Language Courses, Transversal Skills and Transdisciplinary Education: A Case Study in the Malaysian University

Paramaswari Jaganathan
(parames@usm.my)
Ambigapathy Pandian
Ilangko Subramaniam

Universiti Sains Malaysia
Penang

Abstract

The 21st century graduate education stresses on the importance of transversal competence that enables graduates to be better prepared and engaging in the interconnected workforce. Digital competence; social and civic competence as well as cultural sensitivity and expressions are the core skills seen as flexible traits of competent graduates. This paper gives an insight into how English language courses have unfolded new pathways into bridging multi-professional skills for the graduates' preparedness for the workforce in a transdisciplinary education approach. Based on the four pillars of learning, the English Language Courses have the potential to be harnessed as a niche discipline that provides potential pathways for graduates to acquire transversal knowledge and skills needed for various professionals for the global workforce.

Keywords: higher education, language course, workforce skills, transdisciplinary, transversal competence

1. INTRODUCTION

The mushrooming of higher learning institutions in the 21st century has become a great concern to the quality of the graduates churned out by the higher learning institution. The ability to communicate in a foreign language, particularly English language which is widely used in the workforce has been categorized as one of the main four transversal skills for graduates' employability, apace with the graduates' digital competence, social and civic competence as well as their possession of needed cultural awareness and expression for the workplace (Graddol, 2000). This need for the transversal competence is emphasized in producing the 21st century graduates who will be better prepared and engaging in the interconnected workforce. As such, the higher learning institutions, strive to keep pace with the transforming current needs of the external forces and unfold new approaches to churn out apt graduates who are capable of meeting the industry needs. Various approaches are intergrated in the teaching and learning to meet the market needs; one of which is the transdisciplinary approach (Nicolescu, 1996; Delor, 1996). This transdisciplinary

approach also reflects the ability of the higher learning institution to keep up to current trends to transform, rebrand and remodel their teaching and learning approach for further refinement in producing capable graduates. Many higher learning institutions also have customized the transdisciplinary educational framework according to their needs and requirements to produce relevant programmes. While this approach is relatively new in the Malaysian context, it has now become the catchphrase as the transdisciplinary concept of learning across, between and beyond learning disciplines has captivated the interest of many higher learning institutions today. In Malaysia, the Universiti Sains Malaysia, is one of the main public universities that pioneered the transdisciplinary approach in its mission to empower talents for the various workforces and reach out to the bottom billions. Based on the transdisciplinary approach proposed in Delors (1996) report, this paper discussess on how English Language Courses can be designed to forge interconnectedness in the workforce to equip graduates with a variety of professional workforce competence.

1.1 The Malaysian Education Pendulum

Malaysia is also receptive to the changing landscape of the demand for higher education, more so with the influx of globalisation and knowledge economy and saw the potential growth of the educational industry. Proactive actions were taken and the education sector was poised as one of the main drivers of the Malaysian Transformation plan and aspires to be the sixth largest education exporter by 2020 (ICEF Monitor, 2012). With the development of Educity Iskandar and new linkages with world-class universities, Malaysia is moving forward aggressively towards establishing Malaysia as a regional education hub. In the year 2009, the Malaysian Ministry of Higher Education record showed that there are 20 public universities, 33 private universities and university colleges, 4 foreign university branch campuses, 22 polytechnics, 37 community colleges and about 500 private colleges. The number is increasing with more international and private bodies setting up linkages in Malaysia. However, although higher-level and better quality education is equated to better human capital, a real graduate learning experience and remains a challenge to the achievable standards. Unemployment among graduates remains unsolved. According to a report released by Malaysian Ministry of Higher Education on the statistics of employment among graduates in 2009, out of 155, 278 graduates, 45% are employed, 18.4% further their studies, 2.2% improving their skills, 7.6% waiting for job placement and 26.7% are unemployed (MOHE, 2009). The numbers seem alarming year after year, and in the year 2013, the Education Ministry still voice their concern over the 40% of public university graduates in Malaysia who are either jobless or are employed in mismatched occupations (Yu Ji, 2013). With the number of unemployed graduates remaining on the increase, the duration of non- employability seems to be on the rise too. In the year 2011, a total of 24.6% of 174,464 university students were jobless for more than six months after graduating. The causes are similar to the causes cited a decade ago. The National Higher Education Research Institute (IPPTN) in February 2003, cited that the reasons why graduates are unable to get a job is due to the weak command in English, lack of communication and interpersonal skills, high dependence on others to accomplish tasks and high expectation in employee benefits and remuneration. However, with globalization and internationalization, employment selection has become very competitive. As Wei (2011) noted, employers are looking for graduates with good soft skill and academic results alone does not account for their employability. With globalization, employers are also looking for competent graduates with wide ranging skills and competence.

