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Special Edition on Teaching and Learning in South East Asia

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EDITORIAL

This is a **Special Edition on Teaching and Learning in South East Asia** of JIRSEA's, a first for JIRSEA and SEAAIR. Thus it is a new venture that we get into for a number of reasons. Firstly, SEAAIR and JIRSEA have been in existence for 15 years. It has therefore gone past its childhood and is stepping into adolescence. This transition is very important to some people that they would celebrate it in some way. Secondly, JIRSEA editions have been eclectic in their articles collection and contents. There are some disadvantages in this although diversity has been proven to be an advantage as well. Thirdly, one can argue that we have somewhat matured and should be allowed to try something else or new. Hence, the birth of this Special Edition.

By its name, this Special Edition focuses on one of the important aspects of Institutional Research, namely *teaching and learning*, in this case in South East Asia. It further aims to share with readers some of the *novel* methods as perceived by the authors being used and introduced in the region. The challenge is to uproot the predominant teaching and learning method in South East Asia that has been proven not to work as early as in the 1800's. One could not only imagine the damage that this debauched method had caused because we have seen and experienced it in our daily lives now. It is more popularly known as *rote-learning* which many have claimed not to be learning at all. We also have heard and read of employers' complaints about and frustrations with their new employees who are not able to communicate, nor think critically, nor innovate and are certainly not creative. Importantly is the argument that these dreadful results of our current education system is due generally to *rote learning*. Professor Dr Zoraini W Abas from Sampoerna University in Jakarta, Indonesia elegantly shares with us what 21st century education should be. This is followed by exposê of attempts by those involved in higher education in several South East Asian countries on rectifying the situation.

Blended Learning, peer-tutoring, communication styles, different approaches to improve English proficiency, to improve entrepreneurship, to improve research and research collaboration are some of the topics covered in this Special Edition. Yes, the topics are still eclectic and yet this Special Edition brings these together within a focus of both the general topic and geographical area.

We do hope you as readers find this Special Edition of JIRSEA useful to get a glimpse of what South East Asians are doing to address what is a chronic problem in education in the region. We need to remember that these are not the whole story of novel teaching and learning methods in South East Asia. What you see here we hope is just the tip of the proverbial iceberg.

I look forward to receiving your articles. Refer to (http://wwwseaairweb.info) for details.

Happy reading!

Nirwan Idrus
Editor

21ST CENTURY EDUCATION: STRATEGIES TO IGNITE AND ENGAGE STUDENTS

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Abstract

Educators today are being challenged to change their way of "teaching". Primarily the changes are driven by the way millennial students prefer to learn and this is largely the result of learning technologies that have created a new culture of learning from online resources especially from personal devices. In addition, higher education institutions are also facing demands from potential employers who only wish to hire graduates with the right set of skills. Commonly referred to as 21st century skills, this includes, among others, being effective communicators, problem solvers, critical thinkers and effective collaborators. Hence, educators are asked to consider using more appropriate approaches in the "classroom," be it physical or virtual, so as to produce graduates who will be able to support the needs of today's employers in particular and also to be able to function in an increasingly globalized or competitive world. The 21st century graduate should be one who will experience learning activities that will ignite and engage them so that they will be guided to learn deeper. It used to be through learning experiences that would take them through a variety of learning strategies. The paper will address the need and highlight some of the latest developments in education. It will also suggest some of the relevant strategies such as blended learning and flipped learning as ways to integrate and engage students for deep learning.

Keywords: *learning and teaching, strategies, student-centered learning, student engagement, blended learning, flipped learning, deep learning, higher education*

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Introduction

Much has been said about 21st century learning and teaching. Buzzwords that are often heard include: student-centered learning, active learning, blended learning, deep learning, differentiated learning, flipped learning, learning analytics, learning design, learning space, online learning, personalized learning, self-managed learning, social learning, and student engagement. At the same time, everyone has realized that learning resources are no longer limited to print resources or the typical textbook. It has been advocated that educators consider contributing to a world that shares, re-shares and re-creates learning resources within the concept of an open world (Bonk, 2009). Hence, we now hear of OERs (Open Educational Resources), OER University, and Massive Open Online Courses (MOOCs). Unfortunately, not every educator in higher education institutions welcome these developments with open arms or are readily changing their ways to support their students better.

Fortunately, for those who have been following the developments in the educational technology or instructional technology or similar fields, the buzzwords are not new and they have, in fact, been sharing their success with new approaches to learning and teaching with their colleagues around the world, as many of these are available online. These new approaches, when applied or implemented, bring potential benefits to the students, who incidentally, should be the focus of policy-makers and educators in education institutions.

Also, recently, increasing suggestions on which learning theories should be applied in the 21st century "classroom" have led to even more discussions among educators so as to understand which one(s) are relevant or more appropriate. Indeed, learning was primarily based on behaviorist learning principles but while applicable for the lower levels of Bloom's taxonomy, an educator should instead apply only some of the cognitivist learning principles but more of the constructivist learning principles. Only then can educators be considered to have provided students with 21st century education.

According to Alber (2013), graduates of the 21st century are required to be effective communicators. Graduates should also be a problem solver, critical thinker and an effective collaborator. In addition, Nichols (2015) suggests four others (agility and adaptability, curiosity and imagination, accessing and analyzing information as well as initiative and entrepreneurship). Figure 1 show Nichols' seven skills that students will always need.

Alber advised that these skills could be nurtured through deep learning. The next question would naturally be, "what is deep learning?" A perusal of the literature will indicate that deep learning is everything but surface learning. The latter is frequently referred to as rote learning which includes remembering and understanding (Lublin, 2003; Weimer, 2012). While the first two levels in Figure 2 refers to elements in surface learning, the higher levels refer to elements in deep learning. Good teaching will nurture deep learning. Evidence of deep learning as indicated by Lublin (2003, p. 3) would include students who do the list shown in Figure 3.
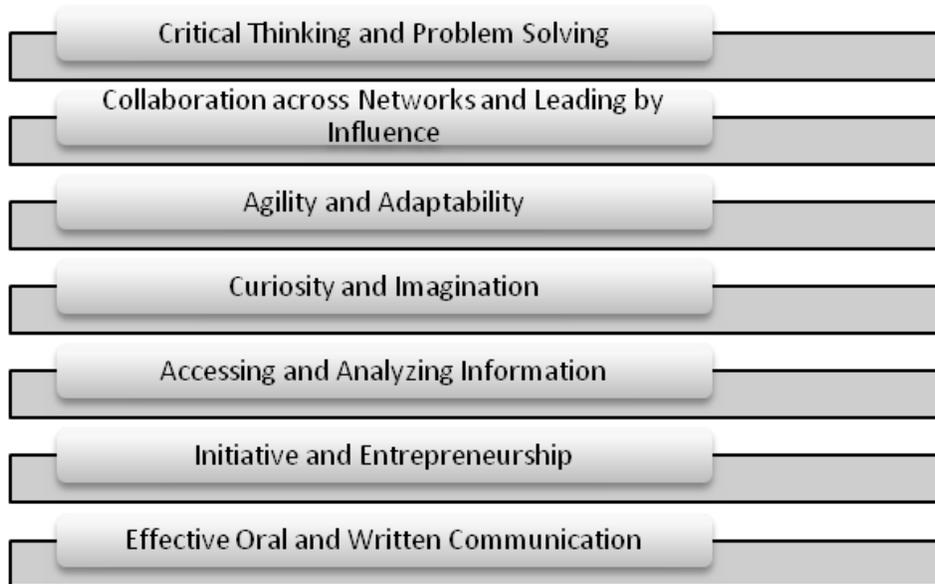
*__Figure 1. Seven skills students will always need__*
Source:
http://www.teachthought.com/learning/how-to-prepare-student-for-21st-century-survival/
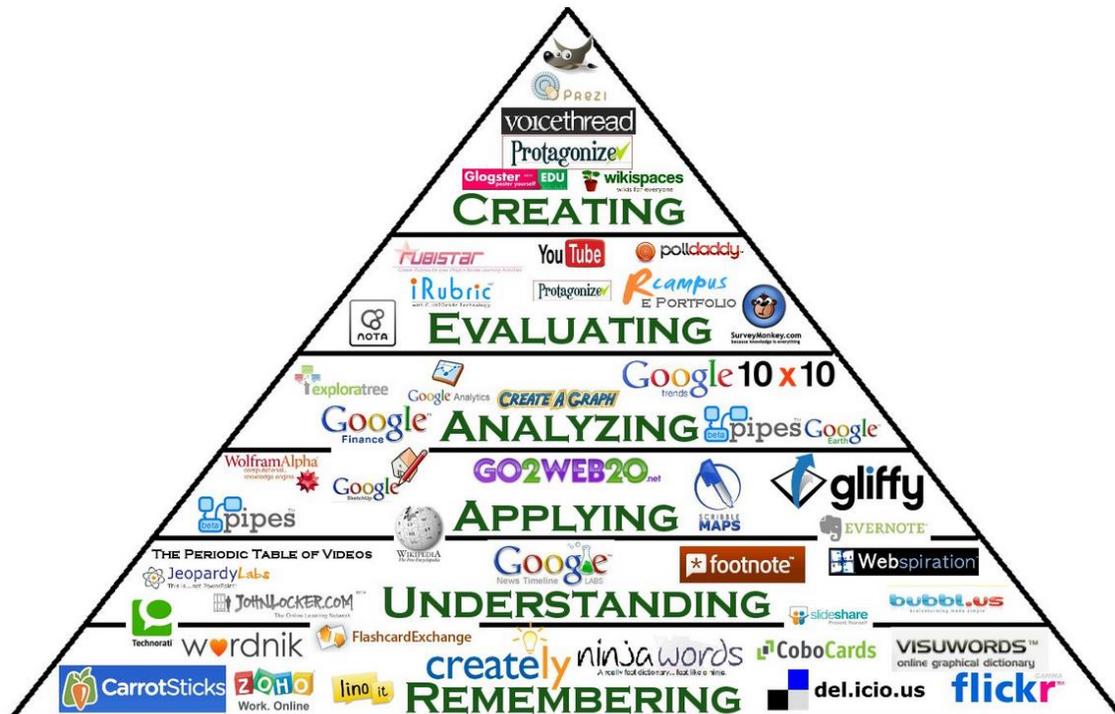
__Figure 2.Bloom's Taxonomy and Sample Online Tools__
Source**:** http://educationaltechnologyguy.blogspot.co.id/2012/05/apps-to-support-blooms-taxonomy-android.html

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More important, however, are what Lublin discovered in relation to encouraging deep learning. For example, when students perceive their workload as heavy, they will tend to adopt surface learning for the sake of passing exams. For deep learning to occur, the instructor should involve active learning strategies and self-learning activities. It means more time on task and more time spent on a particular topic to engage students at higher cognitive levels. The instructor could engage students in a series of discussions that could take place online involving not only sharing of facts, examples, non-examples but also resources. It is important that higher order objectives on the Bloom's taxonomy of learning (see Figure 2) become part of the learning outcomes for the students. Also, how learning is assessed should move away from those that test from being able to recognize and recall to those that test for application, analysis, evaluation and creation.

- Actively seek to understand the material / the subject
- Interact vigorously with the content
- Make use of evidence, inquiry and evaluation
- Take a broad view and relate ideas to one another
- Are motivated by interest
- Relate new ideas to previous knowledge
- Relate concepts to everyday experience
- Tend to read and; study beyond the course requirements
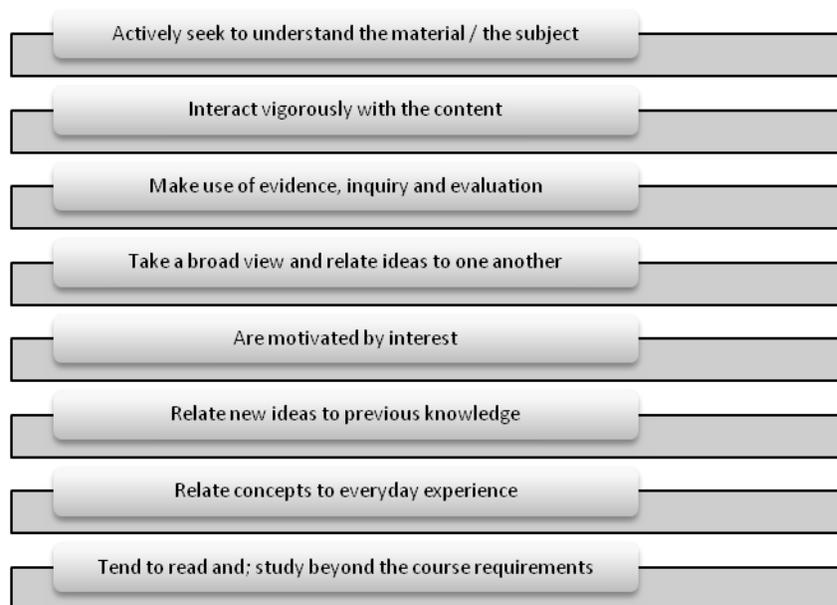
Figure 3. Evidence of students undergoing deep learning
Source:
http://www2.warwick.ac.uk/services/ldc/development/pga/introtandl/resources/2a_deep_surfacestrategic_approaches_to_learning.pdf (p. 3)

The Changing Landscapes in Society and Education

The Flat World

Friedman (2005) in his bestseller, "The world is flat," identified factors leading to a world that is being flattened since moving into the 21st century. One of the results is being able to innovate without having to migrate, where the world has become a single space, where we live in a borderless world and where globalization predominates. Hence, individuals who are able to work within this realm and in multiple and almost limitless collaborative ways. The latter is a result of powerful platforms and

online networking (e.g. offshoring of production, outsourcing of services, and uploading of open source software, content as well as resources, and insourcing of logistics or services. Individuals who will be able to leverage on the collaborative ways will, indeed, be among those who will most likely to succeed. In other words, the global economic playing field is being levelled and eventually, only those with the right qualities will succeed. Hence, it is imperative that higher education graduates are educated based on a curriculum that will provide them with the right qualities in the three main areas: attitude, skill and knowledge.

Evolution of Learning Technologies

Based on the infographic on the evolution of learning technologies (http://bit.ly/1LnGHtl), we have come a long way. From hieroglyphs to the abacus, printing press, calculator and lately, 3D printers and robots, we have seen how each has or will influence our daily lives. It used to be, when, in the 60s, to add variety to the learning and teaching in a classroom, educators used audiovisuals such as filmstrips, posters, photographs, newspaper clippings, overhead transparencies, cassette tapes and video cassettes to support the various learning styles of students. Soon after (in the 80s), development of multimedia courseware became the craze and it was then that Computer Assisted Learning and the like became popular. In the 90s, these gave way to resources found on the Internet, typically, publications, websites or online facilities to help educators create web-based quizzes, crossword puzzles, exercises, and the like. Most revolutionary was when the Internet became even more powerful, that is, when we reached the 21st century, offering web-based portals for education. Over the last ten years almost every college and university has been providing the campus community with a Learning Management System, popularly, Moodle to support course delivery.

The latest developments include the Internet offering of social media sites that now provide us YouTube videos, and Slideshares but also other interesting social media sites such as Twitter, Facebook, Pinterest, ScoopIt have become popular in the classroom. More useful tools that educators find useful are listed annually by Jane Hart, an educator in the United Kingdom. Her latest list is at:2014 Top Learning Tools by Jane Hart
http://c4lpt.co.uk/top100tools/or more recently by some of top bloggers in education:
http://www.c4lpt.co.uk/blog/2015/08/27/15-bloggers/
Bonk (2009) reported that, parallel to the world becoming flat, education too is being flattened with the open education movement such as in the use of open educational resources and the offering of courses online to the masses in the form of MOOCs. Examples of efforts involving open eduation and use of OERs can be seen at the eMundus ATLAS Web site at http://emundusatlas.org/

It is not an understatement that when iPhones and iPads became available, mobile learning and use of social media sites and facilities started becoming the norm for those able to merge pedagogy with technologies. These personal devices are providing just-in-time learning and in such interesting ways that 21st century learning students enjoy. It incorporates interactive approaches that are more dynamic and appealing. Students can be seen to enjoy using Facebook, Twitter, and Instagram on their personal devices. Of late, infographics and Pinterest boards are bcoming part of their courses as well, obviously included by 21st century educators. These seem to be more attractive than the LMS, although they are still seen to be useful such as for the submission of assignments and for the

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downloading of materials previously uploaded by instructors.

Given the quick-pace developments in the last two decades, it appears that keeping up is a challenge and what more to select a few and apply them in our professional lives. Abas (2015a) believes that it is crucial in the 21st century that educators use a variety of approaches and incorporate appropriate online tools to foster learning by engaging the students. Student-centered leaning approaches are to be used where "the learning experience should be based on active learning, applying the constructivist principles of learning to develop higher order thinking skills and to promote communication skills, cooperating and collaborating with other learners as part of the knowledge construction (p.9)."An engagement model has been proposed and the move from the "push" model of teaching to the "pull" model of learning is among ways to get students engaged with their learning.   Description of the engagement model and the "pull" model are available at http://jaems.jp/contents/icomej/icomej.html. Next, two of the most significant developments in the past decade are highlighted below.

The One World Schoolhouse

Salman   Khan,   founder   and   Chief   Executive   Officer   of   the   Khan   Academy (http://www.khanacademy.org) who was once a financial analyst but now a popular leading educator, has been so effective with his "teaching" videos that several foundations have each contributed up to millions of US dollars. The Academy with its mission of providing "a free, world-class education for anyone, anywhere" for K-12 and higher education, has attracted several of the biggest foundations such as the Melinda and Bill Gates Foundation (Khan, 2012).

Founded in 2008, Khan Academy offers almost 600 million lessons in the form of concise instructional videos ina range of subjects (economics, math, biology, physics, computer programming, art history, history, health and medicine, and others) in 36 languages, practice exercises (taken at the rate of about 4 million each day). In addition, teacher tools provide learners a form of personalised learning as they are empowered to study at their own pace in and outside of the classroom.   What Khan had been able to do was to re-imagine education and provided, as Khan's book is titled, The One World School House. The academy has enrolled about 30 million learners within seven years of its establishment. About a million teachers have brought their students with them into the Academy.

Khan Academy videos may be used to support or supplement instruction in the physical classroom. At the Sampoerna University in Jakarta for example, a few lecturers have recognized the value of Khan Academy videos as helpful for learners who need more help to learn or to improve their math skills. In other words, the videos are being recommended to students who need to spend more time learning the more difficult concepts outside class. In addition, the videos can be used to allow students to learn from before taking a placement test, for example.

Massive Open Online Courses (MOOCs)
Although first introduced by three well-known Canadian educators (George Siemens, Stephen Downes and Dave Cormier) in 2008, MOOCs caught the attention of the education community around the world when two professors and indisputable experts in artificial intelligence from Stanford University (Sebastian Thrun and Peter Norvig) offered their regular on-campus course for the first

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time, entirely online. More than 160,000 individuals from every country (except North Korea) registered for the course. While only 23,000 students completed the course and given a Certificate of Completion, it nevertheless paved the way for hundreds of other MOOCs around the world. The MOOC List Web site at https://www.mooc-list.com/ is a good point to search for a course to enrol in.

MOOCs are today, one of the highlights in the education and the training world, and as Abas (2015a) suggested, there are at least 25 ways of using MOOCs in formal, non-formal and informal education (see http://bit.ly/1Qog2vR).One of the ways is to have students on campus enrol in a MOOC that is similar to a course they are enrolled on campus to supplement their knowledge and to help address any gaps, if any.

MOOCs have now been launched as national efforts in many Asian countries such as Indonesia, Japan, Korea, Malaysia and Thailand. A book titled, "MOOCs and open education around the world, edited by Bonk, Lee, Reeves and Reynolds (2015) provides a good overview of how MOOCs are being used to move higher education and workforce training forward. Also, both opportunities and challenges are explored in its 29 chapters written by experienced educators around the world. In the latter, Abas (2015b) highlighted how in Southeast Asian countries, MOOCs are being glocalized.

The Role of Educators of Today

As Nelson Mandela once said, "Education is the most powerful weapon which you can use to change the world." Hence, as educators, we should feel empowered to change the world through our students, that is, via our "teaching" roles in the "classroom." These days, the "teaching" should actually be "facilitating" and the "classroom" could very well be both the physical and virtual classrooms. Learning should be self-centered and use of technology should be part and parcel of learning, especially through the use of mobile devices.

The need and importance in providing 21st century education has been obvious to an increasing number of educators but, perhaps, still only to a minority somewhat. The majority prefer to wait and see or perhaps, have been keen to change so as to be able to contribute to producing more relevant graduates but may need some advice on how to. There are others still, who think there is nothing wrong with how they deliver their lectures and dismiss the need to change their ways of "teaching" their learners today.

Of interest are the four groups of learning theories (behaviorism, cognitivism, constructivism and connectivism.) that influence how learning is achieved. For student-centered learning, we should apply constructivist and connectivist learning theories. Figure 4 shows the methods to use to support the latter theories. It is time to do less of teacher-centered learning and more of student-centered learning simply by focusing on methods that also gives students ownership of their own learning paths and preferences.

The leaders, followers and the laggards

It has been known that among educators, there are the leaders, followers, and laggards. While leaders champion innovative ways of learning and lead the way, the followers eventually get on the path to

applying newer and more interesting ways to learn. The laggards, although straddling behind are still welcomed in spite of having taken a longer time to decide to improve the way they help students to learn.   Interestingly, another way of capturing the various levels of engagement with learning technologies and is self-explanatory is illustrated in Figure 5.
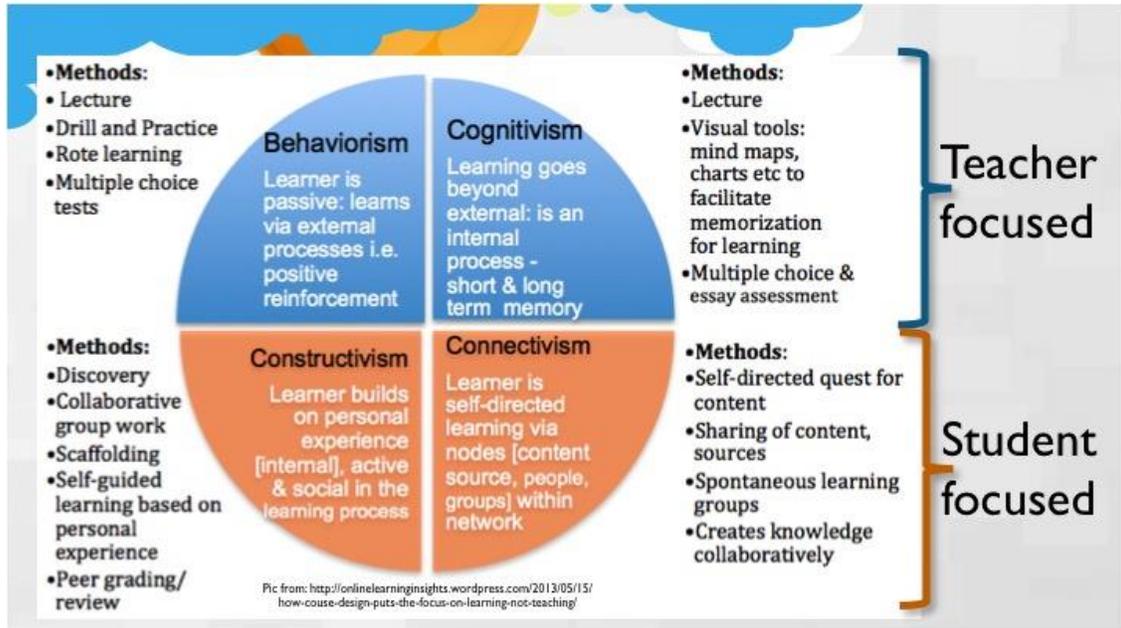


*__Figure 4. The theories of learning and respective methods__*
Source: http://bit.ly/1KsdJDz
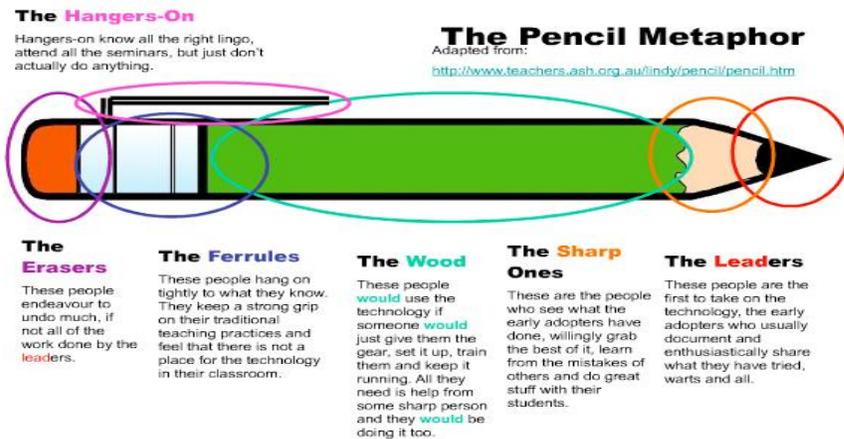
__Figure 5. The stages of technology adoption__
Source: http://bit.ly/1qSBefr

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Good Learning and Teaching Practices – Student-Centered Learning

How and why should educators move to student-centered learning is obvious. As individual educators, we should promise ourselves that we will help the students to learn. Students need to master basic or fundamental concepts as well as become competent in the relevant skills, yet display the values of civilized citizens and respectable or responsible human beings. As the focus of the article is on helping students to learn and to develop relevant skills, student-centered learning is key. Approaches that support this include blended learning and flipped learning.

Blended learning in particular, supports learners with different learning styles. While some learners learn best by reading, others learn best while listening. Others learn best through activities and others simply from seeing things. In addition, while some learners prefer to learn in groups, others learn better when they do it alone. The blended approach requires more preparation time but considering how learners will benefit, it is what passionate educators will be willing to do. An overview of blended learning is provided in the following set of slides: http://www.slideshare.net/zoraini/blended-learning-3131139.

Flipped learning started becoming popular when two high school teachers shared their successes and became very popular around the world at the primary, secondary and higher education levels.As flipped learning experts, Aaron Sams and Jon Bergmann have since established a Web site at http://flippedclass.com/ to promote their services to fellow educators. More about flipped learning can be viewed at: https://www.youtube.com/watch?t=19&v=bwvXFlLQClU and an overview can be obtained from: https://www.pinterest.com/zoraini/keys-to-flipping-your-class/

What Learners Want

According to Laird (2012) in his blogpost on what learners want, educators should consider merging traditional methods with innovative methods of learning and teaching.   It is about producing an integrative approach to learning and teaching to support the needs of the learners. Laird spent a day with 20 learners seeking to understand the kind of learning environment and experiences that learners want. These are summarized athttp://rosslaird.com/blog/what-learners-want/.   Learners want learning reinvented and transformed. The summary did not seem to include traditional methods of learning where surface learning dominates. They are applications of the later theories of learning where learning is community-based, experiential, holistic and without boundaries, promotes creativity and critical thinking rather than regurgitating facts, and where learning occurs both inside and outside the classroom. Most importantly, learning support the needs of a diverse group of learners with different learning style, interest and motivation. Inaddition, we should leverage on the fact that more and more students have smartphones as well on the social media sites that students are already comfortable with.

Conclusion

As Confucius once said, "every truth has four corners: As a teacher I give you one corner, and it is for you to find the other three." This is far from giving lectures or to engage students in rote or surface

learning, mainly with the objective of passing exams. A world-class education is necessary to produce the right set of graduates for a world that is constantly changing. 21st century students are also no longer motivated by just any learning and teaching approach. They prefer their instructors to move away from traditional ways (commonly seen as passive and boring approaches) to more innovative, active, and student-centered learning approaches. Where appropriate, incorporate learning technologies such as personal devices, social media and online tools.

Students are aware that there are more interesting online resources to learn from, not only those limited by what are in the textbooks, or what their instructors provide to them. It is timely that we provide "pull" learning methods rather than "push" the learning to learners. Let students decide and take ownership of how and when they would like to learn. Let them be self-learners responsible and accountable for their own learning, alas, with the right motivation and feedback from their instructors. Resources to help educators improve themselves and find valuable resources to help and support their learners are plentiful online. Many are in the form of social media and open educational resources and some are in the form of MOOCs. There are also several MOOCs on 21st Century Learning or on learning design for the 21st Century and the like that educators could enroll in. In addition, there are many opportunities to participate in free webinars for educators who wish to improve their "teaching" effectiveness.

Finally, as Skinner rightly stated, "education is what survives when what has been learned has been forgotten."

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Useful References and Resources

E-book - Adding some TEC-Variety by Curtis J. Bonk and Elaine Khoo.
http://tec-variety.com/

A Dictionary for 21st Century Teachers
http://www.teachthought.com/learning/learning-models-learning-theories-index/

Slides

21st Century Learning
http://bit.ly/1OkQjqw

Blended Learning
http://bit.ly/1KqPh6v

Pinterest Boards

21st Century Learning and Teaching
https://www.pinterest.com/zoraini/21st-century-learning-teaching/

Keys to Flipping your Class

https://www.pinterest.com/zoraini/keys-to-flipping-your-class/

Online Tools for Teachers
https://www.pinterest.com/zoraini/online-tools-for-teachers/

Facebook groups:

Learning Innovators and Creators
https://www.facebook.com/groups/t4t2011/

Flipped Learning: What, why and how
https://www.facebook.com/groups/flippedlearning/

Personal Devices for Learning and Teaching
https://www.facebook.com/groups/iPTA2011/

<u>**Biographical Notes**</u>:

Professor Dr Zoraini, is Acting Vice-Rector, Academic and Student Affairs and Director, Center for Learning, Teaching and Curriculum Development at Sampoerna University, Jakarta, is a 21st century educator and practitioner. She pioneered e-learning and strongly contributed to online distance learning.

She was named Southeast Asian's influential higher education leader and received an Education Leadership Award from the World Corporate Universities Congress.

