitchell's transmissive force) to what the student is thinking and doing (and the teacher who is concerned with this is called interpretive by Mitchell). Dewey (1997), writing at the turn of the 20th century proposes four key characteristics for a reformed educational system. These ideas continue to inform pedagogical debates well after rearticulated by the constructivists of the late 1970's. Amongst the important considerations are the importance of learning by doing

and reflecting on what has been done in terms of what has been learnt; connecting students' experiences to the content at hand; purposeful and more independent learning with a clear sense of the content and learning purposes of each task and critical thinking about current understandings and beliefs and how these compare with others.

From the pragmatic view point of how learning can best be promoted in classrooms, a constructivist understanding of how knowledge is acquired stresses the active role of the learner. In the words of Woolfolk (1995), student centred learning is the key. Schank (1997) and Prensky (2001b) have expanded on this and talk about learning by doing. Schank argues that students would learn better and retain information longer if they are actively involved in a learning process. Even if learning by doing leads to failure, this is welcomed as part of the learning process. Schank (1997) proposes that when doing something is fun as could be offered by new technologies, students have the chance to participate, take chances, make mistakes, challenge themselves and learn. Moreover, Schank (1997) insists that technology has made learning by doing into a realistic option in a range of situations that are not possible until the arrival of ICTs.

Some academics have misunderstood the concepts of learning by doing it is not about organising student activities in a classroom or arranging classrooms to create a scene of busy groups of students working on allocated tasks. Rather the starting principle is to create a classroom situation in which students are intellectually active physical arrangements and curriculum can promote this kind of learning situation but they are no substitute for the overall learning environment that must create a discourse between students and students, teachers and students in order to discuss why particular understandings have emerged and whether these understandings represent an accurate and sophisticated view of whatever problem is before the class. The same understanding applies to the concept of student centred learning. The only relevant student activity that needs to be understood by the teacher is the intellectual one and that again can only be ascertained by conversations between students and teachers.

Since, Schank's study in the late 1990's, other researchers have commented on the different values of new technologies in the learning environment. For Prensky (2001b) having fun is less important than the capacity of students to easily absorb new information through digital technologies. When students are given the choices to learn with new technologies, they assume more responsibility for their learning and thus become

more active participants. For Dzuiban *et al.* (2006), bringing digital technologies into the classrooms reduce boredom for a generation brought up on the internet and video games. These students known as digital natives and net gen students (or net generation), born after about 1981, find other forms of learning including television and computers. These frequently offer more active intellectual stimulus than lecture-based teaching. Such students may therefore have problems with old-fashioned learning approaches that put them in the position as passive students and the source of knowledge can only come from the teachers.

Further according to Tastle *et al.* (2005), digital technologies compel teachers to keep up with the students' command of technology. The teachers who are considered digital immigrants may find that students excel more at adapting and utilising technology. All these technological pressures on the classrooms from the outside world are according to Laurillard (1993), Oblinger and Oblinger (2005b) and Bonk and Dennen (2005), moving the general learning environment into a direction that focuses increasingly on the students' active engagement with learning rather than a fixed quantum of curriculum. This has been the gist of the items in the questionnaires. Students are also receiving information about the world from outside formal schooling. The older training approaches are increasingly superseded new technologies, the scholars argue, undermine the researchery of old-fashioned teachers.

To sum up, the academics at the Defence University are still trapped in the minds of the old-fashioned teachers. They are afraid to venture out of their comfort zone of researchery and this has created a friction in the progress of understanding e-pedagogy and ultimately accepting e-learning. Without their acceptance and adoption of student centred learning, it would be practical to also assume that they would be able to grasp the concept of e-pedagogy. On the question of whether there are differences in traditional and e-pedagogy, there is actually a fine line between these two. The differences are in terms of the approach taken to visualise the pedagogy itself although, the theories used are the same. At the same time, e-pedagogy focuses on the students' abilities to perform tasks at their own pace and this will be made possible using ICTs.

An evaluation of the hypothesis: The hypothesis of this study that academics at the Defence University are not able to appreciate e-learning because they lack understanding of e-pedagogy and its underpinning theories is proven to be true. Obviously, the management

of the University must revisit this issue immediately because the students' needs are the utmost importance that must be catered to. Being digital natives, they would not fit into the traditional pedagogy that stresses on didactic approach to teaching. Further, the researcher is also wrong to initially assume that the more experienced lecturers would be able to accept e-pedagogy wholeheartedly. Paradoxically, they have accumulated experiences at more established universities that have massive technological infrastructures. Perhaps, these digital immigrants have negative perceptions towards technology, this certainly should be the near research interest of the researcher.

CONCLUSION

In this study, the NDUM must 1st face the reality that its educators are in need of practical training for teaching methodologies. Practical in this sense refers to what works best in the military learning environment and the students of the 21st century. Then, the way forward is to ensure that proper measures are taken to overcome the issue. The study has illustrated two things: 1st, understanding of e-pedagogy is very little amongst the academics and 2nd, the academics are still adopting didactic approach to teaching or in the words of Mitchell, the academics at the Defence University are being transmissive. Nevertheless, the researcher strongly feels that this scenario is temporary; given proper amount of training and retraining all academics will be able to modify their methods of teaching.

There are no easy routes for all who are involved in educating future military officers. Differences that appear in the academics in terms of their backgrounds must be consolidated and transformed into strengths that make up this unique learning environment.

The researcher would like to caution that this scenario is not a superficial one; there are many more underlying challenges that must be braved by this new university. Amongst the challenges are the quality of academic performance of the students, the quality of classroom interactions and many more that contribute to a successful military learning environment. Not with standing that the educators of the university should accept their flaws as a sign for further improvement on their careers. As a serving educator at the NDUM, the researcher too has learnt a lot about her teaching repertoire and certainly, the researcher requires many more training to enable her to become an interpretive teacher who understands and utilises pedagogically suitable approach for e-learning.

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