1.2   The Competency-gap Conundrum in the Workforce

As noted earlier, competence has become the overarching goal in the present day graduate education system as learning outcomes need to be applicable and complementary to work performance. However, the present challenge of graduate education system defects in producing multi-skilled and talented graduates who are capable to meet the changing complexities brought by technological innovation, economical transition and multicultural complexities in a borderless world. The overwhelming demands of the graduate education in a transforming world is far reaching from a real graduate learning experience and remains a challenge to the achievable standards, more so with the limited learning duration, which varies from three to four full years of study. It is less achievable effectively within the projected curricula framework as external factors such as technological advances transforms at a rapid speed; economic demands fluctuate interchangeably with market forces as well as climate change and multicultural trends varies in the global marketplace. The curriculum diversity too, often raises questions about the quality of students in terms of efficiency which is controlled through programs and courses conducted by institutions of higher education in its own way (Altbach, 2002). Some of the transnational education that is driven by the education industry need to expand the scope of the course in terms of theory and specialized sub-disciplines to meet the needs of employers to ensure that the graduates are equipped with the ability to adapt to a changing work environment (Omar Osman, 2005). Some scholars argued that the pattern of higher education in this country are 'functional', mainly to fill the needs of the country (Alba and Barnacle, 2007), who expressed that the higher education institutions focus more on the aspect of knowledge compared to the learning aspect; the emphasis is placed more on 'hyper-specialization' and 'instrumental function'. Competent and productive graduates need to be able to compete effectively in the global marketplace. Therefore, the local graduate should be able to keep pace with current circulation rapid communication technologies, communities and workplaces differ in culture, language, values and attitudes (Sarjit Kaur et al., 2008).

While the meaning of competence varies according to diverse fields of education, generally, competence reflects the ability or skill in a certain area of discipline. The definition of competence in the workplace however, takes one step further by including the ability to assess new situations and then to adapt accordingly to the needs of workplace. With the advent of technology and rapid work-culture transformation, academic grades alone does not substantiate to work performance (McClelland, 1973), instead it demands a cluster of competencies to reflect a real-work task or a particular job-role (ILO, 2009) which is based on multi-skills and versatility. This is the beginning of the new challenge in the teaching curricula to prepare the students for the workforce so that the students will be able to perform and carry out work task successfully. However, the reality challenging the education system now is the fact that the rapid growth of technology, global economy as well as cultural assimilation are beyond geographical borders; hence workplace competence, equitably transcends the definition of being able to perform in certain area of discipline. The International Labour Organisation (2009) has given a standard definition of competency as "knowledge, skills and attitude that a person needs to carry out a particular job or activity and at the level of performance required". This definition, in other words, focus on the key skills, workplace skills as well as generic skills; vis-a-vis observable and measurable core traits in the workplace (McClelland, 1973). These observable and measurable core traits in the workplace, according to McClelland (1973), can be developed with apparent competency and accessible training. Nevertheless, the definition of competence varies according to different disciplines.