INTRODUCING BLENDED LEARNING PRACTICES IN OUR CLASSROOMS

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Abstract

Blended learning has been received great interest in higher education around the world since it can increase access and flexibility for learners, increase level of active learning and achieve better student experiences and outcomes. Blended learning becomes popular to Higher Education Institutions community in Malaysia since a number of public and private universities were committed to bring the blended learning approach in their teaching and learning activities. Medium-impact blended learning has been used in BEng in Civil Engineering Programme, Bachelor Degree in International Business Programme and UK Degree Transfer Law Programme at INTI International University, Malaysia. Teaching techniques used in our classrooms were raptivity, flipped classroom and assessment and rubric on blackboard. The objectives of this study are to provide information on a variety of learning and teaching strategies that used in engineering and law subjects to support blended learning and to find out the perception of students on blended learning practices introduced in their classrooms. As for an academic, more initial preparation time is required to design a suitable blended learning model. Based on the response from the students, about half of the respondents neither agreed nor disagreed with the statements for contentment with blended courses. About 25% of the respondents would like to have more blended courses. It may be concluded that most students were not comfortable with online activities and they still preferred the traditional classes although blended learning has the proven potential to enhance the effectiveness and efficiency of meaningful learning experiences.

Keywords - blended learning, raptivity, blackboard, flipped classroom

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Introduction

Blended learning has been received great interest in higher education around the world since it can increase access and flexibility for learners, increase level of active learning and achieve better student experiences and outcomes. Blended learning becomes popular to Higher Education Institutions community in Malaysia since a number of public and private universities were committed to bring the blended learning approach in their teaching and learning activities.

Several definitions of blended learning are available in the literatures. According to University of Western Sydney (2013), blended learning refers to a strategic and systematic approach to combining times and modes of learning, integrating the best aspects of face-to-face and online interactions for each discipline, using appropriate information and communication technologies (ICTs).

Pankin et al. (2012) pointed out that blended learning can be implemented using different learning methods (lecture, discussion, games, case study etc.), different delivery methods (face-to-face instruction, flipped classroom or computer based learning opportunities) and different level of guidance (individual, lecturer led or group learning).Embi et al. (2014) stated that the course must be reviewed to include blended learning elements such as flip teaching/learning and collaborative learning to improve students' active learning and satisfy the requirements of industry and profession.

Today, the 'Flipped classroom' method is being implemented increasingly around the world in various dynamic and creative ways from primary, secondary to tertiary education (Faculty Focus Report, 2014).

As we explore the use of blended learning, Garrison and Kanuka (2004) recommended that to assess and evaluate its effectiveness with respect to learning outcomes, student satisfaction, retention and achievement. Since a variety of interesting classroom activities was used in our classrooms, the objectives of this study are to provide information on a variety of learning and teaching strategies to support blended learning used in engineering and law subjects and to find out the perceptions of students on blended learning practices used in their classrooms.

Methodology

Medium-impact blended learning replaces activities in an existing course (defined by Alammary et al., 2014) has been used in Open Channel Hydraulics and Water Engineering in the BEng in Civil Engineering Programme (January and August 2014 sessions), International Trade Law in the Bachelor Degree in International Business Programme and Public International Law and Company Law in the UK Degree Transfer Law Programme since 2013, at INTI International University, Malaysia.

Teaching techniques used in our classrooms were Raptivity, flipped classroom and assessment and rubric on blackboard. "Raptivity is a fine crafted builder that offers a rich collection of 190+ templates for creating e-learning interactions, quick and easy, absolutely without any programming" (http://www.raptivity.com/). The template ranges across various categories such as games, simulations, brainteaser, interactive diagrams, virtual words and many more. A number of games from raptivity are used to design a blended learning course to create more face-to-face interactions in our classrooms.

Flipped classroom describes a reversal of traditional classroom where students expose the materials outside of the classroom usually via reading articles or watching lecture videos, and class time is used to do the harder work such as homework or assignment.

Blackboard is a platform for e-learning which provides online tests, discussion boards, reflective journal, assessment and rubrics for assessment and others. In this study, multiple choice questions, true or false questions and rubrics are designed for assessment on blackboard so that students can test their knowledge on the particular topics.

This study employed a survey approach using a seven-scale questionnaire (from strongly agree to strongly disagree) to assess students' perceptions on blended learning. The questionnaire consists of six questions regarding time management, self-pace and contentment in the activities. Law students from the author's classrooms were given the questionnaire for their views on blended learning since they have experienced these practices in three or more classes. They were considered as the pioneers in experiencing a new approach since the university has recently introduced blended learning in selected courses. Therefore, descriptive statistics is used in this study since the entire group of students was considered as a whole population. In the near future, authors will work with samples rather than a whole population when random sampling becomes possible.

Results

Raptivity

In order to trigger an interest of students, games provided by raptivity are suitable and reflect their challenging life style. Among others, games such as Sticky Notes, Wheel of fortune, Graphic Choice, Crossword puzzles, Find-hidden-picture, Match, Catch-them-fast, Hierarchy, Answer-or-deal were given as examples in this study.

One of the useful templates from raptivity is Sticky Notes. It is especially useful for students to be familiar with new terms in the topic. It was used in teaching law subject to non-law students. This is deployed in International Trade Law for business students who are not familiar with the terms like carrier, shipper etc. Students preferred to read the material provided in this game (see Fig. 1) rather than reading from traditional lecture notes or text books.

Wheel of fortune is a popular game in daily life of our society. By playing this game, students were having fun and learning at the same time. For student's excitement, different topics from Public International Law but they are related to each other were combined for this exercise. Students were asked to answer multiple choice questions on important areas of the selected topics. Example of Wheel of Fortune is shown in Fig. 2. It helps students to understand the basic principle of the topics.
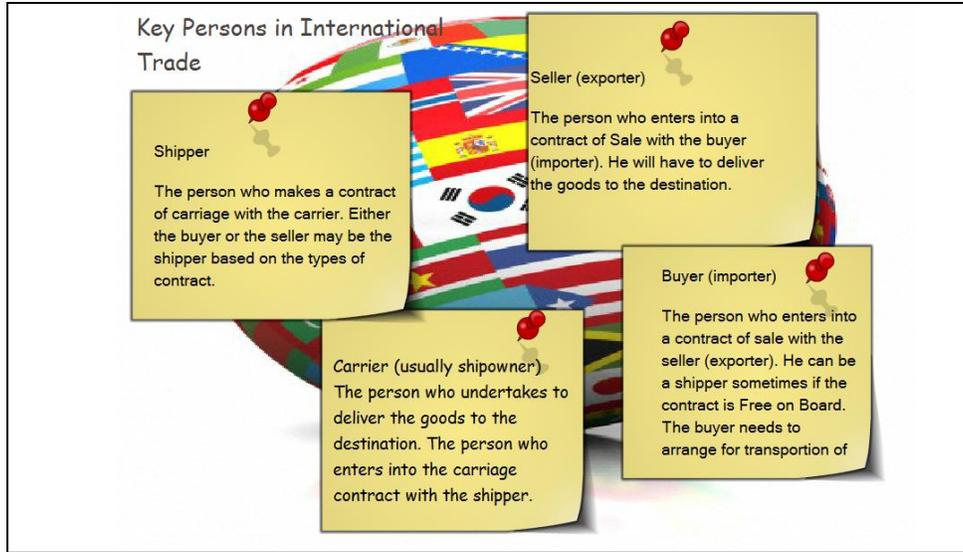
Figure 1. Showcase of Sticky notes used in International Trade Law
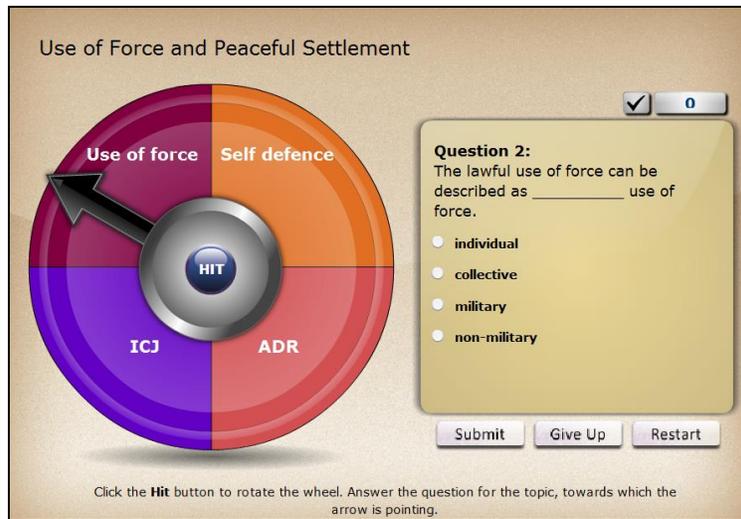
Figure 2. Showcase of Wheel of Fortune used in Public International Law

Since generation 'Y' and 'Z' prefer visualisation, Graphic Choice – multiple section game on raptivity is the right tool for students. After discussion on the coverage of the cargo in three governing rules: common law; Hague-Visby rules; and Hamburg rules in Carriage of Goods by Sea, students were asked to answer the additional cargo coverage by Hamburg rules with the help of the template created by the instructor. Students were excited to choose the first and second pictures since they represent on-deck-cargo and live animal (see Fig. 3).

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Figure 3. Showcase of Graphic Choice used in International Trade Law

Find-hidden picture game is one of the appropriate games for students to have a grasp of unfamiliar subject like Public International Law. First week of the semester, students were asked to watch a documentary video on "International Law" and played a hidden picture game as shown in Fig. 4 so that students have a basic idea of the subject before attending the first lecture.

Figure 4. Showcase of a Find-hidden-picture game used in Public International Law

Raptivity also provides a template for Crossword puzzle. If instructors don't have a raptivity software, crossword puzzle can be created by using the following link 'http://www.theteacherscorner.net/'.Instructor can create crossword puzzles to help the students to be familiar with terminology and spelling. Students have the opportunity of using the puzzles

for their learning. Figure 5shows the Crossword Puzzle used for Company Law. Crossword puzzle is used to design for the civil engineering students from the topic of dams in Water Engineering. Students were excited since it was their first activity in their learning.

Across
2. main reason to destroy separation between a company and its members (**fraud**)
5. existence of a company can be described as (**perpetual**)
6. Articles of association can be described as ----------- of a company (**constitution**)
8. a director of the company can be removed by this resolution (**ordinary**)
10. company's articles can be amended by this (**special**)

Down
1. a group of persons who will become first members of the company (**subscribers**)
3. type of personality owns by a company (**artificial**)
4. Company in which liability of the members are always limited (**public**)
7. founder of the company is called (**promoter**)
9. separation between a company and its member is called (**veil**)

Created on TheTeachersCorner.net Crossword Maker

__Figure 5.Showcase of Crossword Puzzle for Company Law__

Catch-them-fast game is an exciting game for students to understand the duties of the shipper. Students were allowed to make multiple attempts while playing games to remember the contents. Figure 6describes the showcase of Catch-them-fast game used in International Trade Law.
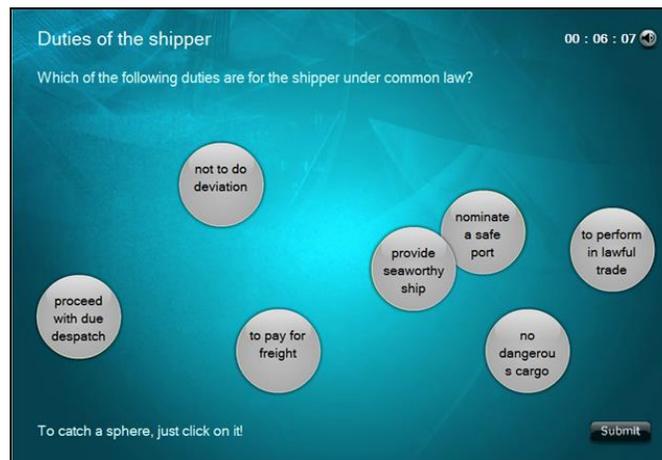
__Figure 6.Showcase of Catch-them-fast game used in International Trade Law__

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The game called 'Match' is very much appropriate for understanding the complex principles in Use of Force in Public International Law. Students practiced these principles such as humanitarian intervention and collective use of forceby matching the terms and descriptions (see Fig. 7).

Figure 7.Showcase of Match used in Public International Law

Another interesting template provided by raptivity is Hierarchy game. It is used for students to understand the sequence of the document involved in the international trade for the shipper to prepare. Figure 8provides the showcase of Hierarchy game used in International Trade Law.
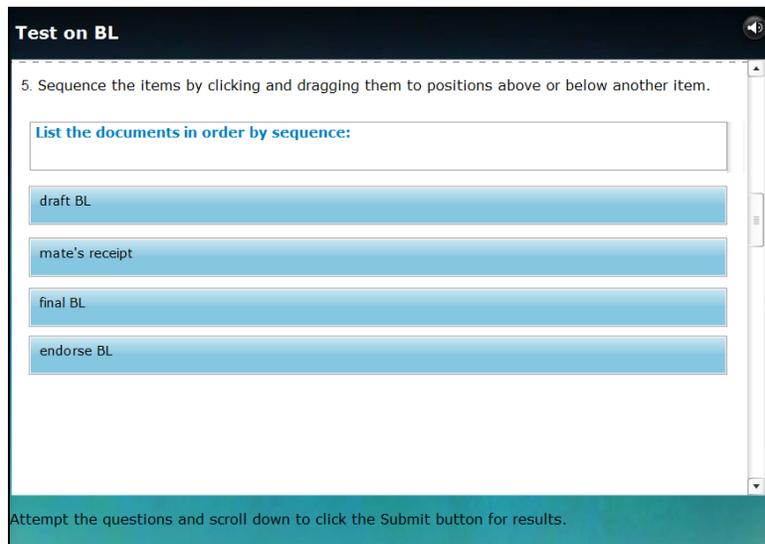
Figure 8. Showcase of Hierarchy game used in International Trade Law

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Answer-or-deal template as shown in Fig. 9 was designed to introduce different types of dams to civil engineering students. Most of the students obtained all correct answers without taking an offer since they wanted to play well.
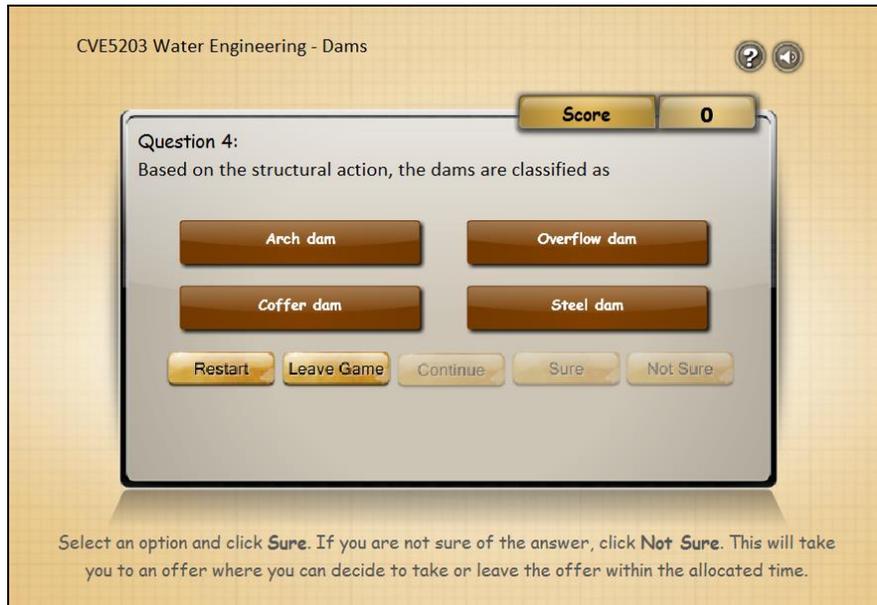
Figure 9. Showcase of Answer or Deal game used in Water Engineering

Flipped classroom

Flip classroom is the one of the preferable methods in blended learning. Students were asked to watch a video or read a journal article outside of the classroom. Then discussion on the assigned task will be taken place in the classroom. It is used for the topic of International Law in Public International Trade Law. A video on the lecture delivered by famous professor is uploaded from you tube on blackboard for students to watch it outside of the classroom. Then assignment on the topic was discussed during the class.

Flipped classroom was also used in civil engineering programme. Students were asked to study different topics in Water Engineering which were uploaded on blackboard outside of the classroom. In class time, each group presented the given topic and followed by the discussion on the problem solving given in the assignment. Students were content with their own learning. This activity enhanced "an ability to communicative effectively", "ability to function on the group work" and "ability to show life-long learning" which are required criteria set by Engineering Accreditation Council, Malaysia.

Perceptions of students on blended learning

The questionnaires were given to law students and 51 students responded. Analysis is carried out on the responses obtained from 25% of male students and 75% of female students. A majority of respondents were Malaysian (88%). International students came from Mauritius and Nigeria.

About ninety percent of the respondents were between the ages of 19 and 21, with 10% were older. Students' perception on blended learning is shown in Fig. 10. It is observed that about 50% of the respondents were neutral for the first three items shown in the figure below. About 25% of the respondents supported the blended learning since they felt to have more blended courses. However, more than half of the students agreed that they could organize their time better and they could control their self-pace. More than 40% of the students would like to spend time in classroom setting rather than spending time online.
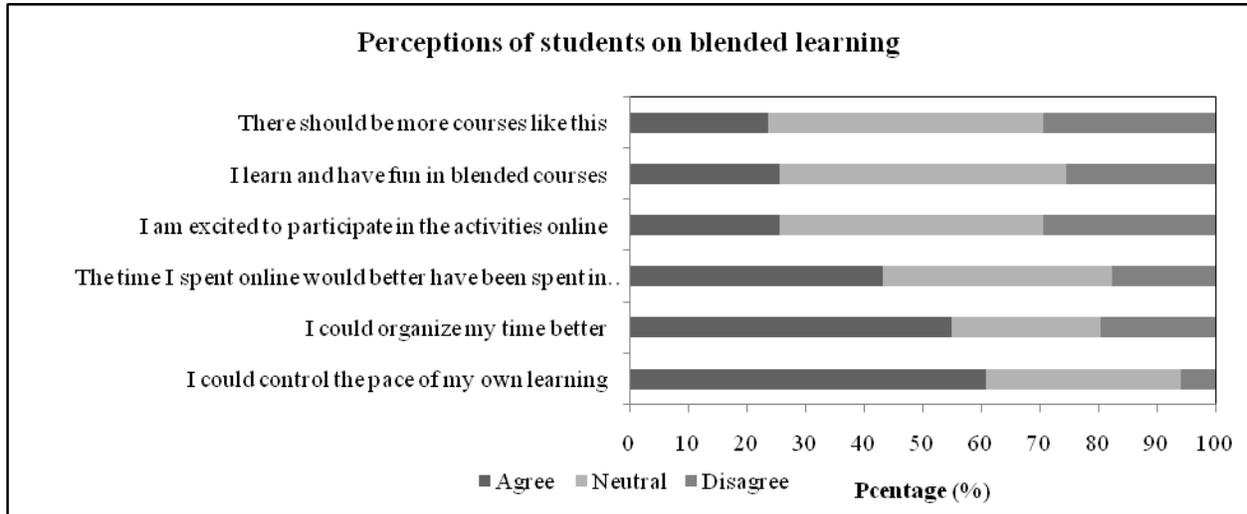
*Figure 10. Perceptions of students on blended learning*
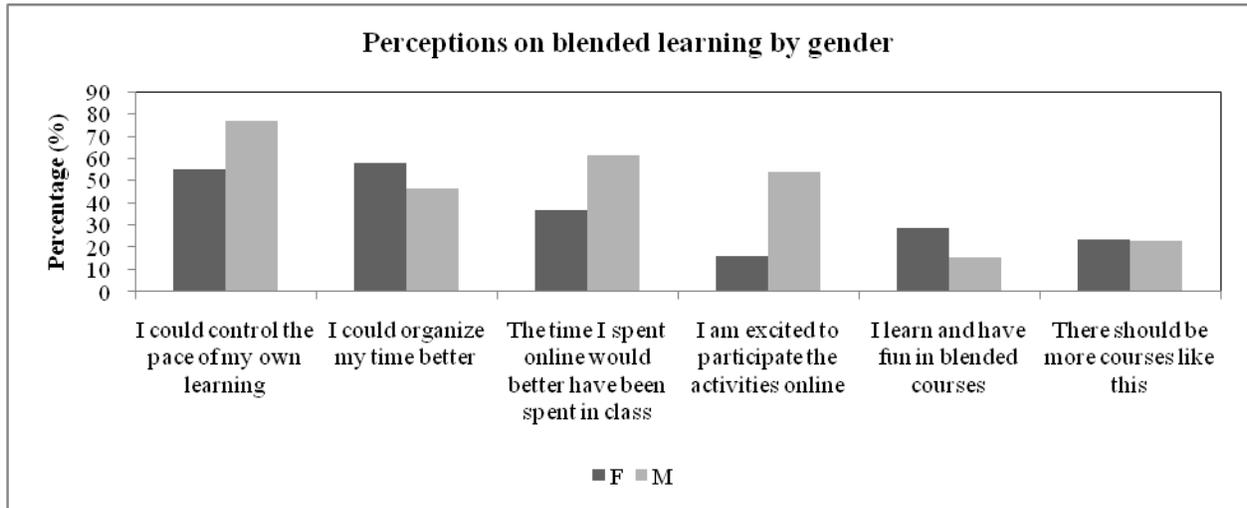

Figure 11. Perceptions on blended learning by gender

Figure 11 shows students perceptions by gender on the scale of 'agree'. It can be seen from the figure that male students felt that they would like to spend time in the class as compared to female students. However, more than half of male students were excited to participate in the

activities online. This was not the case for female students but they have reported that they had fun and learned in blended courses. Only about 25% of both genders would like to have more blended courses.

Conclusions

A number of learning activities using raptivity, flipped classroom, assessment and rubrics on blackboard were introduced in our classrooms to enhance blended learning. Based on our experiences, more initial preparation time is required to design a suitable blended learning model. However, students received the feedbacks on the assessments quickly through computer based technology.

Based on the response from the students, about half of the respondents were neutral regarding the contentment with blended courses. About 25% of the respondents would like to have more blended courses. It may be concluded that most students in the analysis were not comfortable with online activities and they still preferred the traditional classes. It may be the reason that blended learning has recently started being implemented in INTI International University as well in Malaysia. Students may need more exposure and time to adapt to the new approach of learning to be able to appreciate the benefits of blended learning. Therefore, the university offers students' readiness module on blended learning to new students since blended learning has the proven potential to enhance the effectiveness and efficiency of meaningful learning experiences.

It is recommended that a random sample of data be taken from a population to describe and make inferences about the students in the university.

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Useful online resources:

http://www.raptivity.com/

http://www.theteacherscorner.net/

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CAPITALISING ON TECHNOLOGY FOR LEARNING:
CONCEPTUALISING A BLENDED LEARNING MODEL

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Abstract

It is often said that human behaviour is shaped by the environment they live in. Mark Twain's Pudd'nhead Wilson best illustrates this theme. The years of socialisation and conditioning form and colour the unique life experiences of a person. So too are today's generation of students. They live in this ever dynamic environment of technologies, from Internet of Things to Internet of Everything; so-called a digital lifestyle in the making. Hitherto, a private institution of higher learning in Malaysia attempts to capitalise on technology for learning, harnessed by mobile learning and the use of technological applications, by conceptualising a blended learning approach.

Introduction

In its effort to strengthen Malaysia as a global player in higher education, the government, through its education arm, the Malaysian Qualifications Agency (MQA) under the purview of the Ministry of Higher Education, has gazetted in 2007, the Malaysian Qualifications Framework (MQF). The MQF puts a heavy emphasis on outcome-based education (OBE) which stresses on the outcomes of students - what students are able to do or the qualities they would have developed upon completing a course or programme. The outcomes encompass both technical and people-centric skills so as to produce high-performing graduates, translated as holistic, enterprising and balanced graduates.

This regulatory emphasis on outcomes and the changing demographics of students pose grand challenges towards the teaching-learning landscape. Students today represent different generations, are of different personality types with different learning styles. A simple check on students' learning styles would easily reveal a variety of them, from visual, auditory, reading to kinesthetic preferences. In addition, the current cohort of university students, the Millenials, grow up in the Internet age with computers, smart phones and other sophisticated technological

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gadgets abound, in addition to their exposure and participation in social media. Television, microcomputers, presentation software, video gaming and simulation programmes are often spoken in the past tense. The present speaks of computing everywhere, Internet of Things, 3D printing, smart machines, cloud architecture and context-rich systems. If the 21st century literacies are defined by the ability to incorporate digital technologies in learning, how then could the learning experiences of the students be optimised, and at the same time, made rich and engaging? How could students' ability to think be raised from the lower to the higher order thinking level?

Blended learning approach could be an answer to this conundrum. However, there is no generally accepted definition on what blended learning is as one institution's blended could be another institution's hybrid, or another's mixed-mode (Picciano, 2009). In a very loose form, blended learning is perceived as some combination between face-to-face instruction and other methods.

In any change programme, a thoughtful, methodical and systematic analysis would ensure successful implementation. In this regard, the process towards adopting blended learning in this private institution of higher learning involved three main steps in congruence with Lewin's (1943) force-field model – unfreezing, action and re-freezing.

Lewin's force-field analysis is an influential decision-making tool in the field of social science. It provides a three-stage change framework by (i) unfreezing - looking at factors (forces) that either drive movement towards a desired goal (helping forces) or blocking movement towards a desired goal (hindering forces); (ii) action – moving towards the desired goal and; (iii) re-freezing – establishing stability once the desired goal is achieved.

Unfreezing: Burning issues that necessitate blended learning

At this stage, the gaps between desired and current expectations were explored and investigated. These gaps were divided into strategy, structure and support.

The institution's strategy is to align organisational policies and practices with the macro ecosystem, with the Ministry of Higher Education's blueprint for higher education and the students' changing needs being the main focus. Learning is a social process. Effective learning results when both lecturers and students interact and actively participate in their learning activities. In any learning context, both lecturers and students are the main actors.

As the main actors, both lecturers and students play complementary roles in the process of learning. Lecturers have the responsibility to impart knowledge, develop skills, inculcate good values and nurture good character. Students, on the other hand, should inquire, be inspired to innovate and apply the skills and knowledge shared in the classroom or in other learning activities. Together, these synergistic complementing roles between lecturers and students, and among students themselves, would generate conducive, stimulating and engaging learning environments.

However, these learning environments still leave much to be desired. The prevalent scenario in classrooms would be one where the educator does most of the talking, questions are usually responded with silence (volunteerism is associated with lecturers calling out names) or lecturers themselves answering, students busily distracted by their mobile phones, and the class is usually half full; in short, one where students are generally passive (Mohd. Yusof Abdullah, Noor Rahamah Abu Bakar & Maizatul Haizan Mahbob, 2012; Song & Chan, 2008; Bong & Nori, 2007).

On the other hand, the lecturers are mostly stuck with the traditional *teaching by telling* with the most common use of technology being powerpoint presentations. With the majority of the academic workforce in Generation X, they do struggle or are uncomfortable with the use of other technology in their classrooms. As Prensky (2001) rightly puts it, they are generally *digital immigrants*. There are some who are still stuck in the mentality of "If it ain't broken, don't fix it". Some are even reluctant to change their opinions or behaviours or practices in the face of contrary evidence. "I was taught this way and I turned out fine, why should I change?"

But, students of today, the Millenials, take to digital gadgets like ducks to water. Being *digital natives* (Prensky, 2001), students today are very comfortable and savvy in using technology, especially in their social activities.

Hence, getting the buy-in from the faculty is also crucial. To mobilise them into action, the faculty needs to believe that this move would benefit the students and themselves. A simple survey carried out by the author to gauge the students' feelings on the use of web educational tools in the classroom reveal results as shown in Figure 1. Evidence of this sort would be useful to convince the faculty on the benefits of blended learning if used in a pedagogically valuable manner to engage their students in meaningful explorations of content and curricular materials.

Hence, this passive learning environment and the digital divide of "digital natives versus digital immigrants" need to be addressed.

Figure 1 Students' reactions towards use of web educational tools

As for structure and support, an assessment on current infrastructure, technological support, scheduling, staff training and incentives was made which clearly indicated the dearth in all.

Action: Moving towards blended learning

This stage denotes mobilisation. A timeline on getting blended learning off the ground was set. Even though this idea of blended learning was mooted in 2014, it was officially implemented in 2015 with major milestones set. The roles and responsibilities of various stakeholders such as the faculties, technical, human resource and corporate communication support, were spelt out.

First and foremost, getting the whole community at the university on the same page with regards to the understanding, the aim and the acceptance of blended learning was of utmost importance. To do this, a formal definition of blended learning was necessary. As mentioned earlier, blended learning, in its broadest sense, could include any method that complements face-to-face teaching. For example, taking students out on a subject-related field-trip would suffice as blended learning. But for all intents and purposes, any *non-use of technology* method that complements face-to-face learning would come under the mixed-mode methodology. The university defines blended learning as learning which integrates online with traditional face-to-face class activities in a planned, pedagogically valuable manner. Online technology ranges from the simple Web 1.0 read only web to Web 2.0 read and write web to Web 3.0 semantic web to the current Web 4.0 interactive, intelligent adaptive web.

In addition, the one indisputable aim of adopting blended learning is to move students' thought processes from lower order thinking to higher order thinking, characterised by the ability to analyse and evaluate existing data and finally, to create new understanding and knowledge.

To further reinforce on the rationale of blended learning, a model was developed to showcase the relationship between OBE and blended learning. This four-layered model is shown in Figure 2 [*continued next page*].

Outcome-Based Education

Layer 1: Concept of Vision, Mission, Outcomes

Layer 2: Outcome-Based Education (OBE)

Online   Classroom

Layer 4: Concept of Blended Learning   Layer 3: Kinds of Learning to achieve OBE
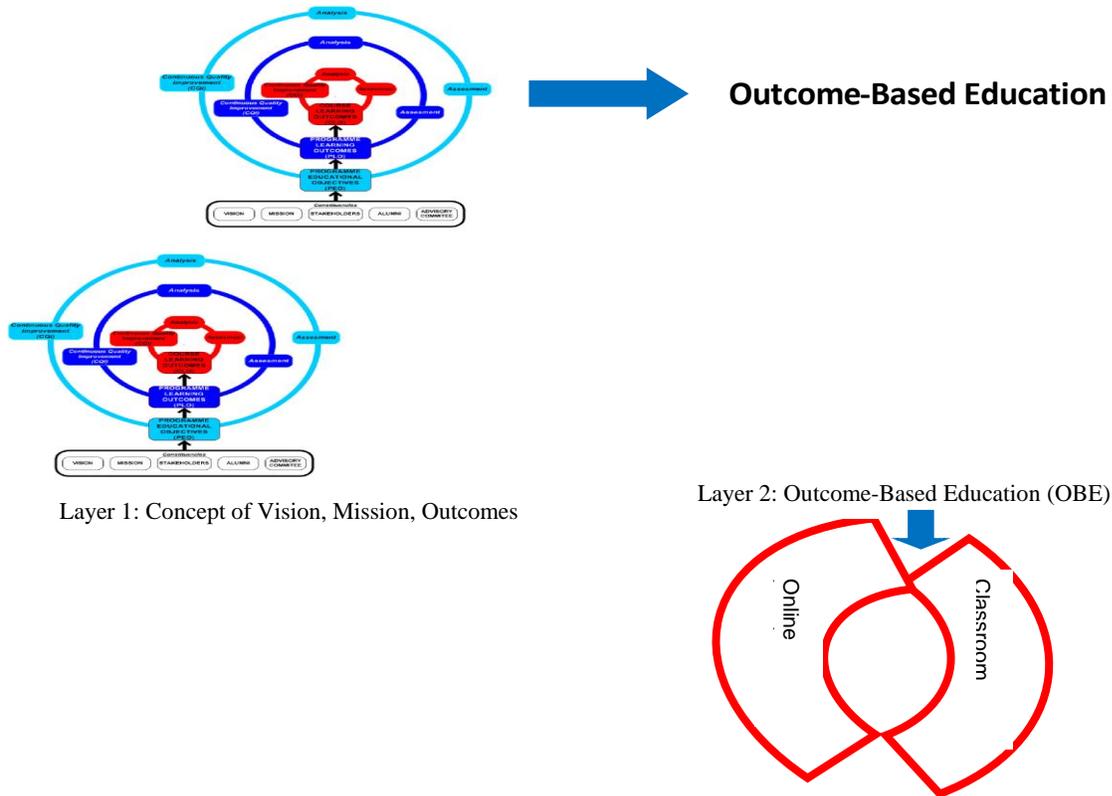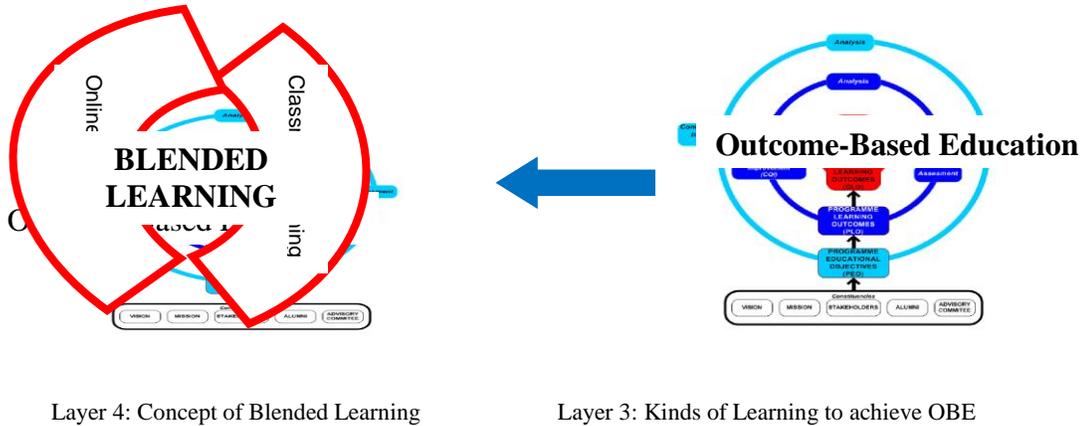
__Figure 2 OBE and Blended Learning Operationalised__

The concept of blended learning can therefore, be captured in Figure 3.
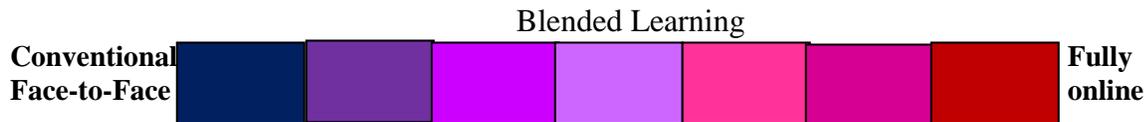
__Figure 3 Continuum of Blended Learning__

In addition, to assist in the spread of this understanding and aim of blended learning to the lecturers, a blended learning committee, represented by champions from different faculties and departments, was formed. Most of these blended learning champions have attended trainings organised by the higher education leadership academy or they themselves have already practised blended learning in their classrooms. These champions have and are still conducting in-house training workshops on the use of various web application tools to the lecturers and the appropriateness of the tools to the planned pedagogical objectives.

As for the students, a publicity blast in the form of posters was hung at high-traffic areas in the campus. Themes related to OBE and blended learning were displayed. To accentuate the understanding, fun quizzes with rewards will be organised.

The success of the implementation of blended learning is contingent on strong, reliable and ubiquitous technological infrastructure. It has to be able to support heavy usage. Here, the technical support group has increased more wireless access points in the campus. Even though hiccups still happen, efforts are being undertaken to improve the situation.

To recognise staff members who have taken the initiative to explore and implement blended learning in their classrooms, this initiative is tied to their annual key performance indicators.

Refreezing: Institutionalising Blended Learning?

How successful and effective is the implementation of blended learning? Do the students use technology academically the same way they use it socially? Have students' learning improved?

As the implementation is still in its infancy stage, answers to the above questions remain open. In the meantime, a great deal more of work needs to be done before blended learning could be institutionalised. But a clear indication is lecturers and students are now more aware and informed of this changing paradigm in learning.

Conclusion

One thing is for certain: today, more than ever before, technology plays an important role in society. Technology is fast changing the learning environment. If in the past, people used to only learn in a classroom, today, people merely require a computer and WIFI . They learn when it is convenient for them, anytime, anywhere and anything. As the skills, knowledge, and needs of the students change, so does the role of the lecturers.

This institution of higher learning is on the right journey to adapt and to find new ways to meet the changing needs of our learners.

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COMPETENCY-BASED LEARNING FOR EFFECTIVE ENTREPRENEURSHIP EDUCATION AT AN INDONESIAN FACULTY OF BUSINESS AND MANAGEMENT

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Abstract

While *Effective Learning* is a desirable outcome of good *teaching,* its significance is much more critical in the case of entrepreneurship development. It must start with identifying the entrepreneurship types of students. Literature shows that there are 9 types of entrepreneurship and six constructs. The Faculty's ability to match them with the students would logically help in achieving Effective Learning. This research explores the students' entrepreneurship types and determines the learning style that would accommodate them. A questionnaire adopted from a leading entrepreneurship researcher is distributed randomly to 270 students from the Faculty. Results show that students in the Faculty fall into four types, namely, Communicator-Trainer, Advisor-Counselor, Builder-Creator and Entertainer-Host. The six constructs are *entrepreneurial competencies, achievement orientation, human service, leadership, expertise, and managerial and personal effectiveness.* While it is not possible to cater for all of the Entrepreneur Types, a competency-based learning style developed from say the top three or four students' competencies identified will establish alignments that should make the resulting learning effective. The potential of this method is shown by way of the low percentage of current graduates from traditional teaching and learning method choosing to be entrepreneurs when queried on their graduation day. As the implementation of this CBL style only took place recently, a longitudinal investigation is required to ensure that the same cohort is being tracked.

Keywords: Effective learning, Entrepreneurship Types, Competency Based-Learning

Introduction
Acknowledging the inexorable technological development and diffusion into all aspects of human life, it is inevitable for Higher Education Institutions (HEIs) to continually review the

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way they conduct their *business*. Over the last decade or so, inclusivity became the operative word in education. The involvement of all stakeholders, namely students, their parents or sponsors, the academics and the staff of the HEI's and importantly the future employers of the HEI's graduates, has become pivotal in the survival of the HEIs.

The future employers over this period have formulated selection criteria for taking on the best graduates to their fold. The list grows with time. Critical Thinking skills, Communication skills, Innovative skills, Teamwork skills and Creative skills appear to be non-negotiable (Idrus et al, 2014). They also look at Leadership skills, Management skills and the ability to be empowered as indicators for future development.

Indonesia, like many Asian nations, is beleaguered by the ubiquitous *rote-learning* where the teachers/lecturers/professors consider themselves as the sage and students simply have to memorize what is given to them, in order to pass the exams. This ominously is the antithesis of what employers want. Do we wonder then why there is an alarmingly huge graduate unemployment in the country?

By the same token students who were born into the computer age have different perspectives of learning from their unenlightened *sage* teachers and professors (Idrus, 2011).
HEIs' status in Indonesia measured by their:

1. Gross Enrolment Rate (GER), and
2. Unemployment rate of the HEI's graduates

has to be closely monitored as the Higher Education Development Policy 2009 was predicated on:
   a. equity and expansion of access
   b. quality improvement, relevance and competitiveness
   c. strengthening of management, accountability dan governance.

The Indonesian government is pushing for a 30% GER in 2015 even though graduate unemployment is about 7% of total unemployment in the country (BPS, 2015). This clearly shows that Indonesian HEIs have not been able to close the gap between what graduates need to have and their qualification and competence.

The *missing link* resides in the long-held expectations that graduates leave their HEIs to apply for jobs. Again given the rapid technological advances, manufacturing and people mobility around the world, uncertain economic climate across the globe and the surge of latent entrepreneurial skills in countries not previously considered to have such talents, signal an ultimatum for governments and HEIs to change their hither to *comfortable* life.

It is true of course that it is easiest to plan for the future when we ourselves create that future. In the same way Matlay & Carey (2007) showed that entrepreneurship and entrepreneurship education will influence students' attitude in selecting their career and will coax them towards creating jobs.

In order to realize a successful entrepreneurship education in an HEI, competency requirements, curriculum and teaching and learning methodology need to be identified at the outset. This will guide graduates in their pursuit to create jobs later.

While some may think that *entrepreneurship* is all-enveloping in fact Abrams (2004) showed that there are 9 Types of Entrepreneurship based on *personality* and the *work norm*. This is so because different *industry* would have different and specific requirements and would attract different personalities.

This research posits that having the knowledge of students' entrepreneurship types will help the Faculty to focus on the competences that need to be taught and the teaching and learning methodology to be used. In turn these will build graduates' confidence and the wherewithal towards entrepreneurship that will create jobs and help develop the economy (Abrams, 2004).

According to AACSB (2011), Matlay & Carey (2007) , Business Schools' students have high interest in entrepreneurship. There is also an urgent need to improve human resources in entering a new economy. All these signal the trend that graduates are considering entrepreneurship as one of their careers.

Entrepreneurship Education

While some assume Business Education to include entrepreneurship subjects, Matlay and Carey (2007) and Solomon (2007) contended that it is different from Entrepreneurship Education. A decade earlier, Shepherd and Douglas (1997) proposed a definition of Entrepreneurship Education in the following way:

> *The essence of entrepreneurship is the ability to envision and chart a course for a new business venture by combining information from the functional disciplines and from the external environment in the context of the extraordinary uncertainty and ambiguity which faces a new business venture. It manifests itself in creative strategies, innovative tactics, uncanny perception of trends and market mood changes, courageous leadership when the way forward is not obvious and so on. What we teach in our entrepreneurship classes should serve to instill and enhance these abilities.*

Clearly, Entrepreneurship Education has a much wider scope than Business Education and it is multi-disciplinary.

An effective Entrepreneurship Education makes students to experience working in and for businesses in order to learn to add value to a real business, something they will need to do for their own business later. Entrepreneurship Education should produce what Solomon (2007) called *entrepreneurial founders* who are able to create business development and prosperity.

In addition Brown (2000) opined that entrepreneurship education must be oriented towards work skills that can be taught in order to develop students' innovativeness, while the curriculum must focus on the requirements for starting a new business.

The Entrepreneurship Learning Process

According to Rae (2006) entrepreneurship learning is *a dynamic process of awareness, reflection, association and application involving experiential and knowledge transformation.*

Entrepreneurial learning occurs by experiencing challenging situations such as recognizing opportunities, problem solving and being involved in various roles which are different from a business person (Politis, 2005). Personal experiences and experiences during entrepreneurship education are recommended by Henry et al (2005) as a means to learn entrepreneurship. Smith et al (2006) showed that it is through experiences that students obtain the required knowledge and skills that enable them to face challenges and to overcome problems in their businesses. Zhao et al (2005) found that experience develops students' confidence and the desire to succeed.

Entrepreneurship Learning and Education models at a HEI may be implemented vicariously through appropriate Guest Speaker sessions where experiences are shared and exchanged, or students' working experience, managing small business, value-add practice, new venture creation, venture capital, small business consultancy. Ko and Butler (2007) identified enhancements in interactive, creative and innovative learning being the core of the entrepreneurship process.

Indonesia has 0.24% entrepreneurs of a population of 238 million, while Malaysia: 2.1%, Singapore: 7.2%, Thailand: 4.1%, South Korea: 4% and USA: 11.5% of their respective populations (Fitriani, R.2012) which clearly shows that economic success is partly dependent on the percentage of entrepreneurs in the population. It is therefore something that any nation should use its resources to produce. In education, particularly higher education, teaching and learning would appear to be the avenue that a country has to help in its economy.

Entrepreneurship Competency

How do we know when someone is a competent entrepreneur? In order to determine this we need to have the measures that we could quantify. According to Berger (2004) competency characteristics are *content knowledge, behavioural skills, cognitive processing (IQ), personality traits, values, motives* and also *percepetual or sensory-motor capabilities* (such as reaction times of combat pilots, taste and smell of sommeliers) to accurately predict some level of performance.

Spencer (1993), Wu (2009), Solomon (2007), Boyatzis (2008) concluded that entrepreneurship competence includes having:

- Achievement orientation – Pro-active efficiency, information seeking,Creativity & Innovation , pro active
- Opportunities orientation – Sees and acts on opportunities, thinking and problem solving, systematic planning.
- Human Service Orientation- Dealing with People, customer service Orientation, Communication

- Personnal Effectiveness -Self-confidence, Flexibility, personal maturity, Persuasion, Emphaty
- Expertise- Bussines Plan, Risk Management
- Leadership & Managerial Skill– directing and controlling
- Negotiation, Team Work
- Orientation to others – credibility, integrity and sincere concern for employees' welfare, the importance of business relationships, employee training and development, influence

Why do we need the types of entrepreneurship?

It goes without saying that success not only in entrepreneurship is easier to achieve when personality involved and the requirements of the job match each other well. People erroneously use this word as an all-enveloping term, the reality is that it has to be appropriate to the industry and tasks at hand. Hence the Entrepreneurship Types (ET).

Various businesses and industries will demand of their potential employees personality, qualifications and experiences that match the requirements of their respective industries (Abrams, 2004).

Mapping out one's ET will help in identifying the appropriate business opportunities and in avoiding those that do not match. Abrams (2004) had identified 9 (nine) ETs and their characteristics as follows:

- Advisor –Counselor (AC) – *has extensive experience and knowledge* that will take time to acquire and gain recognition for
- Commmuicator – Trainer (CT) – *exceptionally good with words written and verbal* and able to explain and elucidate complex ideas
- Organizer-Administrator (OA) – *outstanding dedication and ability to keep things running like clockwork* with little need for recognition while dealing with details, deadlines and multiple tasks
- Caregiver- Maintainer (CM) – *enviable dedication to serve and care for others* who is also reliable and consistent
- Technologist- Engineer (TE) – *creative and innovative person who are able to solve technical and design problems* and normally indispensible in an entrepreneurial ambiance
- Builder- Creator (BC) – *exemplary doer* whether painting, wedding cakes or high rise buildings though the learning time may be long, the long-term rewards are exceptional
- Enterntainer- Host – *thriving in front of people*, outgoing, enjoys the spotlight, command attention and dedicated to making others happy
- Investor- Owner (IO) – *great ability in raising investment funds*, able to take calculated risks resulting in great rewards, good with numbers and money
- Seller- Broker – *competent in sales*, holds a pivotal role in the scheme of entrepreneurship steps and normally earn more than other ETs

The above list which may grow in time, demonstrates the need for appropriate mapping in order to achieve the desired end-results.

In this research *Entrepreneurship Competency* is defined as *knowledge, skills and attitudes that influence the will and capability of a person to create new values.* Its scope therefore could be summarized as:

1. Identifying the students' ETs
2. Analysing the results of the identification of students' expressed ETs by frequencies
3. Providing an appropriate proposal of an entrepreneurship education

In the case of (2) above the faculty has to determine the point of best cost-benefit as it would be impossible to meet all students' ETs especially at this early stage of the proposal.

Research Methodology

An ideal methodology is to carry out a longitudinal investigation of the same cohort(s) to demonstrate the efficacy of the concept. As this proposal for a new teaching and learning method to develop entrepreneurs is only at its fledgling stage such an investigation would need to wait for four years in order to show results. However, indirect evidence by way of data of graduating cohort will partially help in persisting with the proposal. It is argued that if the conceptual thinking is correct then the result of asking the graduating cohort of their career intentions would show a low percentage that would be creating their own business following graduation. It can further be argued that this outcome is the result of the teaching and learning method which was not mapped to the students' entrepreneurial predilections at the start of their studies in Business Management.

Part 1

Data is collected from graduating students on their graduation day via a questionnaire of their career options after graduating from university. In particular whether they intend to seek a job or start a business and thus become an entrepreneur.

Part 2

Data acquisition using a questionnaire adopted from Abrams (2004) consisting of 54 questions (see Appendix) from which the ET of each respondent will be derived. Population sample is non-probabilistic and was randomly taken from among the final semester students in the Faculty of Business and Management which number 560. The sampling size was calculated using the Slovin Formula (Sevilla et al, 2007) with 95% confidence level, thus requiring a minimum sample size of:

$$n = \frac{560}{1+560*0.05*0.05} = 233.3 \approx 234 \text{ (rounded up)}.$$

For practical on-site purposes 270 students formed the sample size in this case.

The responses' scores determined the respondents' ETs (Abrams, 2004). The data processing involves counting the number of students belonging to a particular ET. In cases where a student shows a number of potential ETs, s/he would be categorized as belonging to the ET that shows highest score or the most likely ET. These can then be rank-ordered and decision could be made as to how far down the list the faculty wishes to accommodate in shaping the appropriate learning activities that would lead to an effective entrepreneurship education.

Findings and Discussion

The results of the questionnaire in Part 1 are shown in Table 1.

Table 1 – Distribution of graduates' choice of careers (taken on graduation day)

Graduates of	Total Student	Job seeker & % of total	Start a business & % of total
Business & Management Faculty	98	88 (90%)	10 (10%)
University	190	176 (92%)	8%

Source: Research data

Table 1 shows little difference between graduates from the Faculty of Business and Management and those from the university as a whole. Only about 10% in both cases declared that they would *start a business*. Clearly these data show that the current teaching and learning method does not produce graduates who would most probably add value to the nation's or region's economy by being entrepreneurs. It is therefore only logical that a difference in the way the Faculty does its job is possible to make a difference in the the last column of Table 1. Provided the Faculty changes the way it does its job that will result in more of its graduates think of starting a business then it would have achieved its objectives of creating entrepreneurs.

Table 2 shows the results of applying Abrams' (2004) method (see Appendix) at entry to the Faculty. It is important to note that every answer of the 54 questions in the Questionnaire is associated with one of the nine ETs alluded to earlier. For questions 37 to 54 (the true or false questions) only the true answers are considered in accordance with Abram's method (2004). This would explain the entries under TE score. It is also important to note that the frequency (number of students) for each TE is not mutually exclusive as a person may have a number of ETs albeit with varying strengths. It is therefore the strategy of this research to only count the four highest ETs per person for analysis.

Table 2 Students' responses and their resulting ETs

ET(Entrepreneurship Types)	Number of students with this particular ET	Total Score for ET	ET (Entrepreneurship Types)	Number of students showing this particular ET	Total Score for ET
Advisor Conselor (AC)	116	799	Builder/Creator (BC)	113	770

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Communicator-Trainer (CT)	120	1201	Entertainer/Host (EH)	101	737
Organizer Administrator (OA)	67	469	Sales Person/Broker (SB)	30	184
Caregiver Maintainer CM	85	560	Investor Owner (IO)	33	215
Technologist/Engineer (TE)	60	481			

In order to determine which ETs represent our students sample more than others, a three-class category was considered in this case, namely High, Medium and Low. The class intervals are calculated as follows:

$$Interval = \frac{120 - 30}{3} = 30$$

that is, (maximum number of counts for an ET *minus* the least minimum count)/ (number of classes).

For this group of respondents, Table 3 shows the resulting classes of ETs they are grouped into.

Table 3 The distribution of respondents' ETs

Class Intervals	Classes of ET	ETs
30 –60	**Low**	Investor Owner (IO); Sales Person/Broker (SB); Technologist/Engineer (TE)
61 – 90	**Medium**	Caregiver Maintainer (CM) ; Organizer Administrator (OA)
91 – 120	**High**	Advisor/Counselor(AC); Builder/Creator (BC); Communicator/ Trainer (CT); Entertainer/Host (EH)

This classification leads to prioritizing the ETs in accordance with the natural inclinations of the students involved which is arguably expected to lead to their effective learning. The prioritizing or classifying of the ETs is only being realistic for no faculty or university is able to justify the cost-benefit otherwise. In this research only ETs in the top class 'High' are considered. The ETs involved are therefore AC, BC, CT and EH.

In order to make the learning for these ETs as effective as possible, we need to firstly find out the characteristics associated with them. Table 4 shows the general description, the strategy for success, examples of types of jobs and the required competencies of the four chosen ETs.

Table 4 – The various characteristics of the top four selected ETs

Items	AC	BC	CT	EH
General Description	Clear area of expertise; must have more than sufficient qualification and experience as the task is to share knowledge; must be a quick learner; always willing to help; able to create networking and be prepared for many business alternatives	Have strong visionary skill so are able to 'create something from nothing'; able to fuse vision and clients' requirements; have manual skills and have experience and talent in this business; creative and fastidious in respect of details	Have the ability to communicate using various media whose technology inexorably move forward, able to continuously develop their own expertise, a fast reader, confident in relaying concepts to others.	Have skills to interact with others; love parties ad events; even enjoys attention; like to see others happy; must be creative; enjoy sharing and introducing items to others; able to express oneself effectively in front of others.
Secrets & Strategy for Success	Ensure that you have the expertise required; always offer value to others; build your service to achieve excellence; what is being offered is your value not the time to finish the job;create a niche	Have long-term company clients to ensure regular incomes in addition to individual clients; normally requires certification and licenses to operate; able to charge good fees; have confidence in creating products and services that clients desire; believe if you create it,they will come; you like to work with your hands.	Have contacts with and from businesses on a long-term relationship which should sustain the businesses; takes on opportunities of items and actions needed by others; not expecting instant business success; able to create contacts with people who are already established in the particular business or able to be apprenticed to those people; recognized the need for appropriate legal relationship with his clients	Locate a show or shows that allow for a stable income. Start the business with no expectation of returns. Business location is very important; often need to be associated with an administrator-type persons who are good at organizing; you will find customers can be a good target markets ; Party on
Examples of jobs	Management Consultant, Accountant and Financial Planner, Mediator, Business Coach	Architect, land scaper, fashion designer, Creative director, florist, video grapher	Editor; instructor, Sports coach, Marketing Consultant, Public Relation, Web editor	Actor; salesperson; helper/supporting roles; wedding or party planner, Festival Coord
Competencies required	1.Empathy 2.People skills – normally clients are the result of word of mouth 3.Networking 4.Specialized in the area being offered 5.Able to capitalize on opportunities 6.Skills in general business management (operations, marketing, finance and human resources) 7.Leadership 8. Planning &Execution	1.Creativity and innovative 2.Specialist in the area of expertise 3.Capitalizing on opportunities 4.Meticulous and detailed 5. Enjoy working with own hands 6.Enjoy traveling to get ideas 7.Good provider of excellent customer service 8.General businesses skills (operations, marketing, finance, HR) 9.Leadership 10. Problem solving	1.Able to communicate using a variety of media, active listener, able to see and under-stand non-verbal language, practices two-way open communication 2.Negotiating skills leading to successful results 3.Capitalizing on opportunities 4.Expertise in the business area 5.Committed to continuous learning 6.Presentation techniques 7.General Business skills incl. operations, marketing, finances, human resources 8. Leadership	1.Creativity 2.Flexibility 3.have communication skills 4.Have social competency 5.Interpersonal effectiveness 6.Good working as a team 7.Possess general mgmt skills in operations, marketing, finance and HR 8.Leadership

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Designing Competency Based Learning (CBL) in Entrepreneurship Education at a University

CBL is part of Entrepreneurship Education that is oriented to students' competency achievement.

The next step in developing CBL given the ETs of the students and other information shown in Table 5 is to transform the required competences into job descriptions and job skills from which *learning activities* may be derived. The sources of the learning styles adopted in the case of entrepreneurial education are Dyah (2014), Lew P (2005), and Media Education (2009) where CBL is claimed can be achieved through the following stages:

1) Determination of need for competencies to be achieved

2) Each competency described in the skills, knowledge and behaviors

3) Strategy achievement through learning activities

4) Evaluation and Assessment of achievement of competencies.

As it is a skills acquisition style, the learning is essentially experiential. What normally transpires in implementing a 'new' learning style is the question of its assessment. Much of the quality and acceptance level of a university is increasingly based on explicit cognitive aspects while CBL by its nature is very much a cognitive-implicit style where a conflated existence of many aspects of *realities* including cognitive is bounded by skills domains rather than distinct boundaries of each of the building blocks (Horn, 2015).

Therefore in CBL its evaluation is an assessment of its learning activities identified or assigned behaviours as shown in Figure 1.
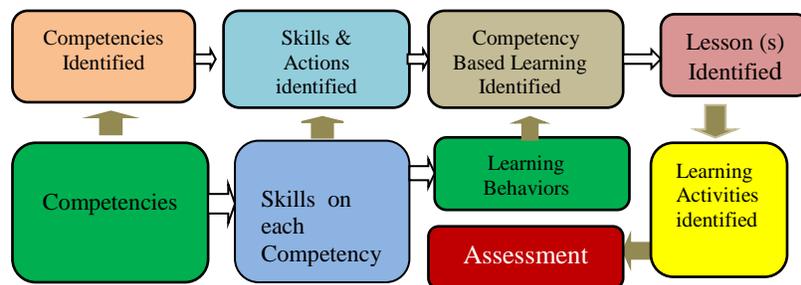
Figure 1 – A systems approach towards CBL Learning activities

From results of data processing competency requirements can be identified as follows: 1) Achievement Orientation, 2) Helping and Human Service Orientation 3) Leadership & Managerial Orientation and 4) Personnel Effectiveness Orientation. Furthermore, each competency is identified skill that needs to appear subsequently as designed learning behavior for each skill (Carayannis et al, 2003). Therefore, in teaching and learning activities, students actively pursue learning activities and achievement of competence that are measured through assessment and observation of the results of learning activities.

The development of CBL to achieve Entrepreneurship competencies based on the research results of 4 ETs and the curriculum of Business and Management in Faculty of Widyatama University is shown in Table 5.

Table 5. Development of CBL based on research result in 4 –E Types

Competency &Skills	Learning Behaviors	Lesson(s) or Subject Identified	Learning Activities	Assessment/ Observation
1.Achievement Orientation Skills : Creative & Innovative, Planning & Excecution,Information Seeking	• Creative & Innovative: do the jobs well, create ideas, look for some potential solution • Planning &Execcution: Plans by breaking a large task down into subtasks, Develops plans that anticipate obstacles and Excecution planning , Evaluation alternatives • Information Seeking : Does personal research on how to provide a product or service, Consult experts for business or technical advice, Personally unders takes market research, analysis, or investigation	• Enterpreneurship • Soft Skill • Decision Making • Bussines Communication • Financial Management	• Business Plan & Competition	Business Plan Feasibility Competition Team Work
			• Case Studies	The case of a real company's completion of a successful entrepreneur
			• F to F classroom	The form of lectures has certain theme
2.Human Service Orientation Skills : Emphaty , Communication , Customer Service Orientation/ Dealing with People	•Empathy: aware of other people's emotions,understand the content ofverbal message, understand the issues behind the conversation •Communication: understand the techniquesof communication, convey the right information, simplify complex information into simple & understable •Customer Service Orientation/Dealing withpeople: follow up onthe needs of others, serving with pro-active, serve to achieve thebest		• Clubs & Network	Associations and networks; Use discussion and entrepreneurship issues
			• CEO Speak/Guest Lecture	Community Local Bussines (Bussines Experience)
3.Leadership & Managerial Skills : Team Work, Negotiation, Networking, Directing & Controlling	• Team Work: Cooperate, share information as a team. • Negotiation : understand negotiation, give recommendation in win-win solution, get support for negotiation. • Networking: expand information access, expand networking, and build partnerships. • Directing & Controlling: Develops or uses procedures to ensure that work is completed or that work meets standards of quality		• Visit Study	Visit to companies to become familiar with operation of business.
			• Game	The use of software for bussines & Decision Making
4.Personnal Effectiveness Skills	• Flexibility; understand the changes in a positive way, adapt to changes, identify the impacts of changes inconditions		• Training for practical	Students worked in the organization for a specified time

Competency &Skills	Learning Behaviors	Lesson(s) or Subject Identified	Learning Activities	Assessment/ Observation
Flexibility Continous Learning	ofemployment •Continuous Learning: analyze the learning needs, seek new challenges for self-development, compiling the needs of self-development		• Placement to Small-Medium Enterprise	Internship, training to work in the company
5.Bussines Expertise Sees and Acts on Opportunities, Setting Setting Bussines Plan, Presenta**tion**	• Sees and Acts on Opportunities : Look for finds ways to do things , Sees and acts on new business or job oppurtunities, Seizes unusual oppurtunities to obtain financing, etc •Setting the Business Plan: Has skills in finance, marketing, business area before starting a business, prepare business plans by product/ service. •Presentation: able to reveal the contents of the presentation, understand the needs of listeners, use interpersonal style to attract interest ofthe audience.	• Marketing Management • Customer Behavior • Introduction to Business • Leadership • HRM • Bussines Ethics • Management Information System	• Workshop • Bussines Simulation	Team work with Project case Embody real business

Note :Lesson Identified based on Curriculum Existing in Faculty
Source : Analyis from research data

The result of development based on four E-types, Entrepreneurship Education (EE) and CBL current in faculty of business and management in Widyatama University shown in table 6.