Borrowing the DeSeCo Project's(1997) definition, competency is viewed from the three broad categories of using the tools interactively, interacting in heterogeneous group and acting autonomously. The pertinence of competence has become of critical importance with the issue of competence being highlighted in high level expert meetings and regional meetings. For example in 2012, the Education and Learning Beyond 2015 highlighted the importance of transversal skills in education and this was reiterated in the Regional Thematic Consultation on "Education in the post-2015 Development Agenda in the Asia-Pacific'2013. These meetings stressed that education systems should give more attention to ensuring that learners acquire requisite non-cognitive or transversal skills so that future generations can lead responsible, decent and productive lives in a rapidly changing world. As the blame of competency-gap connodrum in the workforce is placed greatly on the mismatched skills in the curricula of higher learning institutions, new approaches are adopted by the institutions to minimize the mismatch to meet the demands of the stakeholders, aspiration of the universities as well as churning the desirable candidates for the workforce. Despite the severe blame-game in the widening educational disorientation, it is also pertinent to be cognizant that education transformation cannot be leveled at the speed that global changes take place as educational transformation is evolutionary and procedural. In the face of current educational reforms and needs, a transdisciplinary educational approach is therefore seen feasible in bridging the gap of mismatch between the learning approaches and the need of churning out employable graduates who are competent. Over the recent years, the transdisciplinary approach too has infiltrated the various domains of teaching and learning process to provide a platform for real-work engagement in a learning setting for knowledge transfer. As the transdisciplinary approach evolved in the areas of science, technology and medicine (Nicolescu - 1996), many literatures on transdisciplinary approach are also confined into the science discipline. However, it is pivotal to note that there are avenues for the arts discipline, particularly the language courses to integrate concept of learning across, between and beyond learning disciplines. The transdisciplinary education program, predominantly is built around a core that is then surrounded by knowledge and skills selected from various disciplines (Nicolescu, 1996). In line with this premise, this paper aims to advance on a case study of how Language courses integrates work knowledge and elicits the students' competence to be better prepared for the interconnected working world.

2. Theoretical Foundation for Transdisciplinary Learning in Language Courses

The contextual learning theory underpins the teaching methodology in the transdisciplinary approach discussed in this paper as the main focus of the paper is on the connection between context and the content. The contextual learning approach requires the students to build new meanings based on the specific knowledge that they learn and facilitate the self-regulated learning (Johnson, 2002). It emphasizes the higher level thinking skills in which knowledge transfer occurs and students are able to collect, analyze as well as synthesize information from multiple sources and viewpoints. From the viewpoint of teaching, the contextual learning method emphasizes on five aspects, ranging from relating, experiencing, applying, transferring of knowledge as well as cooperating with other members in the process of learning. Based on this theoretical foundation, the conceptual framework for this study encompasses two main constructs; the transdisciplinary approach and the transversal skills that enable to produce competent graduates.

The Language Course case study discussed in this paper will be matched with the transdisciplinary framework advanced by Jacques Delor (1996) whereby four pillars of education are integrated in the education curriculum. They include aspects of *learning to know, learning to do, learning to live*

together and *learning to be.* In *learning to know*, students will be offered opportunity to solve problems, make decisions and shoulder responsibilities to develop their own talents according to their intended learning outcome of the programme. As such, the course objectives should include the elements of problem solving; involve a decision making process; and allow students to take on a responsibility within the implementation of the coursework. Likewise, *in learning to do*, the students should demonstrate an ability to perform specific physical tasks which employs a mixture of skills. In particular, the skills selected must be related to a profession; and utilize or integrate the ability to use ICT skills in their course task completion. In the third pillar of *learning to live together*, education is seen as a tool to instill the understanding of human diversity and interdependence. The aim is to enable students to live together and be more tolerant to a warm and friendly environment besides allowing the opportunity to love and respect human race in all forms. In the context of language courses, the component of learning to live together includes students from differing background, race, religion or language who would be together in a course. This is to allow a more reciprocal learning environment for fellow students of different cultures and beliefs to interact. The fourth pillar of *learning to be* prepares the students in the language courses to acquire the decision making skills and the problem solving skills relevant to their work needs. With the vast technological innovation and developments, the students must be able to weigh the pros and cons before making decisions and they should have the accountability for the decisions made in order to sustain a holistic social progress. This element is embedded in the case studies, discussions and project work that are assigned to the students.

The competence component includes four main aspects, specifically the language competency that refers to the ability to use the language fluently according to the different context and needs. Students should know the language and complete tasks effectively with the use of accurate language in the spoken and written form. The digital competence refers to the students' ability to use the digital competence in their class activity, presentations and project work. Specifically, this digital ability will include the ability to acquire, process and produce information via information technology and utilize the digital competence in the process of delivering the learning outcome. The social and civic competence refers to the students' ability to display an acceptable norm in peers and teacher relationship as well as posses an emotionally strong and confident behavior (particularly in their conversational skills) that enables them to adapt successfully to their social setting. Another aspect of the competency include the cultural awareness and expression whereby the students should be able to identify and evaluate their own culture through class sharing and discussion as well as discover other cultural diversity among their peers and their surroundings. Developing the skills and attributes of competent graduates is conceptualized in Figure 1 below:
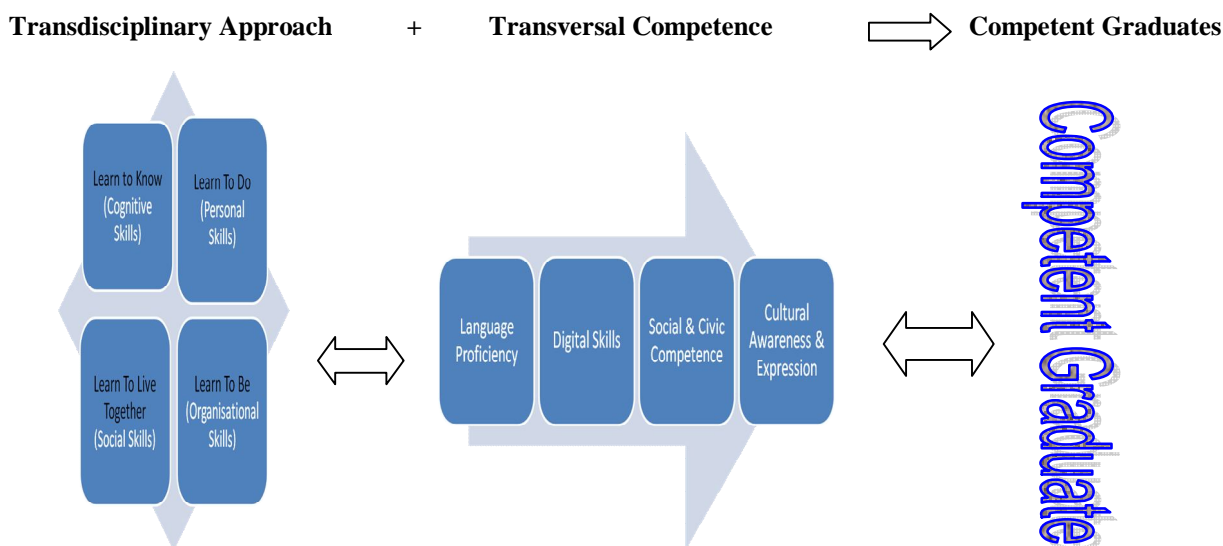
Transdisciplinary Approach   +   **Transversal Competence**   **Competent Graduates**

Figure 1: Developing competent graduates in a transdisciplinary learning approach