Table 6.Differences beetween Education Entrepreneurship (EE) & CBL

Education Entrepreneurship(EE) currently	Education Entrepreneurship(EE) with CBL
Policy statement in Faculty	Policy of the University
While the motto of the university is: *Friendly Campus and Business* Pro, it has not applied entrepreneurship education to all programs and courses. The new entrepreneurs will be born because of business success.	University applies Entrepreneurship education to all programs with evaluation and development of curriculum and learning activities to produce graduates who are well informed to choose to become entrepreneurs. The new entrepreneurs will be born because entrepreneurship education is relevant.

Education Entrepreneurship(EE) currently	Education Entrepreneurship(EE) with CBL
University courses have soft skills as compulsory subjects separate from and not directly linked to the curriculum	The university sets up a curriculum with competence as an integral part in order to shape attitudes and strengthen interests in becoming entrepreneurs through soft skills courses
Quality Objectives in the use of QMS ISO 9001: 2008 to provide an overall quality education do not include the production of entrepreneurs	Quality Objectives in the QMS ISO 9001:2008 include one or several that support entrepreneurship by specifying for example a ratio of graduates who will become entrepreneurs within two years after graduation.
Business & Management Faculty	**Business & Management Faculty**
General entrepreneurship education in the Faculty of Business and Management is done through optional subjects, namely Entrepreneurship (3 credits) and the Laboratory of Entrepreneurship but it does not yet have a road map for strengthening the attitude of students to choose careers as entrepreneurs	Faculty with the University's policy support designs a curriculum that integrates achievement of competence and learning activities in the teaching and learning processes that develop graduates' interests in and positive attitude towards business start up or talented entrepreneurs.
Curriculum consists of courses that have not defined the competence needs and skill as well as behavior indicator	Competencies based curriculum identified what needs to be met, a description of indicator behavior of each competency, and skill as well as knowledge. Competencies as behavioral manifestations of talent.
Learning activities undertaken include: F2F/Classroom, Case Studies, Guest Lectures, the Business Plan, study visits, competition such as: "Be Young Entrepreneur".	Learning activities is based on appropriate curricu-lum and competency such as: F2F/Classroom, Case Studies, Guest Lectures by CEOs, Business Plan, study visits, competitions, Clubs, Game, Training for practical, Placement in Small to Medium Enterprise, workshops, Business Simulation.
Entrepreneurs Laboratory provides only training in Selling which is only used by the study programs in the Faculty of Business and Management.	Business Center available throughout the program of study as a resource for business opportunities, business plans and start-up capitals through CSR (corporate social responsibility) intermediaries.

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Education Entrepreneurship(EE) currently	Education Entrepreneurship(EE) with CBL
Students' Final Assignment as a requirement to obtain significant independence related to management.	Students' Final Assignment as a requirement to get experience directed to the Life Projects.
Outcomes of entrepreneurship education for students who take courses in Entrepreneurship are limited to preparing Business Plans. Successful perhaps as a business planner.	Outcomes of entrepreneurship education are comprehensive by virtue of the integrated curriculum and teaching and learning processes that produce graduates with an aptitude, skills and strong interests in a career as an entrepreneur and to start a business.
Assessment of entrepreneurship education is done by examination of courses and GPA. The achievement of competence is assessed on what is known and declared by the student.	Assessment of entrepreneurship education is through the results of learning activities and/or outcomes of predetermined competencies resulting from what is done by the students.
Lecturers of entrepreneurship are tasked with teaching students to be competent in preparing the business plan.	Lecturers are tasked to be motivators, facilitators, speakers, experience providers, skills trainers of students so that they developed conscientious desire and a strong atitude for entrepreneurship

Limitations of this research

Identifying the requirements for competence of entrepreneurs were based onthe four highest ranked of ETs of students'. To be comprehensive a follow-up research has to do the same survey of the competence of young entrepreneurs/ start-up entrepreneurs from university graduates. On a long term basis a longitudinal research of the same cohort would add to the evidence of the value of teaching and learning method advocated here.

Discussion

Entrepreneurship education aims to raise awareness of students/graduates to choose a career as entrepreneurs, develop personal qualities that are relevant to the entrepreneur, provide technical skills to start, operate, develop new business. Entrepreneurship Education therefore should be prepared on the competency-based curriculum that is based on the results of 4Type Interests

Going by its name CBL must necessarily be a style of learning aimed at creating graduates who are proficient and skilled in the learning domain s/he is involved in. As competence implies a convergence of several inputs including cognitive and not only utilitarian, the traditional *rote-learning* and *serial curriculum* would simply not work. There is a substantial amount of understanding as well as a considerable experiential learning required.

Rote-Learning has been known for sometime as not only ineffective but increasingly proven to dull the learners' natural inquisitiveness and critical thinking (Idrus et al, 2014). By definition therefore this method of learning should never have existed if we are serious about education. Quite fortunately the nature of enterepreneurship and CBL necessitate a non-rote-learning method and this had led it towards seeking different teaching and learning styles.

Included in this non-conventional or non-rote-learning styles are for example guest-lectures given by accomplished practitioners in the subject area who would share their experiences by which students gain experiences. In many cases such personal experiences by those experienced guest lecturers are not available in text books. Even if they were written as Case Studies, the F-2-F interactions with those leaders in the field are so much more realistic than reading case-studies and are retained a lot longer than something memorized. Intense and planned internships or apprenticeships of entrepreneurship students is another example as well as setting up small business, by seeking venture capital and the like so that students are not only presented with theories which they only get involved as spectators and not doers. Another advantage of such practical involvement is the positive effects on the students' confidence as well.

Anecdotal proofs have shown that students when they graduate from a learning style such as CBL will not feel being thrown into a mysterious and unknown environment where they have to learn again or having to make a huge change from what they have been doing during their university time. Therefore, they are not only useful to themselves but also to their business or their company.

With the CBL method using Competency, Skills and Competency Behavior, appropriate learning activities and proper assessment can be identified that can ensure the competence of graduates for entrepreneurship. Learning activities can be developed as mentioned in Table 5 above.

Conclusion

The practical implications of this research is that through CBL and the model described in this paper students' entrepreneurship competence can be developed while they are studying even though the characteristics and predilections of students are varied.

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Appendix

Adopted from Abrams, R (2004)
E-Type Test . Section One

1	If I have to assemble something, I first a. Read directions b. Begin to figure it out
2	When buying something expensive, I would rather have a. A fixed price b. A negotiable price
3	I'm more likely to be valuable to a company for my a. Strong financial head b. Creativity
4	I'd rather spend time understanding a. A new gadget b. A new friend
5	I'm more comfortable a. Giving a speech in front of a large group b. Making a "cold call" to sell something to a stranger
6	When it comes to income, I prefer a. A steady moderate income b. Income with potential to be much higher, but also much lower
7	If I could make an equal amount of money, I would rather a. Take over an existing organization b. Create a new organization
8	At a friend's wedding, I'd rather a. Stand up and offer a toast b. Help make the seating arrangement
9	I'd rather a. Invest my own money in someone else's venture b. Go out and get customers for someone else's venture
10	I am usually the one who a Organizes the logistical arrangements for a get-together b. Finds out what everyone wants to do
11	If I were an artist, my medium of choice would likely be in a. The performing arts b. The visual arts
12	For a friend's birthday, I'd rather a. Make them a special meal b. Take them out for a quiet dinner
13	I'd probably be better at a. Caring for an ailing person b. Caring for an ailing investment portfolio
14	I'd rather subscribe to a. Technology Monthly b. Investors' Monthly
15	Friends and family are more likely to say I'm a. Organized b. Creative
16	If I worked for a computer software firm, I'd probably be better at a. Helping develop the software b. Helping write the user manual
17	I'd feel more comfortable helping someone a. Fix a broken machine b. Recover from an illness
18	If I worked for a daycare center, I'd be better at a. Caring for the center's paperwork b. Caring for the children
19	I take more satisfaction from a. Helping someone learn something new b. Helping someone have a good time
20	In my business, I'm probably more likely to measure success by a. How many sales I make b. The satisfaction level of my customers
21	I'm better with a. Numbers b. Words
22	I'm more likely to get satisfaction from a. Creating success for myself b. Helping others be successful
23	Friends and family are more likely to say I am a. A great speaker b. A great listener
24	People usually trust my a. Investment advice b. Personal advice
25	If I had to sell 10 boxes of cookies, and both methods were equally effective, I would rather a. Go door-to-door b. Create a website
26	I'm more likely to attend a cocktail party because a. I'll have a fun, stimulating time b. I could meet potential business contacts
27	I'd probably get more satisfaction from being a a. Doctor b. Nurse
28	I prefer to work on projects a. By myself b. As part of a team
29	I would rather have the spotlight a. On me b. On someone I care about
30	When meeting someone new: a. I can usually find something to talk with them about b. If they're not interesting to me, I move on
31	I'm more fascinated by a. How things work b. How organizations work
32	I'd prefer to help students a. Understand a school subject b. Understand their feelings
33	In my business, I'm more likely to judge one of my products by a. Its quality and craftsmanship b. How many I've sold
34	Working with a new restaurant, I'd rather help them: a. Devise their computer system b. devise their recipes
35	I would rather help a company a. go out and get new customers b. take care of the customers they have
36	For a community theatre production, I'd rather a. act in the show b. sell tickets
	Section Two, Read the following statements and determine whether or not they accurately describe you. There are 18 questions in this section.
37	I can handle constructive criticism of my work. a. True b. False
38	I'd especially like my work to revolve around helping others (people or companies) overcome obstacles and achieve their goals. a. True b. False
39	I don't burn out on repetitive tasks. a. True b. False
40	I'm naturally good at understanding how things work. a. True b. False
41	I have strong writing skills. a. True b. False
42	I have a bit (or more than a bit) of show business blood in me—I enjoy performing in front of others. a. True b. False
43	I don't find a desk full of paperwork intimidating—it's a challenge! a. True b. False

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44	I'm patient with people. a. True b. False
45	I feel comfortable investing my money in uncertain ventures when I feel the risk is worth it. a. True b. False
46	I'm naturally outgoing and am generally able to establish a good rapport with people right from the get-go. a. True b. False
47	Throughout my life, I've always enjoyed creating things or helping others create things. a. True b. False
48	I often prefer to work alone. a. True b. False
49	I'm a natural nurturer. a. True b. False
50	I'm highly detail oriented. a. True b. False
51	I'm good at conveying information and concepts to others. a. True b. False
52	I've got a pretty thick skin; I don't let rejections keep me from going out and trying again. a. True b. False
53	I have a performance-related talent of some kind: I'm a musician, magician, dancer, actor, etc. a. True b. False
54	I'm often the person people come to when they need help with their computer. a. True b. False

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INSTITUTIONALIZING COMPLEXITY AND INCLUSIVITY FOR DEVELOPING SOCIAL ENTREPRENEURSHIP

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Abstract

This paper discusses a mission-and-value-based field-project undertaken by a private business school in Jakarta in collaboration with the regional government of West Java, Indonesia. The aim is to provide a social learning platform for its Undergraduate students' character building to complement its entrepreneurship/ leadership education by building social awareness of a real life condition in a marginal society. All of the faculty's 336 enrolled students took part in the study and 88.39% of them submitted a filled-in survey. Findings show that engaging students in a partnership of conflicting roles with mentees who are also house parents and partners in a real business setting having limited resources not only enhances students' empathy and responsibility, but also created an adaptive behavior in a new environment. Complex relationship and inclusivity provide students with concrete experience that leads to a new understanding of life at the edge, which in turn enhances students' self-awareness, social awareness and social responsibility. Self-organization drives creative actions voluntarily in order to self-actualize one's own capacities in achieving collective goals to improve the partners' well-being. The eclectic mission-and-value-based learning and teaching activities are highly contextual and should be designed with care.

Keywords: *complexity, inclusivity, social responsibility, adaptation, self-actualization*

Introduction

Graduates of Business schools in Indonesia are currently facing severe competition for employment in preferred organizations. While at the same time employers are encountering a shrinking talent pool of good candidates to hire. It is thought that this is due to the unprecedented unique characteristics of our so-called Gen-Z (born in the year 1995-2009) who actively

communicate in the virtual world and are seldom interacting face-to-face as well as preferring to work at their own time and space. Consequently, they tend to demonstrate behaviors that are increasingly individualistic and having less social interests (Wray1-Lake, Flanagan & Osgood 2010). Self-employment has therefore been suggested as a more suitable career for Gen-Z. As a result Entrepreneurship has emerged as an important subject in many leading business schools' curriculum over the last two decades; and is arguably 'the most potent economic force the world has ever experienced' (Kuratko 2005). Successful entrepreneurs take part in economic development of nations (Shane and Venkataraman 2000), able to create values not only for the companies (Schumpeter 1942) but also for themselves (Gibb 2007) and the greater society (Mair & Marti 2006). In consequence, social entrepreneurship/leadership has also become another popular emerging subject in most business schools and management education globally.

Nevertheless, as people communicate by exchanging information, interactions among them create a social network of information exchanges, whether face-to-face or virtual (Boisot and Child, 1999). Advanced information technology makes it far more possible for members to expand their social network virtually with people within or outside existing social networks. Over time, the network becomes more and more complex where one system exists within another larger system, creating a new environment of increased dynamism and unpredictability. Creative and innovative approaches are required to educate our Gen-Z youths to be adaptive in different environments while making meaningful contributions to society either self-employed or as an employee in an organization.

This paper discusses an exploratory study of an extended field-trip project at a private business school in Jakarta, Indonesia in its attempt to develop its students to be graduates with increased social awareness and a sense of social responsibility within the context of entrepreneurship/ leadership education.

Literature Review - Entrepreneurship/Leadership (E/L) education

Entrepreneurship/Leadership (E/L) learning/teaching

In general, learning and teaching entrepreneurship is normally discussed in the context of identifying business opportunities to be transformed into monetary profit (Venkataraman 1997); and capitalizing on opportunities and adding value to the firm (Lumpkin et al. 2009). Although some have doubts if entrepreneurship can be taught at university, others suggest that an eclectic teaching approach involving "courses and co-curricular/extra-curricular activities that teach entrepreneurial management, strategy, innovation, and venture development in a university setting" can be effective (Rideout and Gray, 2013). For example, using this method, Charney and Libecap (2000) found that graduates of one university in the US were more successful compared to their counterparts who were not exposed to such education. The benefits include substantially higher salaries, the likelihood of working for high growth firms, or being involved in important strategic tasks (Kuckertz, 2013). Furthermore an eclectic approach using field study experiential learning in live projects is found to be even more effective for entrepreneurship learning and teaching (Chang and Rieple, 2013), as well as for community development project for social leadership.

Experiential learning field trip for community development in Indonesia

Field trips for community development by university students have been popularly practiced in Indonesia since the early 1970s. The so-called KKN (Kuliah Kerja Nyata) or Community Service is a compulsory program for students and faculty members as a form of dedication to community development (SK Dirjen Dikti 54/DIKTI/Kep/, 2011). Participants are expected to help improve the well-being of people in underserved communities across the country; thus, locations are selected based on statistical data of poverty indicator. KKN can take various forms, including: food security development, health services, residential housing improvement, reforestation and education (Panduan Pelaksanaan Hibah KKN –PPM, 2013). In some universities, students are also expected to learn and develop problem solving and decision making skills for real social problems. Hence, KKN projects are not focused on entrepreneurship teaching. New, creative and innovative approaches to existing experiential learning for community development are therefore called for.

In search of finding E/L learning/teaching – the case of business schools in Indonesia

In the new world of increasing complexity and uncertainty, it makes sense to think that the best strategy is for business schools to educate students to continuously learn, test and re-test the 'self,' to realize their own capabilities/ capacities, and be able to capitalize on business opportunities when they arise (e.g. Gibb, 2007). New creative and innovative approaches to existing eclectic approaches of field study experiential learning and teaching E/L in Indonesia should be explored.

Actually experiential learning is an old concept; introduced among others by Kolb (1984) and Dewey (1907). For Kolb, experience is 'concrete'… focused on being involved in experiences and dealing with immediate human situations in a personal way' (Kolb, 1984: 68). Similarly, Dewey believed that learning by doing through 'hands on" approach is essential for progressive education; and it should take into account the interests of each student, not only the instructors. Students and teachers must interact, adapt to and learn together (Dewey 1907). Furthermore, Dewey suggests that the school itself is an institution; and students have to be educated to grow in relation to their society (Dewey, 1937). Thus, experiential E/L learning is highly contextual.

This Study

The following provides contextual information on E/L learning and teaching conducted by the business school under study.

Background information of the study

This paper is based on an exploratory study about an extended field-project (Comdev-2) at a private business school in Jakarta, Indonesia in 2014. It took place in Cianjur, West Java, Indonesia. This field project was the 6th carried out by the school, but the 3rd that took place in Cianjur. All 336 students of the 2011 batch who have completed Semester 5 (out of 8 or $\pm$70%

of undergraduate study) participated. This field project is conducted during the short semester break January - February.

All participating students must have passed pre-requisites papers consisting of: Comdev-1 (Personal Development and Social work), Leadership, Business Creation Project, Business Development Project, Marketing, Operation, Human Resource and Financial Management, as well as Business Process Improvement Project. Thus, participating students have been prepared through class teaching/learning as well as real business/ entrepreneurship projects.

This study is firstly to verify if the goals of the field project have been achieved. These goals include enhancing students' social awareness and their ability to improve community potential for business development by way of real entrepreneurial business settings in a community. Secondly, it is to get insights into student's experience during the field project to help for further project improvement.

Jakarta and Indonesia

Jakarta, where this business school operates, is the capital city of Indonesia and the centre for commercial and political activities. It is the most modern but populous city in the country with a population of over 13 million. The city, like other major cities in the country, is characterized by a high degree of socio-cultural and economic diversities and wide disparities among socio-economic groups.

University students are part of the society's digital and technology-driven group. Indonesia has over 9 million BlackBerry subscribers - the largest number of users in the world, and 220 million mobile subscribers in 2014. Young university Gen-Z students in Jakarta have characteristics more-or-less similar to their counterparts in other countries (Idrus et al, 2014) and as discussed earlier. They are competent with electronic communication devices and are highly connected with friends virtually and with less physical face-to-face interactions.

With around 250 million population Indonesia is the 4th most populous country in the world. It is enjoying substantial demographic bonus with a pyramid- shape age distribution where 60% is within the productive-age (age of 15-54 years) (CIA World Factbook, 2015); improved socio-economic, political and demographic backdrop with increasing number highly educated and skillful professionals (including women) and an increasing number of middle-income-earning class.

Many Indonesian families hire domestic helpers to take care of routine daily domestic errands (e.g., cooking, cleaning, and laundry). It is also common for university students to live with their parents and have full financial support from them until financially independent. Thus, university students in Jakarta are full-time students, and have no prior working experience of any sort. Entrepreneurship/leadership education with hands-on experience in a real business setting is therefore a real challenge for them.

Cianjur Township

Unlike KKN field trip discussed earlier, the selected location for this field-trip under study is not based on poverty index, but on the need for entrepreneurship development in the area. Intensive research was firstly conducted in selecting candidate locations. This field study took place in Cibeber village, Cianjur District, West Java ($\pm$110 km Southeast of Jakarta).

Comdev-2 is the 6th project carried out by the School and the 3rd in the Cianjur District (in different villages). While Cianjur's population is approximately 2.2 million, the rapid tourism development in the neighboring mountain resort area of Puncak-Cipanas, had made urbanization of young job seekers from surrounding small villages, including Cibeber inevitable. Furthermore Cibeber is a poor village; with poor road infrastructure, electricity, and telephone/internet connections, housing, schooling, and health services. Demographically, 90% are literate as the majority of the population had completed elementary school, 12.81% completed senior high school but only 0.02% completed education at university level.

Cianjur used to be famous for its rice. Rapid tourism development in the neighborhood however had transformed rice fields into luxurious real estates, leaving a very limited land left for vegetation. The remaining seasonal fruit/vegetable and rice growers are highly dependent on weather for their farming, resulting in unpredictable harvests. The regional GDP is $\pm$ USD 900, only ¼ of the national GDP of USD 3.557 (World Bank 2012).

Careful preparation, including environmental scanning (infrastructure, facilities, and necessary permits), collaboration with local government offices and the selection of candidate locations are carried out about 8 to 9 months before the field project started.

This project arose from the observation that it is only recently that a number of female entrepreneurs emerged to start simple micro home businesses typically in an effort to supplement their family incomes. Being housewives, mothers, and entrepreneurs at the same time, they are in desperate need for help. The majority has neither business experience nor training, and consequently encounters many difficulties. They normally failed in their first year due to a lack of funding, knowledge in processing, sales and product distribution, as well as support from the regional government.

Such an environment is considered appropriate for students to learn about, teach, practice entrepreneurship in a real business and community settings, and at the same time help people in an under-served community.

The Business school in this study

The school under study is one of the top private business schools in Jakarta, Indonesia. It was founded in 1980 by more than 70 prominent business practitioners in the country and it was the first institution to offer an MBA program in the country.

Vision:
To be Indonesia's foremost leading business school dedicated to contribute to the nation's development and prosperity through the advancement of human capital and creation of outstanding business entrepreneurs and professionals.

Mission: To provide high quality business management education by developing professional, entrepreneurial, and socially responsible ethical business leaders to make meaningful contributions to our country, the region, and the world, on the basis of non-discrimination.

Values:

CHAIN for Caring, **H**umility, **A**chievement, and **In**tegrity.

Profiles of the Business School's and participating Comdev-2 students

Undergraduate students are accepted through a rigorous entry test. They all have no working experience; mostly from small (1-2 children) well-to-do families; are: 17 – 22 years, 60% male, 40% female. The majority of them (80%) are from Jakarta greater area, while the rest are from other big cities in the country. They can be regarded as Gen-Zs

Comdev-2, an extended field-project

Comdev-2 is called an extended field project because it is more than a normal project of this kind. It is a partnership between the school and the participating local regional government. The school provides free business consultation and mentoring (through assigned Faculty Members and trained participating students) to the local micro entrepreneurs who are mentees and partners. In return, the entrepreneurs allow students to live in their homes (minus food) for 5 weeks. For this, students pay an agreed amount of $\pm$USD 200 per person to their house parents.

The primary objective of Comdev-2 is two-fold:

- community development activities for faculty members; and
- provide trained students with a social learning platform that enhances students' social empathy in the context of real entrepreneurial village activities.

Thus, while practicing entrepreneurship/leadership knowledge and skills, students together with their partners engage in real entrepreneurial businesses, as well as experiencing 'concrete' life situations in an under-served/marginal village community, something they have never experienced before.

Comdev-2 carried out in the short semester break of January - February is a compulsory project with a load of 6 credit points for all students who have completed Semester 5.

Based on the school's Mission statement, the goals of the field project are:

1) to enhance students' social awareness;
2) to enhance students' ability to identify and endow community potential for business; and
3) to allow students experience and practice business concepts in real entrepreneurial businesses in a marginal community.

The selection criteria for potential partners include the condition of the potential partners' houses, their security, safety and health issues involved. Students on the other hand are allowed to seek business partners of their choice with priority given to those who utilize local produce/resources, technology, and market for their micro businesses.

Students are allowed to go home only once (max. 1 week) during the project duration. For this, students have to arrange their own transportation using public facilities. Parents are advised not to pay a visit in order to allow their children to learn to be independent and responsible for the field project without much outside interruptions.

Facilitators, Energizers and Faculty Members

Since the primary purpose of Comdev-2 is to provide Faculty Members with community development activities and to provide Gen-Z undergraduate students with a social learning platform to enhance their social concern in the context of real entrepreneurial village business settings, the project is facilitated, supported and monitored by the school. For this, the school involves trained selected senior students to engage in the field project as the school's representatives. A group of 20 trained senior students as Energizers, and another group of 15 seniors trained as Facilitators and would stay in the field during the entire project. While earning some income during the short semester holiday, these selected senior students have the opportunity to practice their management, leadership, and supervision knowledge and skills as well as get involved in community development.

Energizers help with macro issues (e.g., communication with local government offices) whilst Facilitators help with daily operational mentoring, logistic issues and technical support (e.g., medication, stationary and office equipments), as well as scheduling visits by faculty members. Both groups have regular daily meetings to ensure the project runs smoothly, and produce reports to the school. Assigned faculty members take turns visiting the field and stay for a couple of days to help students as required. Students in groups are expected to make decisions together with their partners who are also their mentees and house parents.

Upon completion of the field project, participating students are required to go back to the site and check on their mentees' ventures every 2 weeks for 5 months and help mentees with the necessary support. Periodic project report and field assessment are to be submitted to each group's mentors for further analysis and part of marking Comdev-2.

Methodology and Data collection

All 336 students of Batch 2011 (117 Female, 180 Male) took part in this study and 297 of them (88.39%) submitted the filled-in survey. This is considered sufficiently representative of the batch. The Questionnaire was distributed right after they had completed the field-project. The survey was divided into two major parts. Part I was to check the degree of agreement using Likert scale 1-5 (1= not important, 5 = very important) regarding students' opinions on the degree of usefulness of the field project by finding variables with the highest average mean value

(using simple statistical analysis). This part is to evaluate the effectiveness of the field project, whether it has achieved its goals and how the field work could be improved.

In Part II students were asked to write down their opinions about their own experience which they considered to be most interesting while working in a group, with their mentees, Energizers, Facilitators, and Faculty Members during the entire fieldtrip. Students were also allowed to give comments about facilities and the field program.

Research Findings Part I and II

Part I: Students' opinions about the degree of usefulness of this field trip: **Rank**

1. In general is useful to me ……………………………………………….… 4.0296 4
2. Gives me the opportunity to enhance my knowledge and skills on entrepreneurship……. 3.8684 6
3. Gives me the opportunity to apply and integrate other concepts I've learned from school 3.6283 8
4. **Increases my sense of social responsibility** …………….……………………… **4.3651 1**
5. Increases my understanding about 'who' I am (strengths, weaknesses, and opportunities) 3.7763 7
6. **Helps me appreciate of diversity (everybody is different in values, talents, interests)** **4.3586 2**
7. **Helps me understand and appreciate school's mission** ………………………….… **4.3569 3**
8. Helps me re-think about my goals of life, including career (in what kind of organization) 3.3882 10
9. Gives me the sense of pride, accomplishment and thankful-ness ………………….…. 3.6776 9
10. Increases my communication and listening skills …………………………………… 3.9375 5

Part II: Students' opinions about this field work:

Collected data were grouped using Thesaurus Microsoft Window to help find synonyms (different words with the same meaning) of a particular word; or to check a variety of words having the same meaning. Eleven groups of words are identified and ranked to find variables with the highest number of occurrence: 1) Sense of family and friendship; 2) Learn how to adapt and survive in a new and different environment with limited resources; 3) Sense of social responsibility; 4) New experience, new perspectives of life; 5) Learn more about business with the locals in real business settings; 6) Team/teamwork; 7) Social concern/empathy; 8) Communication Skills;9) Understand and appreciate diversity; 10) Leadership skills; and 11) Entrepreneurship skills/help people to become entrepreneurs.

Analysis and Discussions of Research Findings

In Part I, it appears that the three most useful variables during Comdev-2 field trip (with the highest amv=average mean value) according to students are as follows: Var. 4: The field project, 'increases my sense of social responsibility" (amv 4.3651); Var. 6: The field project, 'helps me appreciate of diversity (everybody is different in values, talents, interests) (amv 4.3586); and Var. 3: The field project, "helps me understand and appreciate school's mission" (amv 4.3569).

While in Part II students' opinions about their own experiences during the field project they have considered to be most interesting can be grouped into eleven variables which are ranked based on the highest number of occurrence in the survey, shown below.

1. Sense of family and friendship - is considered the top most interesting experience (27.4%); e.g.: "Bonding with people and have more friends."
2. Learn how to adapt and survive in a new and different environment with limited resources; e.g.: "I found and knew better about myself and my survival abilities actually better than I thought."
3. Sense of social responsibility; e.g.: "I'm happy for being able to help people that are not as fortunate as we are."
4. New experience, new perspectives of life; e.g.: "The best experience is teaching the locals, and experiencing first time living with the less fortunate people," …and " "Learn how to cook together."
5. Learn more about business with the locals in real business settings; e.g.: "How to run business in a bigger community with its diversities."
6. Team/teamwork. e.g.: "Understand the way how teamwork is done for the village to improve economically"
7. Social concern/empathy; e.g.: "I realize there are still many people that need our help,.. the friends, the circumstances and all the things that happened in this project".
8. Communication Skills; e.g.: "Communication skill (language diversity)"
9. Understand and appreciate diversity; e.g.: "I can understand about other people (my group and society) also appreciate diversity"
10. Leadership skills; e.g.: "Increase social responsibility & leadership skill"
11. Entrepreneurship skills/help people to become entrepreneurs; e.g.: "Self development (knowledge, entrepreneurship skills, etc.)"

By engaging students in a partnership of conflicting roles with mentees/house parents in a marginal society suffering hardships and having limited resources, students were sat 'in the same boat' of complex relationships (inter-related and inter-dependent). Over time they built a sense of empathic responsibility to collectively make their partners' real micro business survive and grow. Students voluntarily stretched their own capabilities and capacities to help improve their partners' businesses. Thus complex relationships and inclusivity provide students with a new understanding of life on the edge. This in turn helps them to self-organize and self-actualize their own capacities and work together with team members to survive and achieve collective goals of improving mentees' business.

For students, who are mostly from well-to-do families, living in a rural village with limited infrastructure and resources like Cibeber, is a new 'concrete' experience. Partnership with mentees in a real entrepreneurial micro business also provides students with hands-on real experience which they have never experienced before. In this field project students are provided with the context of real business where they can practice entrepreneurship/leadership and management knowledge and skills while working together with their partners in a real business setting. Complexity, diversity and inclusivity (including people in a marginal society) provide students with a new concrete real life experience which in turn enhances their sense of family

and social responsibility. It also pushes the students to the edge to actualize their inner survival capacities and capabilities and adapt to a new/ different environment.

Given the different backgrounds of the students and the village entrepreneurs (economic, social, and cultural) partnership such as this is highly sensitive and has to be dealt with in a personal way. In this project students feel they enhanced their communication skills, team work and appreciation of diversity and inclusivity.

Conclusions – mission-based eclectic curriculum

Relationships of conflicting roles gave participants no choice but to communicate and interact with each other. These create inter-relationships and inter-dependence. Over time, a partnership with under-served partner enhances participants' sense of empathy, understanding and adaptation, which in turn, further intensifies communication and cohesiveness among members. After a few weeks as shown in this project, this kind of relationship creates as a network of social systems (team, friendship and family-ism).

Once the sense of 'one-ness' in the social system is established, it enhances the sense of belongingness for all members to continue to help each other improve the micro entrepreneurial businesses collaboratively. Because of the interdependent relationships that were developed when members face difficult situations (at the edge), other members will voluntarily help out, learn, and push their own capacities to safe the 'boat' collectively. They creatively test and re-test their own capacities to save the whole network. Hence, concrete field experience in Comdev-2 can help enhance participants' self-awareness, self adaptation, and self-actualization but also their social awareness and social responsibility among members of the social network.

Thus the goals are achieved and the field project is therefore effective. By complementing the field project with a real micro entrepreneurial business setting in a real community the school's mission statement– "to provide high quality business management education by developing professional, entrepreneurial, and socially responsible ethical business leaders to make meaningful contributions to our country, the region, and the world, on the basis of non-discrimination" is lived.

The findings confirmed that entrepreneurship can be taught at school when the curriculum is designed creatively involving an eclectic teaching and learning methods. It also established that Mission-based curriculum and pedagogy is highly contextual. Other schools should design their entrepreneurship/ leadership learning and teaching activities accordingly in an attempt to educate their Gen-Z undergraduate students to have more interests in the social environment.

Limitations and Suggestions for Future Research

There are some limitations and suggestions for future research including:

1) this study is exploratory. There had not been any tests before this. There may be variations in results under other contexts (space and time). More similar studies are required to confirm the findings;

2) this study only involved participating students as the main respondents. Further studies should also involve local micro entrepreneurs, Faculty Members, Energizers, Facilitators, as well as the officers in the regional office to get their sides of opinion;

3) being the first this study was not in a position to conduct a longitudinal check on the performance of graduates who have completed the extended field trip. Further study is required to check whether the sense of social responsibility and appreciation of diversity and inclusivity have economic and well-being to the society where they are embedded;

4) this study did not check the economic conditions and the well being of communities in the other villages within the vicinity that were used for similar field trip by senior students. The effectiveness of the program in one village may not create a spill-over effect of improved knowledge and skills for people in other nearly villages. Thus, the social contributions to the community has not been measured;

5) Collected survey data was run using simple statistical method. Future study should involve Factor Analysis or other statistical methods to produce a better analysis.

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ENHANCING COMMUNICATION STYLE (ECOMS) IN THE INTERNATIONAL WORKING LANGUAGE FOR ACADEMICS: HOW DO WE DO THIS?

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Abstract

What does 'communication style' mean to you? For some, it may mean knowing one self's communication behaviour in formal or informal conversational contexts. It may also refer to patterns of verbal and non-verbal behaviour that becomes one's practice when giving and conveying information. Both meanings are relevant reasons to enhance communication styles for many professionals in promoting professionalism not only common in companies and industries but also at universities. This paper proposes training for heads of faculties and schools in universities as well as its top administrative personnel to enhance their communication style specifically in speaking English. ECOMS (Enhancing Communication Style) is an innovative attempt to set up such training programme for non-native English Speaker professors in one of the public universities. The paper projects how ECOMS is proposed with a description of its approach, training, materials & syllabus as well as the trainer profile.
Keywords: *training, coaching, communication style, professionals, non-native English speaker.*

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Introduction

Learning English in higher academic institutions either as a second language or a foreign language is not an alien topic in non-native English speaking universities such as in South East Asia. Many English language programs are offered at universities to allow students to better their proficiency or competency in speaking English. Yet, we still face the dilemma of having to deal with low proficient students enrolled at the universities; either shy to speak or even afraid to speak despite the learning of English that had taken place during their school days. This is very much the scenario in local universities in Malaysia even when English is the second official language of the country.

Attempts to enhance students' proficiency and competency are often reflected in language programs and language activities conducted at various universities. One factor that may be overlooked is the need to situate the significance of creating an English friendly speaking zone in these non-native English speaking universities. A potent example of this is academics speaking in English on campus rather than in their mother tongue.

Not only are students non-native speakers of English but the academics in this region are also non -native speakers. A survey of several undergraduates in some local universities in Malaysia for example reveals that "some lecturers' English is so weak that what they say is practically incomprehensible" (Education in Malaysia blog 2006). This is expected as non-native speaking lecturers' proficiency and competency level may vary. This problem may be due to pronunciation, enunciation and articulation of words and sentences in the way they communicate in English. These are elements that may pose a hurdle to fluency in speaking and indirectly to their style of communicating in English. This raises a need for a training programme that brings about awareness amongst academics and underlines the importance to improve their communication style particularly in English.

Top management of one university in Malaysia is highly concerned about this and proposed that a training module be designed to develop individual's leadership skills by improving their communication style in English. This will indirectly also upgrade their professionalism. Fabbi (2013) believes that charismatic communication would result in improved leader communication effectiveness. Communication is central to the role of leadership in organizations and a critical leadership skill is required for effective job performance, contributing directly to improved organizational performance (Klauss& Bass, 1982). Thus, this paper proposes a training programme to enhance communication style that promotes leadership qualities amongst academics at a university. This programme is called 'Enhancing Communication Style' (ECOMS).

The University

The university is a national university that houses 13 faculties, and 16 research institutes employing 2,262 academics and 7,519 supporting staff. The universtiy currently enrols 25,525 students of which 14,971 are undergraduate, 10,554 postgraduate students, including 2,985 international students from 57 nations.

Its mission is to be 'the learning centre of choice that promotes the sovereignty of its national language and internationalises knowledge rooted in the national culture'. It is a university whose medium of instruction is the national language. Despite upholding this mission, it also aims to strengthen the use of English not only among its students but also its academic staff. One of the strategies in strengthening English is to internationalize the university activities and work towards as 'a national university with an international reach.' Academics especially are encouraged to have collaborations with international universities in research, training, publication, teaching and learning. To establish such networking and collaboration, academics need to be proficient and competent communicating in English. This paper presents a proposed module that aims to enhance communication style in speaking English focusing on how this can be achieved.

Communication

Effective communication is an essential leadership skill that helps organizations achieve valued organizational outcomes such as profit, high return on investment, customer satisfaction, efficiency, and productivity (Barge, 1994). He concludes that "leadership is enacted through communication" (p. 21). When this requirement is to be conducted in a language foreign to the speakers, especially when their competence is low or that they are unaware of their low proficiency much of the leadership skills become ineffective.

ECOMS therefore also aims to raise such awareness especially of those who are holding leadership positions. This would include verbal and non-verbal techniques, clarity of communication, content structure, incorporation of rhetorical questions, using simple sentences, clarity of pronunciation, relaxed posture, artificial pauses, eye contact, body gestures, facial expressions, and animated voice tone as mentioned by (Frese et al., 2003; Towler, 2003).

Language Use and Communication

The goal of communication is principally to be understood. Words and the manners by which the message is communicated contribute to the different styles of communication that could be assertive, passive or aggressive. For ECOMS, the core element is in both, the words one uses and the way one speaks in English.

There are many communication styles which can be identified through examples of phrases used when one communicates. For example, the use of such phrases "So what you're saying is…is that right?", "I think...I feel...I believe that…" demonstrate an assertive style of communication. Similarly, the use of phrases, "It's going to be my way or not at all" or "You're stupid if you think that will work" indicates an aggressive style of communication. These examples have not yet taken into consideration the manner in which they are spoken. For instance, the intonation and the non-verbal facial expressions of the speakers that could contribute to the impact it has on those being spoken to. The cartoon below illustrates an example of such a phenomenon.
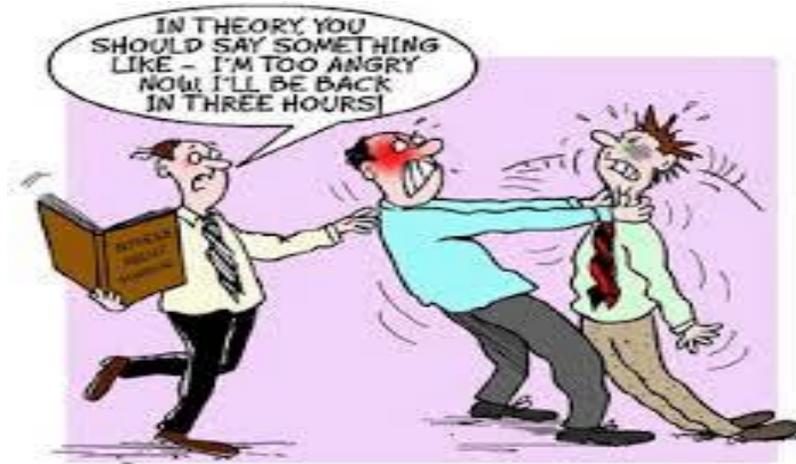
Fig. 1 – A cartoon example of one communication style

Coaching Adults

ECOMS adopts the coaching approach to provide an effective means for creating active, collaborative, authentic and engaging learning (Griffiths, 2005). Hurd (2002) in her study of nine organisational coaching clients reveals that "coaching creates the conditions for learning and behaviour change". Bearing these in mind, the presentation of syllabus and the materials for ECOMS training programme are planned to correspond with the focus to 'coach' rather than to 'teach' the participants. This incorporates as well the role of the trainers as 'coaches' rather than as 'teachers'. With this approach, it aims to raise participants' awareness primarily that is hoped to lead to motivating them to want to enhance their style in speaking English. Most importantly, the coaching approach is less intimidating considering they are high achiever scholars in aiming for them to make a 'transformational' change that will be life- long and sustainable practice too.

This supports McInerney & McInerney's (1998) claims that learner-centred psychological principles acknowledge the influence of cognitive and metacognitive factors, motivational and affective factors, developmental and social factors as well as individual differences in the learning process. The motivational and affective factors especially, are crucial in dealing with the participants' in ECOMS. This is due to the fact that they are professional adults in academia scene. Based on Gardner's Socio-Educational Model of Language Learning (Gardner, 2000), two kinds of motivation exist. One that is integrative where it lies in the positive attitude toward the foreign culture and a desire to participate as a member of it and the other is the instrumental kind of motivation with its goal to acquire language in order to use it for a specific purpose, such as career advancement or entry to postsecondary education. Ehrman et. al. (2003) similarly emphasised on this in their study to investigate individual differences in second language learning.

The Program

Using a discourse analytical approach, a name for the proposed module is appropriately and meaningfully crafted, i.e. ECOMS; an abbreviation for 'Enhancing the Communication Style'. ECOMS is projected as a professional coaching programme for the university's staff focusing on enhancing communication styles in speaking English.

The coaching in ECOMS is aimed at groups of professors, heads of faculties, departments, centres, institutes and heads of administration. At this university this would mean a group of senior academics who are professionals and experienced. The challenge for ECOMS therefore is ensuring that the conduct of the training will not intimidate them. Trainers must therefore prepare themselves accordingly including understanding psychological outlooks that would rain on adult learners.

It would be best if these challenges can be dealt with at the design stage of the programme. It needs to give attention to the following factors:

- The Approach
- The Trainers
- The Training
- The Module

The Approach

It is necessary to address the adult learning theory and principles. This is due to the fact that the participants of this targeted group were adults and thus there is a need to understand how to teach adults or about adult learning. There may be differences in 'teaching' adults, 'training' adults or "coaching adults". As stated by some, Andragogy (adult learning) is a theory that holds a set of assumptions about how adults learn. Andragogy emphasises the value of the process of learning. It uses approaches to learning that are problem-based and collaborative rather than didactic, and also emphasises more equality between the teacher and learner (Knowles 1970).

The training approach is crucial to ensure success of the program as a whole. In running the sessions, the team was aware of the need to build a good rapport mainly, primarily and firstly with the participants. It was with the team consensus that we needed to provide a leisurely programme that will create a good feel factor. As mentioned earlier, the need to create a less intimidating ambience became the crux of the training. The 'Johari Window' becomes a basis for reference.

The Johari Window model is a simple and useful tool for illustrating and improving self-awareness, and mutual understanding between individuals within a group. The Johari Window model can also be used to assess and improve a group's relationship with other groups. The Johari Window model was devised by American psychologists Luft and Ingham in 1955, while researching group dynamics at the University of California Los Angeles. Today the Johari

Window model is especially relevant due to modern emphasis on, and influence of, 'soft' skills, behaviour, empathy, cooperation, inter-group development and interpersonal development.

The Trainers

Given that the participants are senior academics with substantial experience and scholarly achievements, the question of who are appropriate to conduct the training arose just before designing the program.

Three groups of trainers are considered necessary, namely i) synergizers, ii) coordinators and iii) facilitators.

The Synergizer

Professors with high English language competency are selected first. They are the 'synergizers'. At every training workshop two synergizers act as trainers. One, the Head Synergizer, will be involved in all training sessions while the second would rotate in a pool of synergizers to the other training workshops. Synergizers may come from non-language/English faculty.

The Coordinator

Next are the coordinators who coordinate the syllabus, module and the flow of the workshops. Incumbents are at least Associate Professors. Just as in the case of the synergizers there will also be one head coordinator at every workshop.

The Language Facilitators

These are English language instructors and lecturers at the university. Their tasks are to observe and note down participants' use of English and coach participants in the use of English. These Language facilitators were chosen for their recognized English language proficiency and substantial experience in communication and training communication both in education institutions and business.

They also collaborate with the trainers in designing the ECOMs module and training materials. During the training sessions, facilitators are 'active participants' as they sit amongst the participants, take part in the activities carried out and give feedback. There is flexibility for the facilitators to move around from one table to another during the training. They also become resource persons for the participants to discuss or seek for advice in the issues of English grammar, vocabulary, pronunciation, presentation and other language or communication matters.

The Training

The training aims to amplify the kernel of 'communicative competence' in using the international working language amongst the academics. It is the improvement of their communication style in English that should become the thrust of the training outcome. The module projects its objectives to enhance individual's linguistics ability and pragmatic competence of the targeted group of participants. It also aims to boost the leadership skills of these individuals that will eventually mould them to be best communicators while holding the role as being the frontiers of the university's forefront. At the same time, this would contribute to create of the English speaking ambience and indirectly becoming an example to students on campus in motivating them to speak English. It is with these aims in mind and with the targeted

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group of participants, a thorough planning and structuring of the module leading up to its program became the main concern for the module.

Due to the busy schedule of the Professors and top administrators at the university, the length of training period to allocate and the venue are significant matters to consider. The emphasis of the training is that participants should attend all sessions that are scheduled consistently without any disruptions. Thus, most importantly, the training is best held outside and away from campus to avoid absentees if participants decide to return to campus to catch up with office work. It is also designed for a 2 ½ day programme considering the constraints that participants are committed to in their everyday schedule. The flow of the schedule reflects the syllabus of ECOMS that focuses on oratory and eloquence of participants' speaking in English. It is scheduled as in Table 1.

Table 1- The ECOMS Schedule

DAY 1		DAY 2		DAY 3	
SESSION 1	Who am I?	SESSION 3	Know your communication styles	SESSION 7	Oh I see
SESSION 2	Let me story you	SESSION 4	Professional voice and Pronunciation	SESSION 8	Reflection
		SESSION 5	A speech to remember		
		SESSION 6	Mingling in English		

The objective of these 8 sessions is to enhance participants' communication style focusing on their use of language and delivery of information from the verbal aspect as well as the non-verbal aspects of communication. Each session is allocated for about 1 ½ to 2 hours. Details of each session will be described in the following section.

The Syllabus and Materials

The syllabus was designed for a period of about 2-3 days which is a rather challenging task. This is because the need to achieve the objectives of the training within this allocated period of time is critical. The primary aim is to enhance participants' communication style in speaking English. Undoubtedly, this can mean to give focus on several skills that contribute to one's communication style. They can be public speaking, conference presentations, conversations, group discussions and even email correspondence. However, due to limited time availability, ECOMS will focus on what is commonly shared by the various types of discourse', i.e. the ability to convey ideas, thoughts, opinions and information in a manner that is comprehensible to those whom one is talking to. Listeners like refined skills of individuals conveying their ideas when speaking to ensure their messages are clearly articulated and smoothly delivered. Another

individual talk was then scheduled at the end of the syllabus to be then evaluated and commented by peer evaluation, self-evaluation and most importantly, the synergy reflection. The session slots were then aimed to reflect a flow of skills to enhance the individual speaking that incorporated face to face interaction through simulations, online session to realise the 'nitty-gritty' of the correct use, correct pronunciation of the language, in this case English.

The next phase is the selection of materials for each slot to suit this targeted group of participants. The basis of the material selection rests on two important factors. They are firstly, materials that would entice the participants and secondly that would sustain the participants' interest and motivation.

We agreed that the materials were to be selected from 'You Tube' collections that became the input to the syllabus. This contrasts with the ubiquitous slides presentations and is a demonstration of the various ways of presentations.

It was also decided to upload all the materials online onto the ECOMS website. As a result this training also contrasts with the typical training workshops where printed materials are passed on to participants in folders. The only printed materials distributed to participants are the Programme schedule and the feedback form.

The Module

As mentioned earlier, ECOMS is aimed at enhancing participants' communication style focusing on their use of language and delivery of information from the verbal aspect as well as the non-verbal aspects of communication. The training outcome focuses on the participant's ability to give a short talk that demonstrates individual's awareness on their use of language in terms of correct sentences and phrases with appropriate choice of words. It also focuses on the non-verbal aspects of clarity, articulation & enunciation, pace and volume of voice other than facial expressions among others.

Session 1: *Who am I?*

Who Am I? is an ice breaking session. Though participants are under one organisation, they may only know each other by name or by sight. It is important to begin with an ice breaking session first to make everyone feel at ease among participants and between participants and trainers. The training of speaking better in English may trigger perhaps a slight discomfort in some where they may feel inferior due to their lack of fluency and competence in the second language as compared to others.

Participants are paired and asked to do a '*Similar Circle*' activity. Using a flip chart and marker pens, participants need to draw two overlapping circles. When they have done this explain that each member of the group is assigned one circle. In the area that does not overlap they write at least two unique facts about themselves – a unique fact is a piece of information about them that does not apply to anyone else in their small group (e.g. Born in Austria). In the overlapping areas they need to write common facts applying to everyone. Each pair will then go to the front to talk about their 'similar circles' in front of the other participants. Trainers will also be doing this and

could already start to pre diagnose participants' fluency and competency in speaking English. Depending on the number of participants, this activity may also be done in threes.

Session 2: *Let me story you*

The start of the module '*Let Me Story You*' is a diagnostic session. The title of the session is colloquial and is a strategy to lessen participants' anxiety. It sounds catchy and informal. In a sense this equates to the concept of needs analysis or accommodation, a norm in designing a syllabus for a specific purpose and for a specific group of people when conducting a course or training.

In this session, we require participants to introduce themselves and we record this for the purpose of playing it back in the subsequent session. It is at this session too that trainers or participants are allowed to ask questions during or after the brief 'story' each one shares to get participants to engage with one another and to create a spontaneous replies to questions posed to them.

At the end of this session the head Synergizer demonstrates the significance of enhancing communication style in English when speaking by giving his reflections on the 'Let Me Story You'. It is at this point that the head synergizer discusses ECOMS from anthropological perspectives situating the significance of ECOMS to the organisation. It also acts as a motivating instrument to set the beginning of ECOMS training.

Session 3: *Know your communication style*

At this session, the recorded excerpts will be played back to all participants in sequence with the coordinator moderating the session. Firstly, the speaker is asked to comment on their own recordings. This is followed by feedbacks from trainers who take notes of each play back of individual's recording. It is the beginning of input in creating awareness primarily from the self-viewed video recordings.

Viewing one's own *performance,* in this case their speaking in English is normally an impetus for the speaker to improve. Much of what they see on the recording is normally something they were not aware of beforehand. It is at this point that we hope that their motivation is escalated with regards to the essence of the intended training.

In order to relate to their various portfolios as heads of departments and administrators, participants are then asked to do an online survey to 'know their communication style' (http://www.communication-styles.com/survey.php) which is also readily accessed through the ECOMS website. This communication style quiz will generate a summary of one's communication style as leaders. It gives characteristics of one's style in communicating and its strengths and weaknesses. These are then discussed at the training. This discussion allows opportunity for participants to speak and use their English naturally. From the generated results a brief elicit of styles amongst participants are discussed as a mark to end the session.

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Session 4: *Professional voice and pronunciation*

In this session delivery skills that focus on voice and pronunciation are practiced. Videos from 'You Tube' form the material for this session. Two video clips are chosen. One is from the classic 'My Fair Lady' movie where Miss Eliza Doolittle practicing her pronunciation and articulation under an instruction by a Professor. The other is a 'You Tube' video on Professional Voice by Robert Palmer.

For a 'hands on' task, each participant is given a short descriptive text to practice 'reading aloud'. Each language facilitator is assigned 1-2 participants to coach them with effective voice control, stress and intonation and pauses to prepare them to deliver their reading in front of the group. This reading aloud is then carried out by each participant behind a screen using a microphone. This is to allow listeners especially the trainers to focus on their voice projection only when assessing individual's progress.

We incorporate online learning software called 'clarity'. In this slot, participants are to download the software and left to use it. This software focuses on improving speaking and participants are free to listen and learn of correct pronunciation for example, and pace or tempo of speaking. This online software demonstrates native speakers speaking which allows participants to listen to an RP (Received Pronunciation) English. While it is pronunciation that is the main focus here this session equally addresses grammar or the language awareness aspect. Considering the adult learning theory this software forms one of a number of activities in this session.

Session 5: *A speech to remember*

During this session the language facilitators sit with participants assigned to them and play back the recorded Let Me Story You video of those participants to 'coach' and to *diplomatically* point out aspects to improve. It is with this consultation approach that the participants received 'personal coaching'. This personal coaching is to prepare participants for another 3 -5 minute talk presentation as the final outcome of the training.

Participants are to choose a topic about them that they wish to share but not their demographics and jobs. The suitability of topics is discussed between participants and their respective trainers. At this point too, each facilitator will raise participants' language awareness for example the inaccurate use of grammar. This may vary among participants depending on their level of English proficiency. In sum, the coaching is focused on the 'what' participants will present and on the 'how'. They are allowed to use a maximum of only two slides; one with the topic title and the other a visual representation of their topic to mainly aid their talk. This is to avoid the nature of a 'lecture' talk or 'business presentation' kind of talk.

Session 6: *Mingling in English*

Session 6 is one session slotted in this module to address issues on 'mingling in English'. It continues as a practice from the previous session to further practise participants' clarity in speaking and language use through appropriate stress and intonation patterns in conversations.

Similarly, in this session a couple of 'You Tube' videos are used as input to raise participants' awareness on how to 'manage conversation' when mingling in English.

A 'hands on' task is to role play a simulation prepared by facilitators and each pair is given a simulation task. They are only given about 2 minutes and they are then asked to role play impromptu in front of the group. The role playing of each pair is video- recorded, this video recordings are then played back to generate discussion among participants moderated by the coordinators. Remarks on areas that need improvement are noted by facilitators and given as feedback to participants.

Session 7: *Oh I see*

This session is a platform for participants to demonstrate their awareness of what has been exposed throughout the training. A collective viewing on individual's recording is a form of feedback that churned discussion and interaction. This session in away became the quintessence of the ECOMs training. This is the platform where participants and synergizers interact, discuss, seek clarification and offer explanations.

A 5 to 7 minute presentation by participants is required as the final task of the training. Elements such as pronunciation, articulation, pace of speaking, and stress and intonation patterns are primarily the focus of discussion accompanied by gestures, postures and facial expressions.

During this session participants are shown snippets of the 'before' video recording which is the first 3 minute talk they gave on the first day of the training in the Let Me Story You session and the 'after' video recording of their 5-7 minute final presentation.

This time, a more thorough observation by all trainers is needed as they are to identify room for improvement. The remarks however, must focus on the participants' progress followed by weaknesses they should be aware of and aim to improve.

Session 8: *Reflection*

Session 8 is the last session of the training. It is a session where participants reflect verbally their views and feedback regarding the training. Other than it being the final session, it is also a further opportunity for participants to use English as each participant is required to spontaneously express their reflection in English.

It is in this session that we would notice participants becoming more confident to speak and most importantly to see that they '***want***' to speak. The session also offers time to evaluate of the ECOMS training.

The role of the Head Synergy is essential in this last session after the participants' reflection to also reflect on the progress made by participants as a whole and as an individual. The need to reiterate what was put forth at the beginning of the training wraps up the ECOMS training.

Conclusion

This paper discussed an attempt by a university in Malaysia to improve the English speaking competency and proficiency of its senior academic and administrative staff given that English is

not a main language in Malaysia. The Programme ECOMS was created to achieve the objectives without placing undue anxiety on these senior university officers given the rather austere organizational culture.

Equally important is the *modus operandi* of the training. Three types of *trainers* were involved including a couple of the academically highest, namely Professors. Active learning is employed and a lot of discussions are carried out while learning materials are to be self-downloaded from online resources. In addition participants are **coached** through a journey of awareness and self-realization of their own communication styles, identifying their strength and weaknesses via a 'play back' viewing of recorded videos of self, and reflecting and discussing their video-recorded performances. In other words, the input and materials used are from authentic presentations of the participants' which are their own video recordings of 'hands on' tasks.

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TEACHERS' PERSPECTIVES ON UTILISING DIFFERENT APPROACHES TO TEACHING FOR IMPROVED ENGLISH PROFICIENCY

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Abstract

The need for proficient English in one's repertoire of languages is undeniably important today as the language is recognised internationally. However, it was found that the majority of students in Malaysia only have an average level of English proficiency. It was found that mixed approaches in teaching can help teachers direct their teaching to different learner types. Nonetheless, it appears that there is only a few studies conducted on the impacts of different teaching strategies on the English proficiency of young learners. Thus, the aim of this pilot study is to determine the impacts of different teaching strategies on the English proficiency of young Malaysian learners, with a special emphasis on the perspectives of English teachers at a language centre in Kuala Lumpur. The pilot study involved both qualitative and quantitative data collection methods. For preliminary results, only 10 surveys were collected back and 2 senior teachers were interviewed. It was found that the most commonly used teaching strategy employed was the elicitation strategy. Also, the effectiveness of each teaching strategy may depend on the students' level of English, the topics that are taught and the flexibility of the teacher to adapt his/her style to the students' learning abilities.

Key words: English proficiency, Teaching strategy, Pilot study, Perspective

Introduction

The 10th Malaysian Plan aims to improve English proficiency and increase the competitive advantage of Malaysian education. In association with this, the government plans to measure the effectiveness of different teaching programmes and expand efforts to develop the English proficiency in students (The Economic Planning Unit, 2010).

On the other hand, it was found that approximately 40% of the students in Malaysia have only an average level of English proficiency (Atan, 2007). Based on the findings, the English proficiency among Malaysian students (young learners in particular) requires serious attention.

Klimova (2011) suggests that it is a common issue for teachers to be frustrated when their message fails to get across to students, or when their students are not motivated to learn English. Consequently, the English proficiency of the students can be affected. Nonetheless, Wong and Nunan (2011) posit that applying different teaching strategies may assist teachers in providing a better learning experience to the various learner types in the classrooms.

The abovementioned rationalisation suggests that utilising different teaching strategies in one's class can enhance students' English proficiency. Conversely, there appears to be limited research to prove the preceding claim. It also appears that there is few to no research done on the impacts of different teaching strategies on the English proficiency of young learners.

Thus, the aim of this pilot study is to determine the impacts of different teaching strategies on the English proficiency of young Malaysian learners, with a special emphasis on the perspectives of English teachers at a language centre in Kuala Lumpur. This pilot study employs a mix-methodology approach by using survey and interview data to gather the perspectives of teachers in the language centre. The outcome of the study can be potentially used to help other teachers identify better teaching approaches for different learner types.

Literature Review

According to the 10th Malaysian Plan (The Economic Planning Unit, 2010), English proficiency can be divided into 3 underlying variables, namely:

- Reading
- Writing
- Grammar

Reading is making sense out of written texts (Anderson et al., 1985). It is beneficial for students because it sustains the active mind, reduces stress and sets a good example for young learners (Ralph, 2004). Reading English texts reflects on a student's English proficiency since it involves learning new words and grammar (Garcia, 2011).

Writing is engraving characters onto a medium, with an eye to form words and other larger language constructs (Word IQ, 2010). Exceptional writing merits value as it enables

through crystallisation, learning improvement and word-usage effectiveness (Bloomfield, 2004; Kelly, 1999; Kondrat, 2009). The ability to write ideas down in commendable English allows individuals to increase their competitive advantage in their careers (Thomson, 2008).

Grammar can be defined as a structure for individuals to articulate themselves (Crystal, 2004). It is important in English proficiency since it loans reliability to written documents, exhibits eloquence and warrants that communications are transmitted noticeably and efficiently (Beames, 2012; Quick, 2012).

Apart from English proficiency, teachers also need to know different teaching strategies so that they can choose the one that makes teaching more comfortable and the learning process easier for students (Larsen-Freeman and Anderson, 2008). Based on previous research (Courter et al., 1995; Larsen-Freeman and Anderson, 2008; Marzano, 2009; Ng and Ng, 2012; Wehrli and Nyquist, 2003), educators and researchers have identified 4 commonly used teaching strategies in classrooms, namely:

- Elicitation Strategy

- Group Discussion Strategy

- Guided Discovery Strategy

- Mind Mapping Strategy

The elicitation strategy is an approach that requires students to provide knowledge, answers and information instead of them being provided by the teacher (British Council, 2012). It is a strategy which draws out or provoke a response from the learners with the motive of gaining the involvement, ideas, opinion and imagination in class (Rosenberg, 2009). It enables a learner-centred environment, allowing learning to be a memorable experience that connects old and new knowledge (British Council, 2012). In language teaching, it is often used as a questioning approach which focuses discussion on the learner. Graves in Nunan (2003) claims that elicitation strategy puts emphasis on learners' experience and knowledge; as such the strategy aids in shifting the focus of text from being the source of authority, ultimately helping learners in becoming more self-reliant during the learning process. Thus the strategy can serve as a suitable means of leading students into activities which require critical thinking and inquiry (Ngeow, 2003).