2.1 English Language for the 21st Century Graduates

In the current scenario of changing global trends of demography, world economy, technology and cultural flow, there is a demand for English worldwide in the 21st century (Graddol, 2000). The impact of these changing global trends, has not only positioned English as an immediate everyday communication of the people but it has also reinforced the English language proficiency as a basic necessity for the workforce. Recent employability demands focus on the ability to communicate in a foreign language, particularly English language which is widely used in the workforce. Thus, language competence has been categorized as one of the crucial transversal skills for graduates' employability, apace with the graduates' digital competence, social and civic competence as well as their possession of needed cultural awareness and expression for the workplace. The emphasis for the transversal competences seem to be a mandatory prerequisite in producing the 21st century graduates who will be better prepared and engaging in the interconnected workforce, more so with the changing workforce climate which demands dispersed group of English speaking team members who are groomed into knowledgeable, skillful and sensitive to cultural diversity in a workplace. As one of the core transversal competence too, language courses too can unfold new pathways for acquiring the multi-professional skills for workforce preparation via a transdisciplinary approach. Within the transdisciplinary approach, the English Language Course can incorporate the four cognitive, personal, organizational and social skills and the students will be able to enhance the other complementing transversal skills. In other words, the language course becomes the linchpin in a transdisciplinary learning system to consolidate other complementing transversal skills. These constructs can be summarized in Figure 2 below:

English Courses in a Transdisciplinary Approach   Transversal Skills
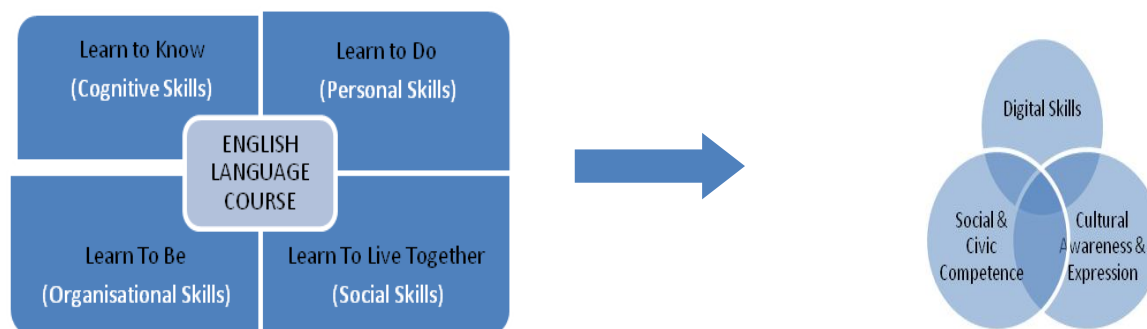

Figure 2: Conceptualising English Language Course in a Transdisciplinary Learning Approach.

2.2 Translating Theory into Practice in a Language Programme

The B.A.(Hons.) English for Professionals programme offered by the Universiti Sains Malaysia is aimed at developing language skills for diverse real-life situations (2012/2013 Course Booklet). Students learn a range of professional registers appropriate for work-related situations and are expected to acquire theoretical, entrepreneurial and practical knowledge about the English language (2012/2013 Course Booklet). The students also need to demonstrate professional and leadership abilities in various contexts, culture and language settings via the coursework projects and internship programme offered for the course. The programme is designed for three years, commencing with theoretical foundation and introductory courses; followed by practical knowledge and application in various fields in the final year. Within each course, project work, assignments as well as assessments are carried out according to the outcome specification. The courses for the B.A.(Hons.) English for Professionals programme is summarized in the table given below:

Table 1: Summary of Course Programme for B.A.(Hons.) English for Professionals

Year 1 (Theory)	Topics on World Languages and Multilingualism Topics on Linguistics Professional Readings Professional Writing The History & Study of Structure of English The study of English Grammar The study of English Literature
Year 2 (Practice)	English in Society Psychology of Language Phonetics and Lexis of English Interlanguage Study English Discourse Industrial Training Orientation Programme