The group discussion strategy involves a structured conversation among participants who present, examine, compare and understand similar and diverse ideas about an issue (Larson, 1997). Group discussion strategies are effective ways to promote higher-level thinking, develop student attitudes and advance student capability for moral questioning (Larson, 1997). The use of discussion formats and strategies can assist teachers and student in fostering intellectual agility and encouraging livelier and more engaging discussions across topics in the classroom (Taylor and Wood, 2007).

One of the most frequently used discussion format in teaching young learners is the fishbowl discussion which is a form of discussion that serves to put in order a medium-to-large-group discussion or small-group activities with the purpose of encouraging student engagement.

Studies suggest that this form of discussion is applicable to learners with varied abilities (Taylor and Wood, 2007). The term fishbowl is coined from the manner in which students are organised in the seats, typically with three to five seats arranged in an inner circle with the rest arranged to form a larger outer circle. Recent research in literacy reaffirms the effectiveness of the use of group discussion strategy in young learner classes.

A current study found that children who were placed in small group discussions were able to foster reading comprehension through creative and meaningful conversations in class (Maine, 2013). Researchers recorded the interactions of primary-aged children in small groups. Children used a different reading technique in each group. For example, one group was assigned a story with a setting which took place on a river. Children in the group were shown a painting of a lady sitting in a boat surrounded by reeds on a river. The accompaniment of pictures with the texts not only aided students in inferring meanings but also encouraged creative discussions and questions in the group. The findings of the study revealed that the images and discussions supported their ability to understand the overall context of the stories. As the children were not assigned instructions by their teachers, they were given the autonomy to select discussion topics and prioritise the importance of events in the texts. Therefore, the practice of small reading groups enabled children to take on meaningful discussions amongst group mates allowing them to develop many interpretations through imaginative and logical thinking (Maine, 2013).

The guided discovery strategy is an approach which is grounded in the philosophy of constructivism through which learning takes place by reflecting on our own experiences when we construct our own comprehension of the world that we live in (Labush, 2015). It is a teaching technique used to lead students towards discovering knowledge without guidance and allow them to be active participants in their own learning (Goodyear et al., 1991; Shrager and Klahr, 1986), a method often used in instruction and learning to help students personalise the concepts involved in the study and construct understanding which cannot be generated otherwise through any other methods of instruction (Labush, 2015).

Guided discovery strategies can result in much deeper learning when the topic is less black and white, and when more than a superficial commitment to a set of ideas is required (Shepherd, 2010). In guided discovery, the teacher holds the responsibility for preparing or "setting" the students up in making the desired discovery, which is usually the goal of the activity or lesson (Labush, 2015). The necessary background knowledge of the topic must be provided by the teacher to successfully lead the students to the discovery.

The mind mapping strategy is a note-taking, organisational technique, which allows individuals to organise facts and thoughts in a map format containing a central image, main themes radiating from the central image, branches with key images and key words, plus branches forming a connected nodal structure (Buzan, 1993; Buzan, 2002). The strategy not only shows facts but also the relative importance of the individual parts of the topic involved. As mind maps have a visual design which enables students to observe the relationship between ideas it also allows students to group some ideas together as they advance in the activity (Riswanto and Pebri Prandika Putra, 2012). Mind mapping is likely to encourage a deeper level of processing and improve cognitive processing for better memory formation (Farrand et al., 2002).

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Methodology

The design adopted for this study is in a form of a mixed methodology combining the interview research design together with the cross-sectional survey design. Preliminary survey results on the variables discussed in the literature were gathered by using a simple questionnaire to strengthen the legitimacy of the interview data.

Survey questionnaires were handed out to all teachers in the language centre. Due to the limited number of staff in the particular language centre, only 10 surveys were collected back. The unit of analysis for this study is the teachers of the language centre. The data was gathered and analysed using the Microsoft Excel 2010.

Besides surveys, interviews were also conducted to collect the insights of teachers on how different teaching strategies affect English proficiency. The interview study serves as validating evidence to support the results from the survey study conducted in this research.

In this method, an interview protocol was prepared for the study. Guided by this interview protocol, a total of two experienced teachers (Participant A and Participant B) were interviewed for approximately 45 – 90 minutes on how teaching strategies influence the English proficiency of young learners. The interview session was recorded using a voice recorder and later transcribed manually for analysis.

Findings

Figure 1 presents the results of the data collected from the survey. Based on the percentages in the figure, it is found that this particular English language centre values the use of the elicitation strategy above all the other strategies (Group discussion, guided discovery and mind mapping).

This phenomenon may perhaps be because of the fact that group discussions, guided discovery and mind mapping strategies are more appropriate to be applied in institutions of higher learning. It also appears that the teachers in this language centre find the elicitation strategy to work the best since they get to urge their students to directly answer their questions. This suggests a more teacher-centred approach in their learning environment.

However, based on the figures provided in Figure 1, it is also suggested that the other strategies are by no means less important compared to the elicitation strategy. This suggestion will require further verification from the interview results. The following sub-sections will involve the description of each participant's interview session.
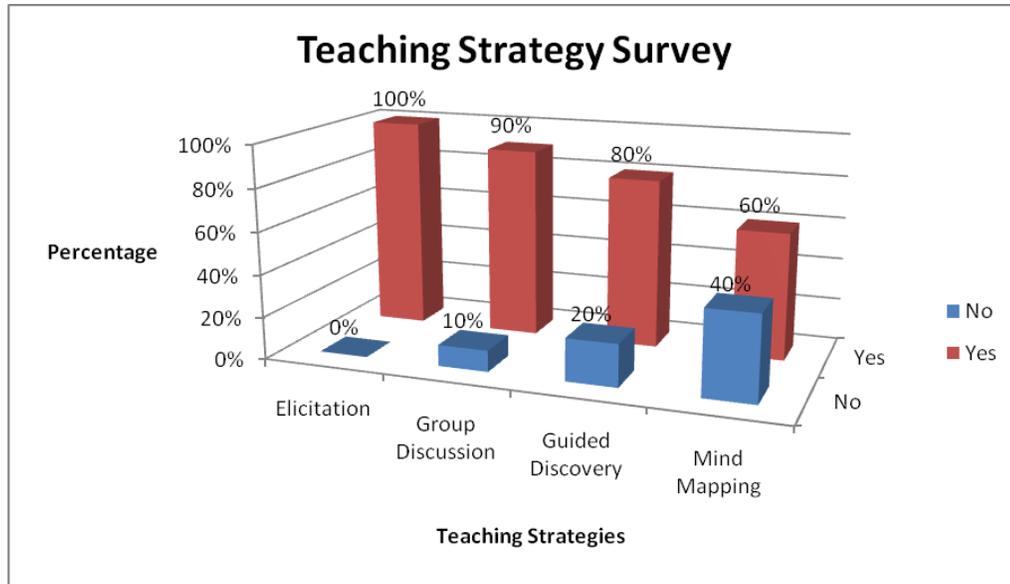
Figure 1: Survey Results

Participant A (PA)

Elicitation Strategy. When PA was questioned on whether the elicitation strategy was used in the class or not, the participant explained that in class, she would usually provide her students with an example of verbs through action words like jump or run or examples of nouns in class. PA showed that she imparts these examples to help students understand and provide continuity in the process of learning. PA further explained that by providing students with some help through this strategy, it creates opportunities for students to contribute to the lesson with their own word examples and encourages student participation. This prompts students who are less pro-active in class and helps them in their process of learning.

In the interview, it was also found that PA considered this strategy as an effective teaching method mainly because it served as a crucial indicator to whether or not students understood the topic and were able to keep up with the lesson. Simply put, the method to PA was a means for verification if the students needed more attention and help during the learning process whilst providing them room to be more participative, active and confident in learning.

When asked on how this strategy helped students in reading, writing and grammar however, PA stated her belief that the strategy is effective for speaking activities during lessons. This is because the majority of the students in PA's class were first language speakers of Mandarin and second language speakers of English. Activities employing this strategy helped PA's students practise their speaking skills in English which was a rare opportunity for the students as their exposure to the language outside the centre was scarce. PA believed that the practice of speaking activities through this strategy indirectly helped her students improve in developing their reading and writing skills. PA gave an example of this in the following excerpt.

"For example, if verbs like sit, stand and jump were provided in class by the students, they will tend remember the word, and also remember how these words are read and written in future. In the end, it serves as a form of reinforcing what they have learned".

In summary, PA's example reveals that students perform better in reading and writing because activities employed through this strategy reinforced student's memory of the lesson.

Group Discussion Strategy. The interview with PA revealed her belief that this strategy is more suitably applied in groups of young learners who were "older". It was found that from PA's teaching experience, there is a lack of participation from students when this strategy is employed. As such the most common scenario which occurred during lessons as mentioned by PA was the biased distribution of participation during the activity which stemmed from the balance of the actively and inactively-participating students in class. In a situation when most of the students lacked participation during an activity, the situation would inevitably lead to an unfair distribution of participation which would cause the less active students to lose interest in the activity.

Teachers such as PA reverted to the elicitation strategy when faced with students who were shy in nature and less participative in class. Thus, from PA's perspective, this strategy is only effective and applicable to a class in which all students willingly participate in the activity. In the event of that, the strategy is effective as it stimulates thinking and helps students generate ideas that teachers may not have thought of. Within such settings, students become autonomous individuals who have the ability to develop their own understanding and views.

For educators such as PA, the group discussion strategy can also aid teachers in helping their students improve in their writing, as PA stated in the following excerpt.

"This strategy can help in improving a student's writing. An example would be in writing essays. This is because in order to write good essays or good stories, the students require sufficient general knowledge. A student with excellent grammar may still be lost when attempting to write a good essay due to a lack of general knowledge. For example, if they are going to write about a particular country, they need to have some idea about geography. Group discussion strategies may help them improve their general knowledge and help them write better essays".

The group discussion strategy described by PA is similar to teaching strategies such as the fishbowl strategy in which students engage in a discussion activity which helps students alternate between the roles of being contributors and listeners in the activity. As reflected in PA's account of how such a strategy could help improve a student's ability in writing, the strategy is most suitably employed in pre-writing activities which often aid students in unearthing questions and ideas that enable them to explore their assignments in a more profound way (Facing History and Ourselves, 2015).

The strategy enables students to share their knowledge and experiences with each other about the topic, helping them build on the ideas of others and look at matters from different perspectives. Aside from enabling students to expand their knowledge of content in the activity, the strategy helps in increasing their confidence as students fine-tune their skills in communication. Through

the use of this strategy, students are given the ownership of the classroom, therefore allowing them to take more responsibility for their own learning. Ultimately, the strategy facilitates teaching that helps students learn beyond the course content (Dutt, 1997).

Guided Discovery Strategy. According to PA, guided discovery learning in teaching is an approach which has become common practice as it helps makes learning more interesting. This is reflected in the following excerpt of from the interview.

"*When the students get to actually see and touch something tangible and related to the lesson, it somehow perks up their interest in learning. For example, if the particular lesson was about Egypt, the teacher who has perhaps been there before can show some photos of the trip there to spark their interests in the lesson. This allows them to understand the lesson and prompt them to ask questions*".

In the aspect of enabling students to improve in their reading, writing and grammar proficiency, PA revealed that the strategy helped increase students' vocabulary skills. Even though students have advanced technological resources such as electronic dictionaries which can aid them in their language acquisition, students still needed to be introduced to different forms of stimuli to peak their interest and to remain motivated throughout the learning process. This was described by PA in the excerpt below.

"*This strategy can improve their vocabulary. Most students do not have the habit of looking for words in the dictionaries. The use of audio visual aids will help them. Improving their vocabulary will help their reading and eventually their writing*

This finding is supported by anecdotal evidence present in Caprario (2013) in which the researcher found that by combining traditional teacher-fronted grammar instruction and guided discovery grammar tasks to facilitate second language acquisition, students benefited from the strategy especially when set in a larger, communicative, meaning-focused lesson.

Mind Mapping Strategy. As for this strategy, the participant explained that this strategy was more suited for the older range of learners in the language centre as there were situations where young learners faced difficulty when participating in activities which used this approach. This is because some of the younger learners had not developed the necessary vocabulary skills which is required to be able to express themselves in order to complete the mind map. In regards to whether the strategy was more effective than the group discussion strategy or not, PA responded that the situation depended on the age of the learners. She believed that older learners who had the ability to contribute ideas and speak better in English benefited more from the group discussion strategy. Hence, the mind mapping strategy was the less used strategy for activities at the centre.

However, the participant still suggested that this strategy definitely could aid students in improving their writing skills as it allows them to classify and group the ideas with main points and supporting points. Students are able to build their ideas, structure and organise them which consequently is reflected in the flow and continuity of each paragraph of their writing. PA also stated her belief that in a similar way to the group discussion and guided discovery strategy, the

mind mapping strategy also helped students gain knowledge that is not just limited to the course content. This aided students in developing their writing skills.

Question on Survey Data. In regards to the plausible reasons for why 100% of teachers in the language centre used the elicitation strategy, PA suggested that based on her experience, most of the teachers themselves learned the English language through the elicitation strategy and not through strategies such as the mind mapping strategy as the strategy was considered the newer form of teaching strategies. Hence, teachers who were familiar with the elicitation strategy were likely to adopt the use of this strategy more frequently in their approaches to teaching.

Aside from the teachers' preference for elicitation strategy, there was also the problem of young learners not having enough vocabulary skills to be able to participate in an activity involving the mind mapping strategy. The variance of age and abilities in vocabulary skills of students in a class can affect the effectiveness of the mind mapping strategy. As the elicitation strategy, often involves question and answer where students can just provide verbal responses, teachers often opt for this strategy because of the convenience of its application in teaching.

Mixture of Strategies. When asked if there should be a mixture of teaching strategies employed, PA agreed that teachers must be able to utilise different approaches in teaching as there is no one best strategy because of the various types of learners in a class. This was explained in the following example given by PA.

"Slow learners for example, may need a lot of visual aids whereas older students may need group discussions. If students are comfortable with their writing for instance, perhaps the mind mapping strategy can be brought in. So, there should be more than one strategy depending on the situation".

Participant B (PB)

Elicitation Strategy. For this strategy, when asked if the strategy was utilised in the classroom PB suggested that the strategy was in fact used in class. An instance of application of this strategy was explained in PB's example on how singular and plural grammar was taught in class in the following excerpt.

"For example, when words on singular aspects are provided, the students will then be requested to give the teacher words on plural aspects. They usually manage to answer them correctly."

PB also claims that the strategy is quite effective as it is a strategy which enables all students to be involved in question-and-answer session, ultimately promoting student participation in class. Activity conducted through this strategy also helped students to be more aware of themselves amongst their peers. This awareness prompted them to be careful and critical thinkers when attempting to respond to the questions in class. In regards to the question on how this strategy could help students in their reading, writing and grammar, PB stated her belief that the strategy is helpful in activities involving speaking, writing and grammar but not for reading.

Group Discussion Strategy. In relation to the interview question on the use of group discussion strategy in class, PB responded that when using this approach in an activity, students in class were usually prompted some questions and then allowed group discussions with class members. After the discussions students were asked to present to the class and the teacher their answers or conclusions from the discussions. Similar to PA's account of the effectiveness of this strategy, PB also reported that this strategy is valuable as it enables students a chance to take part in discussions and take turns in being contributors of ideas and listeners. A practice of such autonomy in the discussion can help students to be less reliant on their peers and more independent in their communications especially when students needed to give short presentations of their answers.

Like PA, PB also stated a similar belief that students benefit from activities using this approach especially in writing as the discussions aid in the development of ideas, enabling students to broaden these ideas and expand the content of their writings. However, according to PB the strategy was not as effective for reading and grammar skills. This finding may be an isolated case as there are studies with findings that suggest that group discussions help foster reading comprehension in young learners.

Guided Discovery Strategy. As for this strategy, PB provided an example of how this approach was employed in her class in the following excerpt.

"For example, when the young learners are to be taught a certain words that describe 'pick up', 'throw' and 'kick' actions, a football is brought into the class to demonstrate these actions. This enables the learners to be very clear in what they learned. As a result, they can remember the lesson well with the help of these visual aids. This improves their vocabulary, writing and grammar".

In PB's example, when students were taught vocabulary in her class, students were introduced to the new vocabulary through demonstrations of the action word or verb in class or at times provided with visual aids, such as pictures. By using this approach, students were able to grasp the new vocabulary with ease and commit the words to memory. Thus, the strategy helped the students in increasing their vocabulary, grammar and writing skills.

Mind Mapping Strategy. This strategy for PB was not really applicable to her class as most of her students were very young learners who did not have sufficient general knowledge pertaining to the mind maps or graphical relations. Therefore, PB did not employ this strategy in her class activities.

Question on Survey Data. When asked for her views on why 100% of teachers in the language centre employed the elicitation strategy in teaching, PB suggested that the strategy was the better strategy as all students in class have fair opportunity to be involved in the activity and ultimately be a part of the learning process.

This view of enabling opportunities of involvement for students is consistent with PA's view of the elicitation strategy. PB explained further on the benefits of the elicitation strategy in relation to the attentiveness of the students. She implied that because of the opportunity of involvement

which is present during the activity, students in class paid extra attention to the questions which were being asked and the answers given by their peers to anticipate for an opportunity for when the next question was posed to the class. However, PB's view on the suitability of the mind mapping strategy is also similar to PA's view. PB commented that the mind mapping strategy is a strategy which is more applicable to classes with students who were already proficient in English and not applicable to learners of Basic English.

Mixture of Strategies. When asked if there should be a mixture of teaching strategies employed, PB affirmed that there definitely should be a mixture of strategies and that the strategies applied were also dependent on the topics to be taught in class. PB reasoned that "c*ertain topics require a certain kind of strategy. A mixture will also ensure that the class is lively and not boring during the English lesson"*.

Conclusion

Based on the results obtained in the previous section, it appears that the elicitation strategy is the more commonly used strategy among the other teaching strategies. The results also suggest that the effectiveness of implementation of each teaching strategy may depend on a few factors, namely:

- The level of English portrayed by the young learners in class

- The topics that are taught in class

- The flexibility of the teacher to regulate the teaching style according to students

Based on the research, it can also be concluded that the responsibility and capability of the teacher is important as the teacher needs to identify the type of learners in the classroom before he/she engages in whatever preferred teaching strategy for the lesson. Teachers in this case must play a role not just in delivering knowledge to their students, but also as influential leaders that are capable of identifying their students' talents and guiding them to the correct direction.

In this study, all the teaching strategies appear to play a role in improving English proficiency although it may not be clear as to what level of contribution do these strategies play a role in with respect to reading, writing and grammar. However, the perspectives obtained from this study can serve as a preliminary guideline for an extended study that utilises in-depth qualitative research and more complex statistical analyses.

For example, a more complex questionnaire can be developed in order to observe the significance of the relationships between the teaching strategy variables and the English proficiency variables. More detailed interviews can also be conducted, focussing not just on teachers' perspectives, but also on students' perspectives. The study can be extended to include young and adult learners. Lastly, the sample size of this study can also be improved by including various language learning centres across Malaysia or including both local and private varsities around the world.

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Overall, the purpose of this study which was to determine the impacts of different teaching strategies on the English proficiency of young Malaysian learners has been fulfilled. Although the effects of mixed teaching strategies on English proficiency still remain enigmatic in educational research, it is believed that a preliminary understanding of teaching strategies in English proficiency is now within sight, due in part of an improved understanding of how the employment of these strategies can potentially raise the English proficiency of various learners in Malaysia.

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Abstract

This study aimed to investigate the effects of the qualities of supervisors on supervision. Students' supervision experience, conceptualised in terms of 13 tasks, was compared based on the qualities of supervisors in terms of interpersonal skills, experience in research, academic skills, experience in supervision and academic subject knowledge. Differential Item Functioning (DIF) analysed by Rasch Modelling was used to ascertain the effect of each of the qualities on supervision. Significant DIF was found in four of the 13 supervision tasks for interpersonal skills, two tasks for experience in research, three tasks for academic skills, three tasks for experience in supervision, and two tasks for academic subject knowledge. Providing constructive feedback was found to be an important supervisory skill that students needed for their progress. Supervisors with good interpersonal skills, extensive experience in research and supervision, academic skills and academic subject knowledge provided more constructive feedback on their students' progress.

Background

A main thrust in Malaysia's education plan is to increase the number of doctoral degree holders to 60000 by the year 2023. However, one of the main challenges in the realisation of this target is high attrition due to issues in postgraduate supervision (Sidhu, Chan, &Yunus, 2014) with the quality of supervision among the key global concerns for excellent postgraduate education. In addition, research supervision is also an important factor to the success or failure of a postgraduate student (Memon, Salleh, Baharom & Harun, 2014) where the quality of the supervisor-student interactions is believed to directly influence the quality of the doctoral experience and its outcomes for students. Unsatisfactory supervisory relationships have been implicated in cases of student withdrawal or failure to complete their postgraduate studies; conversely, shorter completion time has been associated with maintaining the same supervisor throughout the duration of the study, keeping to a fixed dissertation topic, developing a close relationship and meeting frequently with him/ her, a fast turnaround time for submitted material as well as establishing mutual collaborations on research papers (Seagram et al., 1998 as cited in McCormack, 2009). The Postgraduate Research Experience Survey 2013 in the United Kingdom found that 82% of the students surveyed were satisfied with what was perceived as high quality supervision and research skills development. It was also found that supervision had the strongest influence on overall satisfaction of students (Bennett, Turner, & Lambon, 2013). In Australia, the Postgraduate Research Student Experience study of 2013 showed that 81% of the respondents were satisfied with supervision. However, postgraduate students in Australia ranked supervision as the fifth most satisfactory aspect of experience (Lindsay & Edge, 2013).

Various difficulties often arise in the process of completion of study programmes due to the length and complexity of graduate student supervision, attributable in part to organisational or professional factors. Different views abound on the supervisor's role in supervising their students; one of these is that it is the responsibility of senior researchers "to nurture the appropriate intellectual, technical, ethical and career development of new staff, students and supervisees" (Queen's University Belfast, 2009, p. 23). Additionally, supervisors are tasked with establishing mutual expectations, responsibilities and benefits for working together with students, both on a departmental and individual basis. Some researchers point out that supervisors should treat their students as independent researchers (Sidhu et al., 2014); however, since the process is often a challenge, students need adequate support in order for them to grow and establish their own individual scholarly identity (Lin &Cranton, 2005 as cited in Abiddin, Ismail & Ismail, 2011). In the study by Sidhu et al. (2014), students expected their supervisors to be motivators and confident boosters equipped with effective communication, decision- making and problem- solving skills. The researchers also found Malaysian supervisees to have more expectations and being more dependent on their supervisors compared to students in the United Kingdom (UK) (Sidhu et al., 2014).

In both Malaysia and the UK, supervisors perform a similar framework of supervisory practices (Sidhu et al., 2014). Students expect their supervisors to be experts in their areas of study, able to provide expert knowledge and guidance in terms of research methodology and data analysis, create positive working relationships and guidance at all stages, help identify their strengths and weaknesses, encourage them to become confident and independent, extend constructive feedback to nurture progress, and are easily contactable via email, SMS and

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phone. Based on literature review, Abiddin, Ismail & Ismail (2011) hypothesise that the factors that may delay the completion of doctoral research students' studies are related to issues in research design, the collecting and processing of information and writing of report which may be linked to lack of experience, poor supervision or an inefficient supervision system. They also point to the need to adopt as a best practice that supervisors meet regularly with their students to minimise these problems.

In view of the importance of certain aspects necessary of supervisors and supervision tasks, this study was aimed to investigate the effects of the qualities of supervisors on supervision. It is hoped that the findings will provide some relevant inputs towards the realisation of the projected 60000 doctoral graduates in Malaysia by 2023.

Method

The data for this study was extracted from the dataset of Postgraduate Research Student Experience in Malaysian Public Universities Study (MyPRSE) which had used the Malaysian Postgraduate Research Experience Questionnaire (MyPREQ) developed by the MyPRSE team. The MyPREQ questionnaire consists of 116 items encompassing 10 dimensions of postgraduate research student experience i.e. supervision, intellectual climate, research skill development, system, infrastructure and research resources, role and responsibilities, professional development of students as knowledge workers, international exposure in a research environment, intercultural communication needs and support, proposal defence and thesis examination and overall satisfaction. The conceptual framework of the overall MyPRSE study (Koo et al., 2011) is summarised in Table 1.

Table 1: Conceptual framework of MyPRSE study

No.	Dimension	Source
1	System, infrastructure & Research Resources	Park et al. (2007), Kuley& Wells (2009), Park (2009), Graduate Careers Australia (2010).
2	Intellectual Climate	Kuley& Wells (2009), Park (2009), Graduate Careers Australia (2011).
3	Supervision	Park et al. (2007), Park (2009), Graduate Careers Australia (2011).
4	Research skills Development	Park et al. (2007, 2009), Graduate Careers Australia (2011).
5	Roles and Responsibilities	Park et al. (2007, 2009), University of Sydney (2010), Graduate Careers Australia (2011).
6	Professional Development	Ballantyne (2004), Kuley& Wells (2009), Park (2009).
7	English Communication & Support	Brown (2008), Essa (2011),
8	International Exposure	MOHE (2011)
9	Intercultural Communication needs & support	Gudykunst& Kim (2003), Guilfoyle (2004), Lustig&Koestar (2006), Evelin (2007), Koo, Yuan &Safinaz (2012).
10	Proposal Defense & Thesis examination	Park et al. (2007), Park (2009), Curtin University (2011).

This study utilised the data from the supervision dimension which involved the qualities of supervisors (5 items) and supervision (13 items). The qualities of supervisors were interpersonal skills, extensive experience in research, academic skills, extensive experience in supervision, and academic subject knowledge. Supervision was measured using the items shown in Table 2. The scale used was a five-point rating scale (1= strongly disagree to 5= strongly agree).

Table 2: List of Supervision Items

No	Item
1	treat(s) me with respect.
2	inform(s)me on how my thesis will be assessed.
3	monitor(s)my progress effectively throughout the stages of my research.
4	make(s) himself/herself/themselves available whenever I need him/her/ them.
5	advise(s) me on the guidelines related to plagiarism.
6	provide(s) constructive feedback on my progress.
7	encourage(s) me to publish my work.
8	encourage(s) me to apply research issues that are relevant to the international context
9	encourage(s)me to apply research issues that are relevant to the local context.
10	make(s) efforts to understand my difficulties.
11	provide(s) me with the necessary support to improve my language proficiency.
12	motivate(s) me to keep me going.
13	provide (s) me some degree of freedom and flexibility in the conduct of my research.

In ensuring the representativeness of the population, the researchers adhered to two processes: firstly, categorizing the population to ensure every section was represented in the sample. Secondly, a sufficient and optimal sample size to represent the whole population was emphasised. The target subjects of this research were 17,718 doctoral candidates in 20 public universities in Malaysia who were in the second year (at least) of their research programmes and had lived the experience of being a research student. The simple rationale of not taking in first year students was their lack of experience as a postgraduate student as yet.

The 20 public universities in Malaysia are categorized into three different types of universities by the Ministry of Higher Education namely research universities, technical universities and comprehensive universities. In the study, a bigger sample extract was allocated for research universities as the population of PhD students in such universities was larger as compared to technical and comprehensive universities.

The students who were involved in the study came from diverse backgrounds in terms of age, gender, nationality, education background, financial background, cultures and fields of study, amongst others. Overall, 2,582 questionnaires were distributed with overall response figure of 1,378 showing a return rate of 53%. This number is above the minimum sample size suggested by Krejcie and Morgan (1970). The final sample consisted of 1215 (88.2%) full time and 152 (11%) part-time doctoral students from the 20 institutions. There were 735

(53.3%) male and 633 (45.9%) female respondents involved in the study with 73percent (n=1007) of them Malaysians and the remaining (n=371) being international students.

Using Winsteps software (Linacre &Wright, 2012), Differential Item Functioning (DIF) was computed to indicate whether one group of respondents was scoring better than another group on an item. The independent variables in this study were interpersonal skills, experience in research, academic skills, experience in supervision and content knowledge of which thesewere based on a dichotomous scale (1=yes, 0=no). The dependent variable was supervision containing 13 tasks (Table 1).

From the 1378 respondents, 42 were dropped due to incomplete responses, leaving 1336 student responses which were then analysed using DIF. The Infit mean square values (Table 3) for all items were within the acceptable range of 0.6 to 1.4 (Bond & Fox, 2007). A high item separation value (> 3 item reliability > 0.9) implies that the person sample is big enough to confirm the item difficulty hierarchy, which is the construct validity of the instrument (Linacre&Wright, 1999). The higher the item separation and reliability index, the more confidence the researcher can place in the replicability of the item placement across other samples (Bond&Fox, 2007). The person separation of more than 2.0 and person reliability of more than 0.8 imply that the instrument is sensitive enough to distinguish between high and low performers (Linacre&Wright, 1999 as cited in Sherron, 2000).

Table 3: Fit statistics

	Item	Person
Standard error	.05	.63
Infit mean square	1.00	0.99
Outfit Mean square	0.99	0.99
Separation index (reliability)	7.87 (.98)	2.16 (0.82)

DIF is observed when one group of respondents scores higher than another group on the same item. The Winsteps DIF table is equivalent to constructing a "ruler" based on the persons, and measuring the items on it, first for one person-group, then for the other person-group. In analysing DIF, Winsteps performs two–tailed t-test to test for significant differences between two difficulty indexes. Confidence level of 95% and the critical t value at ±2.0 are used for all DIF analysis. DIF Size plots generated with Winstepsare used to show the difference between the two lines representing with and without each of the qualities. The size of DIF which is less than 0.5 logit or more than -0.5 logit is considered to be negligible. The indicators of DIF are (1) t value ± 2.0 (t $\geq$ +2.0, $\leq$ -2.0), (2) DIF contrast ± 0.5 (DIF Contrast $\geq$ +0.5, $\leq$ -0.5), and (3) $p< 0.05$ (Bond & Fox, 2007).

Findings

Differential Item Functioning (DIF) of supervision

Differential Item Functioning (DIF) analysis was conducted to investigate the differences in supervision based on interpersonal skills, academic skills, experiences in research, experiences in supervision and academic subject knowledge.

Interpersonal skills

Table 4 shows the DIF analysis for supervision based on interpersonal skills. Four (30.8%) of the 13 supervision tasks show significance DIF with $t \geq 2.0$ logits. The DIF Contrasts indicate that all items do not show serious DIF because the DIF indices are less than 0.5 logit. Figure 1 shows the DIF plot of supervision based on supervision.

Table 4: DIF analysis of supervision based on interpersonal skills

Item number	Item label	DIF Measure (0=no)	DIF Measure (1=yes)	DIF contrast	t
1	A1	-0.25	-0.66	.41	**2.62**
2	A2	0.22	0.18	.04	.24
3	A3	-0.02	-0.11	.10	.54
4	A4	-0.15	-0.07	-0.08	-0.50
5	A5	0.21	0.37	-0.16	-0.95
6	A6	0.03	-0.36	0.40	**2.27**
7	A7	-0.69	-0.30	-0.39	**-2.34**
8	A8	0.13	0.09	0.04	0.22
9	A9	0.06	0.40	-0.34	**-2.05**
10	A10	0.56	0.30	0.26	1.59
11	A11	0.35	0.66	-0.30	-1.76
12	A12	0.00	-0.28	0.29	1.72
13	A13	-0.48	-0.26	-0.22	-1.30
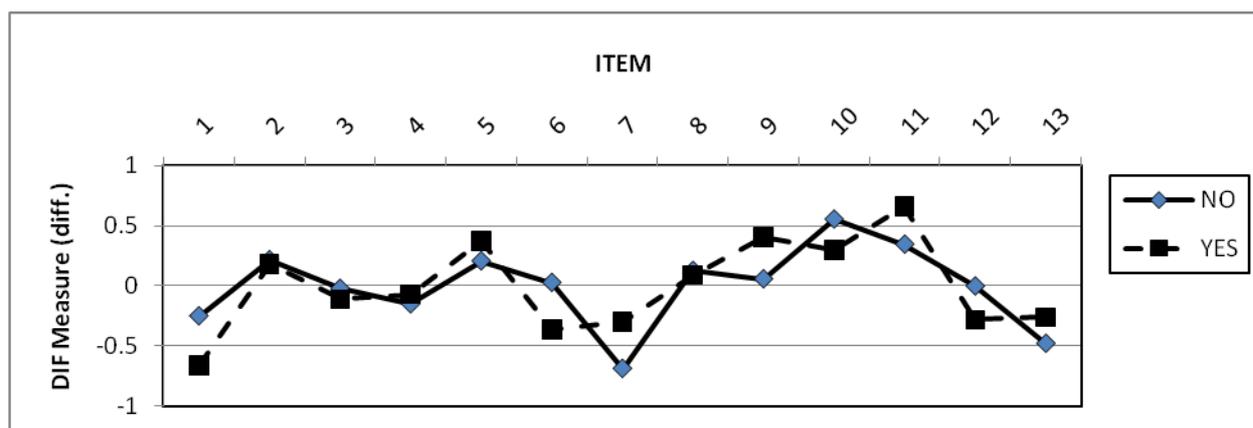
Figure 1: DIF plot of supervision based on interpersonal skills

It is therefore implied here that students who have supervisors with positive interpersonal skills tend to agree with item A1 (*treats me with respect*) and A6 (*provides constructive feedback on my progress*). On the other hand, students whose supervisors lack interpersonal skills tend to agree with item A7 (*encourages me to publish my work*) and A9 (*encourages me to apply research issues that are relevant to the local context*). Overall, as shown in Table 5, the effect size of the difference in supervision between students with supervisors who have interpersonal skills and those without is -3.060, which is considered to be large (Cohen, 1988).

Table 5: Difference in supervision based on interpersonal skills

|	n	mean	Standard deviation	Effect size	interpretation
Agree	1162	56.1	6.9	-3.060	large
Disagree	57	34.5	9.8		

*n=number of students

Experiences in Research

Table 6 shows the DIF analysis in supervision based on supervisors' research experience. Two (15.4%) out of 13 supervision tasks show significant DIF with $t \geq 2.0$ logits. The DIF Contrasts indicate that none of the items show serious DIF because the DIF index is less than 0.5 logit. Figure 2 shows the DIF plot of supervision based on supervisors' research experience.

Table 6: DIF analysis of supervision based on research experience of supervisors

Item number	Item label	DIF Measure (0=no)	DIF Measure (1=yes)	DIF contrast	t
1	A1	-0.89	-0.60	-0.29	-1.55
2	A2	0.37	0.18	0.19	1.01
3	A3	0.20	-0.05	0.25	1.29
4	A4	-0.35	0.04	-0.39	**-2.11**
5	A5	0.43	0.39	0.04	0.22
6	A6	0.23	-0.22	0.45	**2.43**
7	A7	-0.42	-0.35	-0.07	-0.39
8	A8	0.46	0.01	0.42	**2.23**
9	A9	-0.04	0.36	-0.40	**-2.19**
10	A10	-0.05	0.30	-0.36	-1.95
11	A11	1.02	0.58	0.44	**2.25**
12	A12	-0.10	-0.23	0.13	0.69
13	A13	-0.75	-0.45	-0.30	-1.55
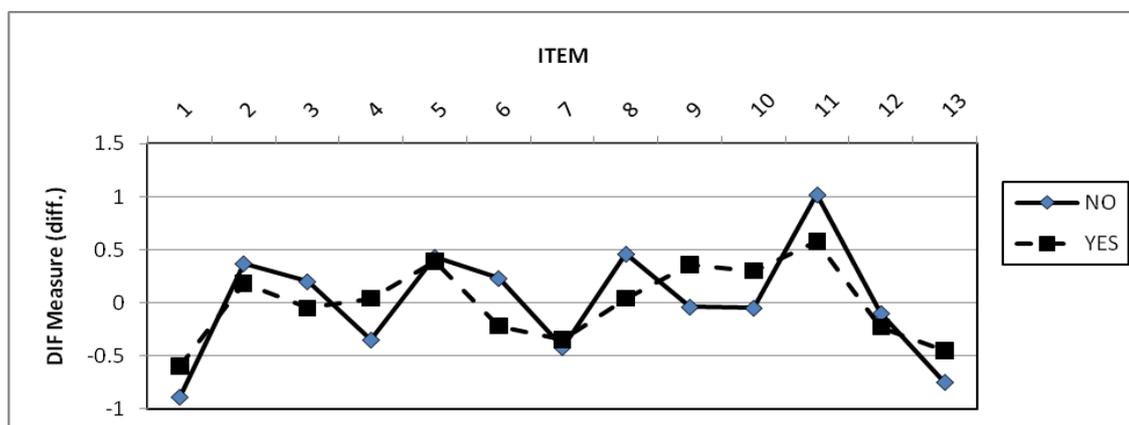
Figure 2: DIF plot of supervision based on supervisors' experience

Respondents whose supervisors have extensive experience in research tend to agree with item A6 (*provides constructive feedback on my progress*), A8 (*encourages me to apply research issues that are relevant to the international context*) and A11 (*provides me with the necessary support to improve my language proficiency*). In contrast, respondents with supervisors lack experience are more likely to agree to item A4 (*makes himself/herself available whenever I need him/her*) and A9 (*encourages me to apply research issues that are relevant to the local context*).

Table 7 summarises the supervision of students by experienced and inexperienced supervisors. Overall, the effect size of the difference in supervision between students with supervisors with and without extensive research experience is -2.730 which is considered large (Cohen, 1988).

Table 7: Difference in supervision based on research experience of supervisors

	n	mean	Standard deviation	Effect size	interpretation
Agree	1168	55.7	7.4	-2.730	large
Disagree	49	35.1	10.5		

*n=number of students

Academic Skills

Table 8 shows the DIF analysis of supervision based on supervisors' academic skills. Three (23.1%) out of 13 supervision tasks show significant DIF with $t \geq 2.0$ logits. The DIF Contrasts indicate that none of the items show serious DIF because the DIF indices are less than 0.5 logit.

Table 8: DIF analysis of supervision based on academic skills of supervisors

| Item number	Item label	DIF Measure (0=no)	DIF Measure (1=yes)	DIF contrast	t
1	A1	-0.61	-0.57	-0.04	0.22
2	A2	0.16	0.16	0.00	0.00
3	A3	0.14	-0.07	0.21	1.20
4	A4	-0.61	0.00	-0.60	**3.42**
5	A5	0.27	0.39	-0.12	-0.69
6	A6	0.34	-0.22	0.56	**3.27**
7	A7	-0.71	-0.35	-0.37	**-2.16**
8	A8	0.17	0.11	0.06	0.34
9	A9	0.13	0.33	-0.21	-1.24
10	A10	0.30	0.27	0.03	0.20
11	A11	0.96	0.61	0.34	1.94
12	A12	0.04	-0.25	0.28	1.73
13	A13	-0.54	-0.47	-0.08	-0.43
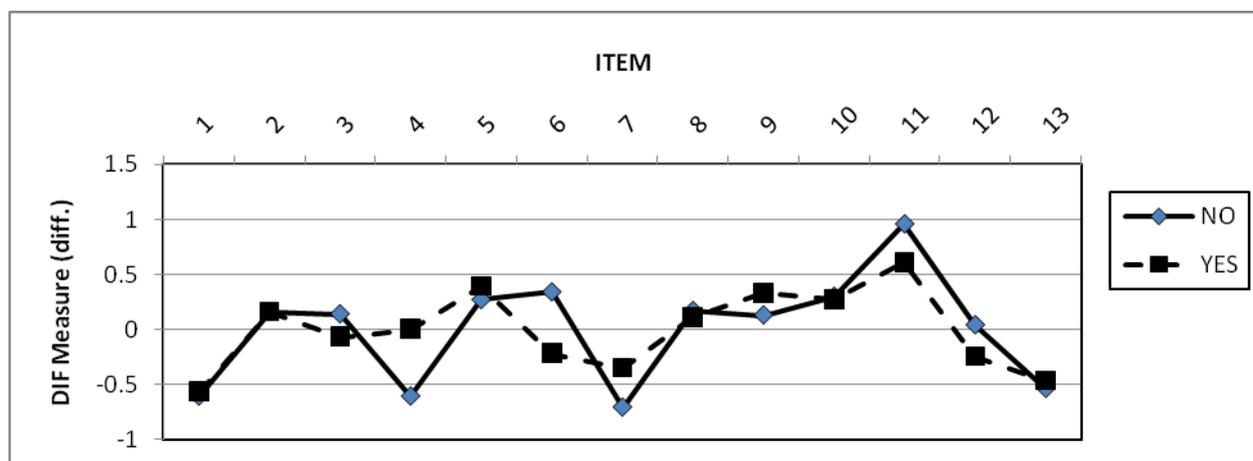
Figure 3: DIF plot of supervision based on supervisors' academic skills

Figure 3 shows the DIF plot of supervision based on supervisors' academic skills. Respondents whose supervisors have academic skills to support their research tend to agree with item A6 (*provides constructive feedback on my progress*) while those with supervisors lacking academic skills tend to agree with item A4 (*makes himself/herself available whenever I need him/her)* and A7 (*encourages me to publish my work*). Overall, as shown in Table 9, the effect size of difference in supervision between students who were supervised by supervisors with and without academic skills is -2.819, a figure considered to be large (Cohen, 1988).

Table 9: Difference in supervision based on academic skills of supervisors

|	n	mean	Standard deviation	Effect size	interpretation
Agree	1174	55.8	7.2	-2.819	large
Disagree	57	35.2	9.3		

*n=number of students

Experiences in Supervision

Table 10 shows the DIF analysis of supervision based on supervision experience. Three (23.1%) out of 13 supervision tasks show significant DIF with t ≥ 2.0 logit. The DIF Contrasts indicate that one of the items show serious DIF with DIF index of more than 0.5 logit. Figure 4 shows the DIF plot of supervision based on supervision experience.

Students who have supervision experience tend to agree with item A3 (*monitors my progress effectively throughout the stages of my research*) and A6 (*provides constructive feedback on my progress*), while respondents with inexperienced supervisors tend to agree to item A4 (*makes himself/herself available whenever I need him/her*). Overall, as in Table 11, the effect size of the difference in supervision between students who agree and disagree that their supervisors have extensive experience in supervision is -1.886, which is considered to be large (Cohen, 1988).

Table 10: DIF analysis of supervision based on supervision experience

Item number	Item label	DIF Measure (0=no)	DIF Measure (1=yes)	DIF contrast	t
1	A1	-0.95	-0.68	-0.28	-1.54
2	A2	0.11	0.16	-0.05	-0.29
3	A3	0.18	-0.20	0.38	**2.12**
4	A4	-0.67	-0.03	-0.65	**-3.59**
5	A5	0.30	0.33	-0.02	-0.13
6	A6	0.25	-0.27	0.51	**2.99**
7	A7	-0.35	-0.25	-0.10	-0.62
8	A8	0.37	0.06	0.31	1.85
9	A9	0.26	0.41	-0.15	-0.91
10	A10	0.39	0.34	0.06	0.34
11	A11	0.82	0.62	0.19	1.13
12	A12	-0.33	-0.21	-0.12	-0.71
13	A13	-0.36	-0.34	-0.02	-0.13
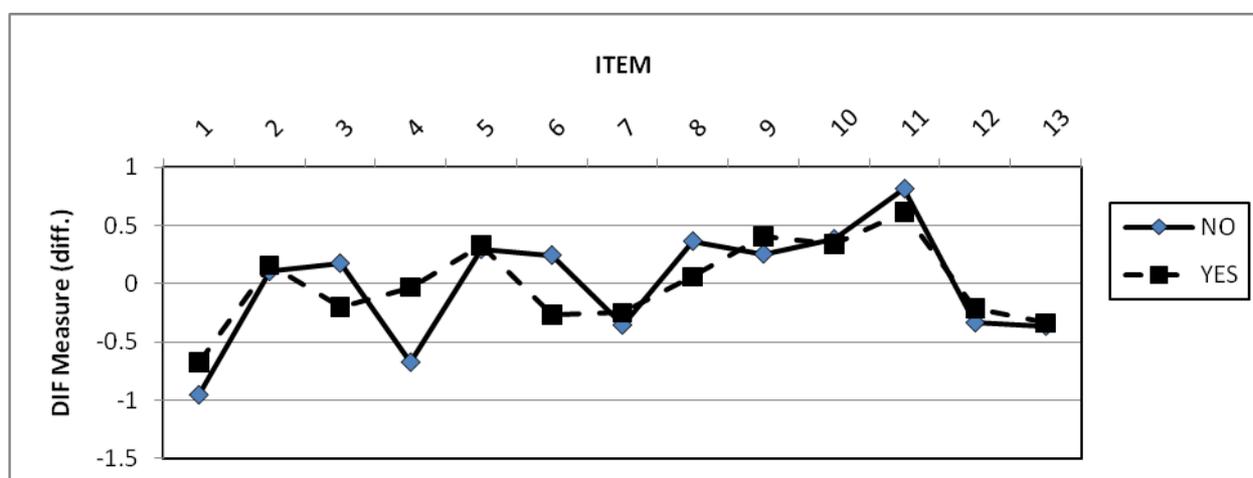
Figure 4: DIF plot of supervision based on supervision experience

Table 11: Difference in supervision based on supervision experience

	n	mean	Standard deviation	Effect size	interpretation
Agree	1374	53.6	9.2	-1.886	large
Disagree	59	36.2	9.8		

*n=number of students

Academic subject knowledge

Table 12 shows the DIF analysis of supervision based on academic subject knowledge of supervisors. Two (15.4%) of the 13 supervision tasks show significant DIF with t ≥ 2.0 logits. The DIF Contrasts indicate that none of the item shows serious DIF because the DIF indices

are less than 0.5 logit. Figure 5 shows the DIF plot of supervision based on the academic subject knowledge of supervisors.

Table 12: DIF analysis in supervision based on supervisors' academic subject knowledge

| Item number	Item label	DIF Measure (0=no)	DIF Measure (1=yes)	DIF contrast	t
1	A1	-1.18	-0.59	-0.58	**-3.33**
2	A2	0.19	0.19	0.00	0.00
3	A3	0.16	-0.10	0.26	1.59
4	A4	-0.26	0.05	-0.30	-1.93
5	A5	0.57	0.38	0.19	1.18
6	A6	0.13	-0.20	0.33	**2.09**
7	A7	-0.43	-0.32	-0.10	-0.67
8	A8	0.34	0.13	0.21	1.35
9	A9	0.38	0.38	0.00	0.00
10	A10	0.44	0.27	0.16	1.07
11	A11	0.63	0.60	0.03	0.19
12	A12	-0.28	-0.32	0.04	0.26
13	A13	-0.75	-0.47	-0.28	-1.67
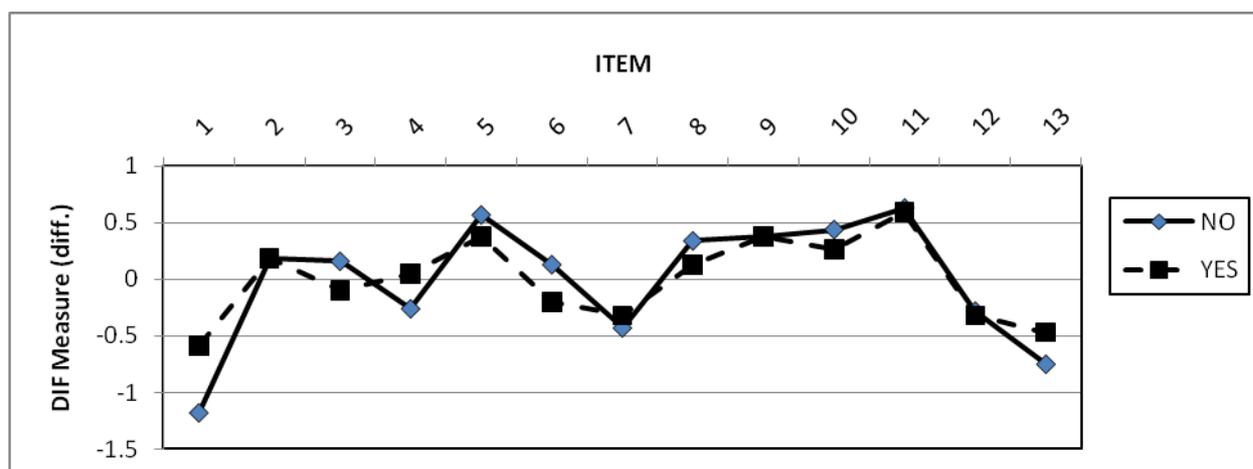
Figure 5: DIF plot of supervision based on academic subject knowledge of supervisors

Students whose supervisors possess academic subject knowledge tend to agree with item A6 (*provides constructive feedback on my progress*) while those with supervisors lacking subject knowledge tend to agree with item A1 (*treats me with respect*). Overall, as in Table 13, the effect size of difference in supervision between students who agree and those who disagree that their supervisor have the academic subject knowledge to support their research is -2.636, which is considered to be large (Cohen, 1988).

Table 13: Difference in supervision based on supervisors' academic subject knowledge

	n	mean	Standard deviation	Effect size	interpretation
Agree	1126	56.1	7.2	-2.636	large
Disagree	69	36.8	9.1		

*n=number of students

Discussion

Past studies have indicated that postgraduate success is very much dependent on the interpersonal relationships between graduate students and their supervisors (Lessing & Schulze, 2002; Ives & Rowley, 2005; Lin & Cranton, 2005 as cited in Abiddin, Ismail & Ismail, 2011). This study has found that the supervision experience between students supervised by supervisors with interpersonal skills and those without, as indicated by effect size, is different to a large extent. Supervisors who have good interpersonal skills not only treat their students with respect but also provide constructive feedback on their (students) work. On the other hand, supervisors without interpersonal skills encourage their students to publish their work and apply research issues that are relevant to local contexts without adequate supervisory support.

Effective communication between supervisors and students during the course of supervision defines the success of students (Felton, 2002; Sidhu et al., 2014)with experienced supervisors determining the positive progress of many students (Felton, 2007). In this study, the difference in supervision by academics with extensive experience in research and those without is significant. The former are able to provide constructive feedback on their students' progress, encourage them to apply research issues which are relevant to the international context, and provide the necessary support. Similarly, Park (2009) found that one of the aspects of good supervision experience is the skills and subject knowledge of supervisors. This study has provided similar findings.

Supervisors without extensive experience in research on the other hand, although readily available whenever their students need them and encourage them to apply research issues that are relevant albeit only to local contexts, are unable to provide the needed content knowledge necessary to produce larger global perspectives required for publications with broad relevance. Hence there is a disconnect between the requirements of supervisors for their students to publish without providing the supervisees the necessary academic expertise and guidance needed to produce such publications.

The main Key Performance Indicators (KPIs) for academic staff in research-intensive universities in Malaysia are research and publication outputs. The appraisal and promotion of supervisors in these universities are largely based on their achievement of KPIs especially in terms of publication (Velu & Nordin, 2011; Abdullah & Yahya, 2007). Hence, it is not surprising that supervisors motivate students under their supervision to publish as this represents an important part of knowledge production and knowledge sharing. Emphasis on research and publication is also apparent in comprehensive universities as supervisors in these institutions are also encouraging their research students to publish. However, contradictions may surface when there is a mismatch of expectations between a supervisor and his student especially when the former is perceived by the latter as lacking important academic skills and extensive experience to supervise him/ her.

Apart from this, the supervision process is influenced by the level of student independence expected at a doctoral level of study and the supervisory support perceived to be needed. For example, supervisors would assume critical thinking, independence and autonomy are present at the outset of the supervision process while the students in contrast would be expecting further support to develop their critical thinking and writing skills (Lee, 2009; Sidhu et al., 2014). Hence the need for a delicate balance. In this study, the difference in supervision experience is significant between those with supervisors with and without adequate academic skills. Respondents assigned to supervisors with adequate academic skills are provided constructive feedback on their progress, while supervisors without adequate academic skills, who although readily available whenever they are needed and encourage students to publish their work, are viewed as unable to provide a corresponding level of support needed for such publications.

In this study, the difference in supervision between supervisors with supervision experience and those without is significant. The number of respondents with supervisors without extensive experience in supervision is small in number. They agree that their supervisors are readily available whenever they are needed. Students of supervisors who have extensive experience in supervision tend to agree that their supervisors monitor their progress effectively and provide constructive feedback on their progress. Kam (1997) argues the frequency and contact hours of supervision meetings are not an important concern as compared to the supervisor's ability to provide quality feedback and constructive comments. Sidhu et al. (2014) also propose constructive feedback as an important element in supervision. As such, the quality rather than quantity of supervision is more crucial in shaping positive postgraduate students' research experiences (Kam, 1997).

A supervisor with adequate academic subject knowledge can help the students direct and solve problems in their research. Supervisors with this attribute are found to provide constructive feedback for their students to progress in their research. The difference in supervision between supervisors who have and do not have academic subject expertise is found to be significant.

Conclusion and Recommendations

These findings affirm that all the qualities of supervisors i.e. interpersonal skills, extensive experience in research, supervision experience, academic skills, and academic subject knowledge are integral for the progress of doctoral research supervision in public higher education institutions in Malaysia. It is proposed that all postgraduate supervisors be given continuous professional development programmes to further enhance their interpersonal and academic skills. These can be realised through the provision of in-house programmes at the respective institutions. Research experience and academic subject knowledge can be enhanced through research apprenticeship and mentor-mentee programmes for new lecturers whereby those with potential as supervisors could be assigned to co-supervise and learn from their more senior and experienced counterparts. These five qualities can also be developed through programmes in the Higher Education Leadership Academy (AKEPT) under the Ministry of Higher Education, the national leadership development agency for the academia.

The overall recommendations for policy in terms of the broader postgraduate research experience (PRSE) study include concerted Ministry of Higher Education (MOHE) initiatives to provide clearer directions for PRSE related policies and guidelines in Malaysian public universities as a means of ensuring the positive findings of research student experience in public universities are disseminated as part of their broader educational and marketing strategies. It is further recommended that higher education institutions apply measures to ensure supervision and qualities of supervisors are further improved, and for MOHE and the Malaysian Qualifications Agency to conduct further research to examine whether the perceptions of students correspond with the actual situations on the ground. It is recommended that MOHE apply the MyPREQ survey as a tracer study on a biennial basis.

It is hoped that the enhancement of the qualities of supervisors and supervisors, and overall PRSE in public higher education institutions will contribute towards talent development, one of the ten shifts in the Malaysia Education Blueprint 2015 – 2025 (Higher Education) (Ministry of Education Malaysia, 2015) aimed at strengthening higher education in Malaysia for the coming years. At the same time, there should be further consolidationof institutional and national policies and practice for postgraduate education to provide and sustain quality in Malaysian higher education.

Acknowledgements

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e-LEARNING AS A TOOL FOR RESEARCH COLLABORATION IN THE ASEAN REGION

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Abstract

This paper seeks to delve into the potential use of e-learning as an instrument wherein higher education institutions could exchange ideas, share research strategies and collaborate on future endeavors. It will deal with the problems that maybe encountered in such a set-up, the technological support for example that it would entail and the logistics support that it could require.

It will focus on the formulation of learning management systems to support e-learning capabilities, the instruments used by institutions and the degree of collaboration to be implemented. In such an arrangement, institutions will focus on the setting up of collaborative tools which would address the e-transactions occurring among themselves. In such a scenario, knowledge-based research would be at the finger tips of academicians and research activities would be unified and quickly adapted by members. The important aspect to be considered is the capability of institutions to share their knowledge and skills to their less-developed counterparts and ability of the region to adapt to these changes. The potential academic fruits cannot, however, be ignored with unparalleled research growth in the region to be reaped.

Key Words: *E-learning, collaboration, institutions and research*

Introduction

It is the main objective of this paper to provide an avenue for research institutions to "benefit, assist and advance research leading to improved understanding, planning and operations of institutions of post-secondary education in the region". Its primary concern is to help transform the ASEAN (Association of Southeast Asian Nations) region from a mediocre hub into a Mecca of institutional research where highly regarded research centers lend a hand to their less developed counterparts.

There is precedent for this process to be accomplished. In the realm of relations between states for example, Suharto in 1969 said that "The members of the ASEAN need more contact with each other, we need a continuous dialogue between ourselves, in order to arrive at a common thinking which will make coordinated and effective action possible". Indeed, ASEAN institutions must learn to adapt with the times and be effective research partners of states in the region in order to be relevant in a highly competitive global academic environment.

This collaboration for the advancement of research in the region will only be realized if institutions realized that greater and substantial issues beyond their own interests exist.

It posits the view that an efficient way for collaboration is through the use of e-learning which is traditionally used in instruction. In a way, e-learning would still be used in its normal mode but with some modifications as the process of knowledge transfer would no longer be between individuals but between institutions.

The Role of Institutions

Institutions will play a vital role in the degree of success that this project entails. For one, it is through their academic machinery that the use of e-learning as a tool for research collaboration will be implemented and evaluated. They would have to provide the necessary facilities, manpower, technology and financing for this undertaking to succeed.

Top research institutions in Asia will have to be at the forefront in these academic transactions. Some of these are mentioned in a study conducted by the Rockefeller Foundation (The Straits Times, 2009). ASEAN institutions which topped the list in its 29 top research centers of Asia are Singapore's Lee Kuan Yew School of Public Policy, Institute of South East Asian Studies and Asia Research Institute. Others on the list include Indonesia's Center for Strategic and International Studies, Japan's Institute for Global Environmental Studies, India's Indira Gandhi Institute for Development Research, and Thailand's Asian Institute of Technology. It is a mixture of university-affiliated, privately-funded and public-supported centers.

 Asian Rockefeller Director, Mr Ashvin Dayal (2009) stressed that the study is not an "exclusive shortlist", but an assessment to find out where high-quality research work is taking place. The criteria used included the quality of research and research staff, the institution's network and collaborative relationships in the region, its ability and interest in shaping policies and communication of research results, among others.

Dr. Mary Astrid Tuminez (2009), Assistant Dean and Director at the Lee Kuan Yew School, was elated in the report but gave the view that "the tradition of research is very strong in the West. But in Asia, this tradition is a bit weak because many countries in the region are not funding research work. Universitas 21 (Neelakantan, 2010) , a global university network with some ASEAN universities as members, had discussed ways on how to build programs when financing, academic calendars and higher-education goals which vary across nations. According to John T. Casteen (2010), President of the University of Virginia and Chairman of the network, "countries channel funds differently". Thus, it is quite difficult to focus on research initiatives, much less on collaboration.

The Importance of Collaboration

The need for institutions to assist one another through collaboration cannot be ignored. Collaboration is a vital instrument for the improvement of research capabilities, sharing of recent technological advances and the enhancement of research facilities.

Research collaboration is defined as "the working together of researchers to achieve the common goal of producing new scientific knowledge" (Katz and Martin, 2007). But this could also refer to institutions and this is done due to the escalating costs of conducting research, the substantial fall in the cost of travel and communication and the growing availability and easy access of information. Science is a social institution where advances depend crucially on interactions with others. At the most basic level, (2007) it is people who collaborate through direct co-operation, not institutions. However, we often talk about collaboration at other levels - between institutions and between geographical regions and countries. Indeed, most policies are aimed at fostering collaboration at these higher levels rather then inter-individual collaboration.

The degree of collaboration may vary depending on the linkages established between institutions. As partnerships begin to thrive and prosper, research capabilities of institutions will also flourish. In this regard, "there is a need to establish new, equitable and global links of partnership and intra-generational solidarity" (Custodio, 1999). These partnerships will help the region move forward as the advancement of one will lead to the development of other research entities. Sharing data (Borgman, 2006) is a core element of scientific collaboration. It is a complex social process involving trust, incentives, disincentives, risks and intellectual property rights. However, institutions will adopt a technology only if it offers sufficient advantages to justify the investment in learning, in changing associated practices and in costs of the technology itself.

Benefit from collaboration (Katz and Martin, 2007) are: the sharing of knowledge, skills and techniques; the transfer of knowledge or skills plus a clash of views and ideas which may in turn generate new insights or perspectives. However, there are also disadvantages (2007) to such an endeavor. It will bring about, in financial terms, additional costs; certain costs in terms of time and other costs in terms of increased administration. Furthermore, where two or more institutions are collaborating, there is often the problem of reconciling different management cultures, financial systems, rules on intellectual property rights and so on. There may also be differences over reward systems, promotion criteria and time-scales, and even a more general clash of values over what is the most important research to pursue, how to carry it out, or over commercial or ethical implications. Universitas 21(Neelakantan, 2010), also discussed complications that can slow down collaboration projects such as geographic distances, time-zone challenges and conflicting priorities. Even the group's members don't invest much directly in developing research partnerships thus such projects rely heavily on individual researchers or institutions to secure grants on their own.

e-Learning as a Tool

The use of e-learning as a tool for research collaboration can transform ASEAN educational institutions from mere minions of research to a gigantic network of research bulwarks which

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will challenge the rest of the globe. As a tool for research collaboration, it will effect change in the aspect of education research due to its numerous benefits and advantages. This method of learning applied at the institutional level with centers as recipients and mentors will take advantage of the current instruments of e-research as " science and technology have indeed changed the world so much and have rapidly developed the West" (Custodio, 1999) and the Eastern world. However, it must be observed that "in the use of new technologies local and global rules, regulations and other proper guidelines as well as legislations must be put in place to protect the lives and property of the people."(De la Cruz, 2009)

e-Learning would allow institutions to connect and "allow users to exchange messages, to communicate in real time (seeing messages and responses immediately), to share data and programs and to access limitless stores of information " (Norton, 2006) as the improvement of technology performance and the ease of the knowledge transfer are breaking down the time and distance barriers in knowledge dissemination (Freeman, 1999) even if the great majority of organizations have only begun to search for ways to build and maintain ongoing capabilities in e-Learning(Ismail, 2002).

e-Learning (Liu, et al, 2010) in higher education can be understood as "technology-enhanced teaching and learning" within an education institution, and e-learning as instructional content or learning experiences delivered or enabled by electronic technology. It is also defined as learning facilitated and supported through the use of information and communications technology" to deliver content (learning, knowledge and skills) on a one-way (asynchronous) or multi-way (synchronous) basis. General barriers to e-learning adoption include factors such as time commitment and workload issues (including the academic priorities for research), poor leadership, information technologies self-efficacy, lack of effective staff development and implementation issues. There are also dominant concerns about the cost and technology required for implementation. An e-Learning strategy should be set up at institutional level, implemented at faculty level and embedded in curriculum design.

The real value of e-Learning lies not only in the ability to train just anyone, anytime, anywhere, but in the ability to deploy this attribute to train the right people to gain the right skills or knowledge at the right time (Govindasamy, 2002). e-Learning is a means of education that incorporates self-motivation, communication, efficiency, and technology (Phobun and Vicheanpanya, 2010). Findings from a *research* indicate that implementing *e-Learning* as a mode of teaching and *learning* (provided that it is properly implemented and presented) can add value to an outcomes-based, distance *learning* course. (Steyn, 2008)

The quality of the instructor is an important determinant for an effective learning management system. Liaw et al. (2007) claimed that, 'instructor' is the major aspect of e-Learning. Within learning environments, instructors should have enough time to interact with students in their learning process (Khan, 2005). In parallel, Collis (1995) emphasizes the importance of the 'instructor' highlighting the fact that it is not the technology itself but the instructional implementation of the technology which determines its effects on learning. Similarly, instructors' attitudes towards technology, their teaching styles, and their control over the technology affect the learning outcomes. (Ozkan and Koseler, 2009)

Deployment opportunities could be further enhanced if national innovation policies supporting the diffusion of Information and Communication Technology (ICT) products and services could be in place (Protogerou, 2010). The growth of ICT has enabled people in

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global organizations to communicate and collaborate and exchange their information, opinions, ideas and knowledge efficiently (Numprasertchai and Poovarawan, 2008).

In the Case of Kasetsart University, Thailand (KU)
(Numpresatchai, 2008)

One example for the use of e-learning as a collaborative tool is ICT based Knowledge Management practiced by one of Thailand's largest and most progressive public universities established in 1943. Knowledge management (KM) is the management of information to support productivity and efficiency through steering of strategy, identifying and communicating explicit knowledge to tacit knowledge and transferring tacit knowledge that resides in processes, people, products and services. For a university, KM is defined as "the set of processes designed to manage those knowledge resources that are critical for achieving the university goals" (2008). KU has applied ICT-based KMS as one of the university strategies to overcome resource scarcity and enhance its competitive advantage. The purposes of ICT-based KMS are to foster a collaborative learning environment by providing opportunities for the KU community to easily acquire knowledge from internal and external sources and to share and integrate research among different research communities. In this regard, it has established the KM strategy called "KM@KU for R&D" as research supporting policies and tools to support research activities. KU has established several Specialty Research Units (SRU) to conduct both basic and applied research that contributes to the development of the country.

In a Hongkong Polytechnic University-funded Research
(Lau and Tsui, 2009)

This research also focuses on Knowledge Management to improve e-learning effectiveness. From a knowledge management perspective, learners need to go through the processes of knowledge collaboration, exchange, sharing, acquisition, creation, distribution, dissemination, storage and personalization in order to acquire knowledge. Knowledge management tools assist learners to learn in an ubiquitous learning environment. Collaboration and community tools, that have the functions/features of groupware, workflow systems, email communication, chat-rooms, workspaces, discussion rooms, help the learner to create knowledge through knowledge collaboration and sharing. Peer-to-peer knowledge management tools provide the features for searching, using a workspace, file sharing, content distribution and synchronous communication. These tools simulate the real learning environment of peer interaction, communication, learning material sharing and group work, so that learners can learn from each other and motivate other learners to learn in this peer-to-peer e-learning environment.

In a Study at Taiwan's National Central University
(Shu-Sheng Liaw et. al, 2008)

In this study regarding Web-based collaborative learning for Knowledge Management, it is stated that communities used electronic support to create, share, store and archive their knowledge. Research in e-learning and cooperation as elements of knowledge management, employee portals and e-learning make an important contribution to accessibility, transparency and maintenance of knowledge. Additionally, effective knowledge management within the context of ongoing educational processes can lead both to the successful development of

learning improvement and the creation of more stable communities' relationships based on knowledge sharing. Furthermore, Web-based KMS which allows instructors and learners to exchange information and evaluate peers' work, can enhance better teaching and learning. KM involves identifying, gathering, analyzing, constructing, sharing, and applying knowledge and practices. Sharing knowledge occurs when an individual is willing to assist as well as learn from others in developing new competencies. The ultimate goal of sharing knowledge is the attempt at transferring all individuals' experiences and knowledge to organizational assets and resources. From the idea of sharing-and-retaining knowledge, if individuals share what they have learned, they become more experienced and knowledgeable. They can also think more systematically through the context of phenomena arising from the group operations. By having access to more useful and applicable information from a group, individuals have greater chances to make decisions more effectively and efficiently. Thus, knowledge accumulates its value when it is shared.

Challenges to Research Collaboration

The success of this process largely depends on the interaction and partnership of different agencies and institutions, both public and private. Research joint ventures, government support and corporate partnerships are just some means to give financial stability to academic institutions. As found out in the Greek experience, "the effects of the EU-funded Information Society Technologies (IST) research networks on Greek participants and the national research and innovation system are positive over-all and the maintenance and strengthening of the Greek presence in Framework Programs (FPs) is very important."(Protogerou, 2010)

In the study, interviewed Greek firms emphasized the importance of the technological knowledge diffused during a project to their future involvement in the deployment of innovative information and communication technology products in the Greek market (Porotogerou, 2010). Knowledge is a main resource for new knowledge creation and sustainable competitive edge (Numprasertchai, 2008). An organization can increase innovation by turning tacit knowledge into explicit knowledge and by externalizing and sharing it with others (Nonaka and Takeuchi, 1995).

Research joint ventures (RJVs), on the other hand are defined as a special case of R&D partnerships that have been established through project-based ventures. These research partnerships are contractual agreements among independent entities such as firms, universities, research institutes and other organizations aimed at undertaking joint works toward specific goals. (Protogerou, 2010)

CONCLUSION

Research centers and institutions will play an important role in the success or failure of research collaboration in the ASEAN Region as they provide the link and support in e-Learning transactions. International collaborations (Neelakantan, 2010) among universities have become common as institutions look for ways to provide opportunities abroad for their students and engage in globally focused research. Perhaps the singular feature (Boardman and Corley, 2008) that all university research centers have in common is "the intention to foster collaboration among researchers". This collaborative aspect is one of the pillars of research initiatives in the region.

As in the case of Kasetsart University, Knowledge Management (KM) improves the capability of a university to acquire, share, integrate, and use the various knowledge sources to achieve its goals. Nevertheless, an effective KMS must be supported by appropriate strategies, collaboration among faculties and institutes, and technological tools, in order to ensure that professors, staff and students can access, share, and use the right knowledge at the right time. (Numprasertchai, 2008)

For his part, Mr. John T. Casteen, Chairman of Universitas 21, said that the network is trying to reduce another barrier to collaboration-research costs. He stressed, "Over time as faculty and students become more comfortable with collaborative research, research itself will become less expensive and global interactions become more efficient". (Neelakantan, 2010) Professor Lily Kong (The Straits Times, 2009), (Asia Research Institute) ARI's director, added that, "With Asia's rapid development, there is an urgent need to understand the multi - faceted challenges as well as potentials it faces ... "

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A RELATIONSHIP BETWEEN PEER TUTORING HOURS AND STUDENTS' PERFORMANCE

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Abstract

Peer tutoring is known as one of the most effective instructional practices for excellent education. However, there appear to be few evidences of its ability to improve students' academic performance in engineering subjects. There are also few studies on the effects of peer tutoring hours on students' performance. This study aims to investigate the relationship between peer tutoring hours and students' performance, with an emphasis on results from selected engineering subjects from a Malaysian university. A total of 21 selected engineering subjects adopted the peer tutoring approach across 3 trimesters. The results of the students were analysed with Pearson's correlations analysis. It was found that peer tutoring hours are highly, significantly and negatively correlated with students' performance, suggesting that the performance of students increased as the number of tutoring hours decreased. Students also do not necessarily perform well if they attended more hours of peer tutoring. Despite these observations, with peer tutoring, the passing rates for the subjects were still considerably higher than the failure rates. Though further validations may be required, this study recommends an estimated range of 2 to 4 hours of peer tutorials per student in order to preserve its effectiveness.

Keywords: Peer tutoring, student performance, academic performance, collaborative learning

Introduction

Peer tutoring refers to a cooperative learning approach rooted in the creation of pairs, with an asymmetrical relationship, derived from the work of the respective roles (Miravet et al., 2014). It is widely used in many countries and acknowledged by experts, such as UNESCO, as one of the most successful instructional practices for quality education (Blanch et al., 2012).

Studies on cooperative learning have pointed out that peer tutoring is effective in enhancing student achievement at a variety of educational levels (Greenwood et al., 1988; Griffin and Griffin, 1998; Slavin, 1991). This gain in achievement typically resulted for both students in the peer tutoring partnership, or for both the tutor and the tutee (Griffin and Griffin, 1998). However, several studies have also found that the tutor benefited more than the tutee from this pairing possibly because of the studying and preparation for the tutoring partnership required of the tutor (Annis, 1983; Bargh and Schul, 1980; Benware and Deci, 1984).

More studies need to be done on the impacts of peer tutoring on the performance of students, especially in engineering degree courses which are normally considered to be one of the most challenging courses (The Best Colleges, 2014). This study aims to investigate the relationship between peer tutoring hours and the performance of engineering students in a Malaysian university.

Literature Review

Peer tutoring is a cooperative learning method which comprise of a peer tutor and students with an asymmetrical relation and a common, known and shared objective, which is achieved through a planned structure (Monereo and Duran, 2002). It is a system of partnership in the learning process that involves students helping each other to learn while simultaneously learning themselves by teaching (Loke and Chow, 2007).

This approach has been introduced in several contexts, such as primary level education (Stephenson and Warwick, 2001), teaching children with learning, mental or physical disabilities (Barfield et al., 1998) and tertiary education (Anderson and Boud, 1996; Saunders, 1992). The principle is based on the realisation that some students have the ability to construct their knowledge through interactive processes and are capable of playing an intermediary role that assists other students in learning (Duran and Monereo, 2005).

One of the flexible characteristics of peer tutoring is the students' freedom to reject a peer tutor's advice (Thonus, 1999). Jones et al. (2006) suggested that peer tutors and students construct their relationships with each other and the activity of peer tutoring in different and more relational ways. Loke and Chow (2007, p. 242), found that students who participated in peer tutoring schemes benefited from the experience in various ways such as:

- Enhancement of learning skills/intellectual gains that improved reflective and critical thinking abilities
- Opportunity to develop transferable personal skills such as communication, interpersonal, and time management skills

- Increased confidence, and becoming more active and responsible for their own learning

Studies reveal that peer tutoring improves the self-regulated learning capabilities of students (Shamir and Tzuriel, 2004) and produce positive impacts on the metacognitive monitoring and regulation of peer tutors and students (King et al., 1998). In the perspective of linguistics, peer tutoring is suggested as a great way of encouraging tertiary students to practice the target language in order to improve their language proficiency because the nature of the activities are unthreatening and less-intimidating compared to the more rigid classroom setting (Sharif et al., 2012). However, there appear to be limited studies on the relationship between peer tutoring hours and students' performance, much less in engineering education.

The difference of age between the students and peer tutor gives rise to tutoring known as cross-age due to the fact that it approaches the widespread conception that associates the peer tutor with the figure of the teacher (Duran and Monereo, 2005). The tutor is normally the more experienced student who supports the learning processes through questioning, explaining and scaffolding (Backer et al., 2012). In this study, the peer tutors are normally senior or well-performing students studying under the same institution as their students, while their students usually include those who have poorer CGPAs and require more assistance in their studies.

Method

This study involved the investigation of students' performance for a total of 21 selected engineering subjects that adopted the peer tutoring approach. The investigation was conducted across 3 trimesters (Refer to Table 1), which lasted a total of 36 weeks. There were a total of 629 peer tutored students. The registration of the peer tutoring classes was based on a voluntary basis.

Table 1: Selected Subjects that adopted Peer Tutoring Approach

No.	Subject	Peer Tutored Students
1	Engineering Mathematics 1	83
2	Applied Dynamics	89
3	Strength of Materials	30
4	Algorithm & Data Structure	19
5	Calculus	28
6	Mechanics	16
7	Digital Signal Processing	14
8	Applied Statics	46
9	Circuit Theory	10
10	Basic Electrical Technology	13
11	Geometry and Trigonometry	31
12	Engineering Mathematics 2	55
13	Control Theory	10
14	Measurement and Instrumentation	39

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No.	Subject	Peer Tutored Students
15	Applied Thermodynamics	7
16	Algebra	15
17	Computer and Program Design	21
18	Principle of Thermodynamics	11
19	Engineering Mathematics 3	36
20	Fluid Mechanics	48
21	Fluid Dynamics	8

The number of peer tutored hours attended by a peer tutored student would depend on the number of peer tutored subjects in that particular trimester which the peer tutored student is registered in. This would also depend on whether the particular student is under the probation category or not. Apart from that, the number of peer tutored hours received would depend on the student's decision to enrol for the peer tutoring programme on a voluntary basis.

The data gathered comprised primarily the students' academic results, namely marks from their quizzes, lab reports, assignments, tests and final exams. The identities of the students were not disclosed for privacy and confidentiality reasons, and only descriptive statistics of the passing and failure rates were used for this study.

In order to analyse the relationship between peer tutoring hours and students' performance, Pearson's correlation analyses is used. The number of different grades obtained by the peer tutored students are tabulated against the number of peer tutoring hours attended. In order for the relationship to be deemed significant, a p-value (probability coefficient) which is lower than 0.05 is to be obtained (Montgomery and Runger, 2010). This would mean that there is a 95% confidence that the correlation between peer tutoring hours and students' performance is significant.

The R-value (correlation coefficient) is also referenced in the analysis. If the R-value is found to be close to 1, this would mean that there is a strong relationship between peer tutoring hours and students' performance. If the R-value is found to be positive, this means that the increases in peer tutoring hours are correlated with increases in students' performance. It can also mean that the decreases in peer tutoring hours are correlated with decreases in students' performance. However, if the R-value is found to be negative, this means that the increases in peer tutoring hours are correlated with decreases in students' performance.

Results and Discussion

Table 2 presents the results of passing and failure rates of the peer tutored students according to the selected engineering subjects. Students are identified to have passed if they achieve grade A, B or C, whereas students that fail would have achieved grade D and below. The top 3 subjects with highest passing rates are Computer and Program Design (95.24%), Measurement and Instrumentation (94.87%), and Algebra (93.33%). These 3 subjects also have the lowest failure rates (2.56% for Measurement and Instrumentation, 4.76% for Computer and Program Design and 6.67% for Algebra).

### *Table 2: Pass and Failure Rates of Peer Tutored Students according to Selected Engineering Subjects*

No.	Subject	Peer Tutored Students	Pass A/B/C (%)	Fail D/F (%)	R/I (%)
1	Engineering Mathematics 1	83	66.27%	25.30%	8.43%
2	Applied Dynamics	89	86.52%	10.11%	3.37%
3	Strength of Materials	30	90.00%	10.00%	0.00%
4	Algorithm & Data Structure	19	68.42%	31.58%	0.00%
5	Calculus	28	78.57%	21.43%	0.00%
6	Mechanics	16	75.00%	25.00%	0.00%
7	Digital Signal Processing	14	85.71%	14.29%	0.00%
8	Applied Statics	46	78.26%	15.22%	6.52%
9	Circuit Theory	10	90.00%	10.00%	0.00%
10	Basic Electrical Technology	13	84.62%	15.38%	0.00%
11	Geometry and Trigonometry	31	70.97%	22.58%	6.45%
12	Engineering Mathematics 2	55	81.82%	18.18%	0.00%
13	Control Theory	10	70.00%	30.00%	0.00%
14	Measurement and Instrumentation	39	94.87%	2.56%	2.56%
15	Applied Thermodynamics	7	85.71%	14.29%	0.00%
16	Algebra	15	93.33%	6.67%	0.00%
17	Computer and Program Design	21	95.24%	4.76%	0.00%
18	Principle of Thermodynamics	11	45.45%	45.45%	9.09%
19	Engineering Mathematics 3	36	72.22%	22.22%	5.56%
20	Fluid Mechanics	48	81.25%	18.75%	0.00%
21	Fluid Dynamics	8	50.00%	37.50%	12.50%

*Note: R/I refers to a status without grade, where students are either barred or absent from the exam

The poorest 3 subjects with the lowest passing rates are Principle of Thermodynamics (45.45%), Fluid Dynamics (50%) and Engineering Mathematics 1 (66.27%). The first 2 subjects also have the highest failure rates (45.45% for Principle of Thermodynamics and 37.50% for Fluid Dynamics). Although Engineering Mathematics 1 has the 3rd lowest passing rate, it does not seem to have the 3rd highest failure rate (25.30%). Instead, the subject Algorithm and Data Structure has the 3rd highest failure rate (31.58%).

Figure 1 shows a graph that compares the peer tutored students' performances across different subjects. Only about 14% of the subjects in the list have failure rates above 30%. All in all, most of the subjects which have adopted peer tutoring have considerably more students in the passing category as compared to the failure category. The only subject with equally as many passed students as failed ones is Principle of Thermodynamics. This is of no surprise because over a period of three or four decades, this mechanical engineering subject in general has

become one presenting considerable difficulty to the average university engineering undergraduate (Wakeford, 1985).
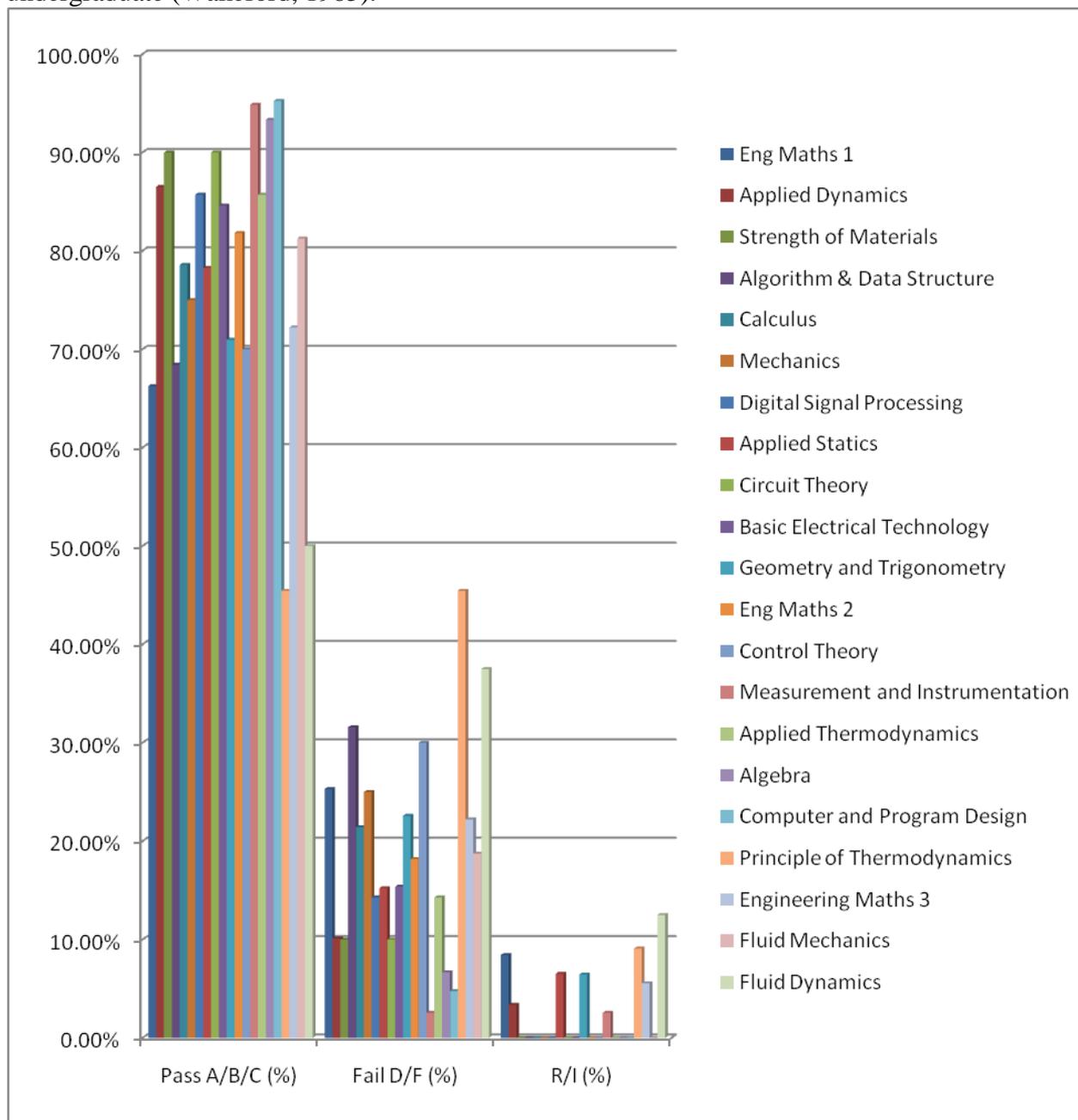
Note: R/I refers to a status without grade, where students are either barred or absent from the exam

Figure 1: Comparison of Students' Performance across Different Subjects

Table 3 presents the number of peer tutoring hours versus the student grades for all the selected subjects. In order to standardise the categories of peer tutoring hours to 2, 4, 6, 8 and 10 hours, the total number of peer tutored students selected for this observation was 560 students out of the 639 students. This was because not all of the peer tutored students attended these set of hours across all the selected subjects (some subjects had more peer tutoring hours than the defined set of hours and some had a mixture of odd and even number of hours).

It is found that considerably more students scored grades A, B and C by attending 2 hours of peer tutoring sessions. This trend slowly declines as the number of peer tutoring hours increase to 4, 6, 8 and eventually 10 hours. Figure 2 shows a comparison of the students' performance across different peer tutoring hours.

Table 3: Number of Peer Tutoring Hours versus Student Grades

Hours	Grades						Total	Total (Pass)	Total (Fail)
	A	B	C	D	F	R/I*			
2	24	68	102	32	25	12	263	194	57
4	11	60	60	14	17	5	167	131	31
6	8	25	34	4	8	3	82	67	12
8	2	9	16	2	2	0	31	27	4
10	2	7	8	0	0	0	17	17	0
Total	47	169	220	52	52	20	560	436	104
Group Total	436			124					

*Note: R/I refers to a status without grade, where students are either barred or absent from the exam

It is also found that the number of peer tutored students who passed their subjects is 71.56% higher than those who failed their subjects (436 versus 124 students).
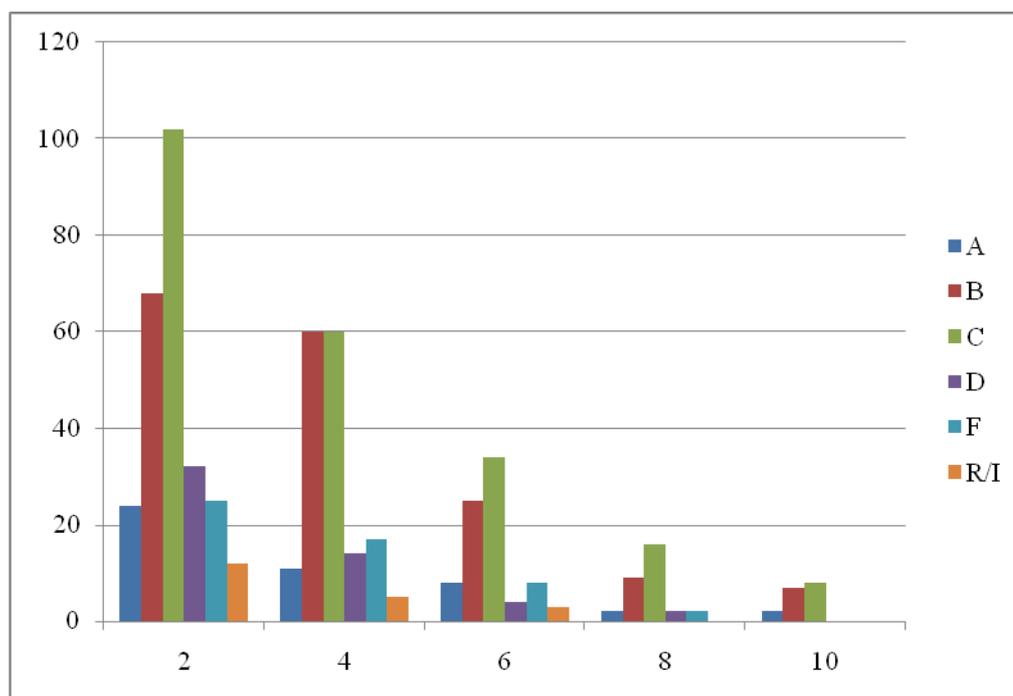

Figure 2: Comparison of Students' Performance across Different Peer Tutoring Hours

It appears that as the number of peer tutoring hours increase, the performance of the peer tutored students tend to decrease. This notion is further investigated with the Pearson's correlation analysis (Refer to Table 4). Based on the results of the correlations analysis, there appear to be high, significant and negative correlations between peer tutoring hours and

students' performance ($p < 0.05$). This indicates that the students' performances tend to improve with lesser peer tutoring hours.

For the passing grades (A, B and C), the relationship is found to be strongest at the C-grade category ($R = -0.963$, p = 0.008). With reference to the descriptive data in Table 3, it is found that most peer tutored students across all hour categories fall under this grade, with the highest number being in the 2-hour category (102 students).

Table 4: Pearson's Correlation Analyses on Relationship between Peer Tutoring Hours and Students' Performance

| Parameters | Hours | Grades | | | | |
		A	B	C	D	F
Hours Pearson Correlation (R)	1.000	-0.927[*]	-0.957[*]	-0.963[*]	-0.909[*]	-0.979[*]
p-value	-	0.024	0.011	0.008	0.033	0.004
No. of data points, *N*	5	5	5	5	5	5

* Correlation is significant at the 0.05 level (2-tailed)

Under the failure category (grade D and F), it is found that peer tutoring hours are highly, significantly and negatively correlated with students' performance, with the highest correlation under the F-grade category ($R = -0.979$, $p = 0.004$). This also alludes to a possibility that students who attend an excessively high amount of peer tutoring hours may not necessarily improve in their performance. This finding is consistent with the findings of other researchers who posit that long working hours (in this case, studying hours) may have a negative effect on cognitive performance (Virtanen et al., 2009). Hence, unnecessarily long peer tutoring hours can possibly deter students' effectiveness and focus in their studies as well.

Based on Table 3, it is also important to note that the number of peer tutored students under the failure category who attended above 6 hours of peer tutoring sessions is considerably lower than those of the passing category (4 students under failure category versus 44 students under passing category). Comments from students in a general survey uncovered that students who studied with peer tutoring demonstrated a better understanding of the material tested and these findings agree with the findings of previous studies on peer tutoring as well (Fantuzzo et al., 1992; Fantuzzo et al., 1990; Griffin and Griffin, 1998; Riggio et al., 1991).

Conclusion

Besides that, a high, significant and negative correlation exists between the number of peer tutoring hours and the performance of the peer tutored students. This suggests that as the number of tutored hours decrease, the performance of students increase.

With peer tutorials, the passing rates for each subject appear to be considerably higher than the failure rates. However, students do not necessarily perform well if they attend more hours of peer tutoring as the statistics suggest that an excessively high number of hours could deter the students from studying effectively.

According to the results, it would be reasonable to propose that an estimated range of 2 to 4 hours of peer tutoring should be offered for every peer tutored student in order to ensure its effectiveness is preserved. However, this proposition may require further data collection and investigation with more subjects and students involved.

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