Year 3 (Application)	English Discourse in the Professions English for Administration English for Public Relations and Marketing English for Scientific, Technical and Web-based Writing English for the Media English for Law Oral Communication for Social and Occupational Purpose

Within the various courses, the second, third and final year courses gives emphasis on project work and and internship that contributes largely in developing the transversal skills. This is because the projects assigned are designed with an outcome-based objective and provides multiple learning opportunities; each varying according to the different courses. The learning outcome for the B.A.(Hons.) English for Professionals programme is based on the nine main outcome thrust, ranging from knowledge; technical cum psychomotor skills; thinking and scientific skills; communication skills; professionalism, values, attitudes and ethics; lifelong learning and information management; entrepreneurship skills and leadership skills (2012/2013 Course Booklet).

To illustrate further, a project work focused on organizing an event in conjunction with World AIDS Day (WAD) for English for Public Relations and Marketing Course enables the students to incorporate digital skills, social and civic competence as well as cultural awareness and expressions. The students will utilize and enhance on their digital skills from every aspect of pre-planning stage, designing print materials for publicity, preparation of the event as well as to the post-event assignment. In the whole process of planning out the event too, the students need to equip themselves with the social and civic competence in dealing with the various organizations, personnel and individuals. The students will be able to gauge on the practicality of negotiating, relating and interacting to the various groups appropriately as well as coping with stress and frustration in a constructive manner in the process of managing the event. In the aspect of cultural awareness and expressions, the project work provides the opportunity for the students to be sensitized to the different cultural norms, expectations and identity. In the case of HIV/AIDS in Malaysia, for example the students need to be alert of the peripheral issues surrounding the pandemic from the socio-cultural context and values whereby preventive measures and fostering positive behavior change is received more openly compared to lifestyle issues and sexual behavior that are considered to be taboo subjects in the community. Hence, every stage of planning and preparing the event for the World AIDS Day should allow the students to understand and value the diversity and respect for others' cultural norms and sensitivities. The outcomes of the project in this context encompass all the nine learning outcomes noted earlier. The students therefore, need to acquire the necessary knowledge, facts and information on the current issues of WAD in order to organize the event as well as employ the necessary technical, entrepreneurship and leadership skills to manage and execute the tasks. In the process of planning the project too, the students need to adhere to professional ethics and protocols in dealing with the various dignitaries and authorities. These are some of the significant outcomes that the students obtain in their pursuit of learning to do what they have learned. The application of the skills in the project work and during internship enables the students to exercise and further explore their own transversal skills as the platform of learning is readily accessible for them to experience the meaningful learning in context. Likewise, in acquiring cultural awareness and experience, a non-Malaysian student will be able to understand the sensitivities of HIV/AIDS issues and equally share their world-view and country-specific experience pertaining to the same issue. The transversal skills are inter-connected and they provide

operational application of knowledge and skills to a certain situation and promote learning beyond the curricula besides making the learning process more effective, meaningful, on-going and self-motivated.

3. Implication of Transdisciplinary Approach and Opportunities for Language Courses

Workplace competence demands the ability to multitask in a variety of role as well as job functions which transforms rapidly with the global demands of the workforce. As designing a curriculum which encapsulates a diverse learning outcome is not easily accomplishable, the transdisciplinary approach helps to gauge a multi discipline work experience. English language courses that are designed within a transdisciplinary approach are considered feasible and relevant to enable the students to explore real-life work understanding, knowledge and exposure. Additionally, English language is a notable transversal skill that is sought after for the current industry needs; as such there are numerous potentials to diversify the teaching and learning approach to integrate various disciplines of study via English Language. The English language courses too, if tailored to suit the various needs of the professions, will be able to prepare the students for the real workforce as well as independent learning. To facilitate and enhance a transdisciplinary teaching via English courses, it is recommended that avenues be explored into collaborative teaching efforts by team-players from the various industries as well as enhancing interaction between participants from different disciplines through collaborative work in small groups. More effective engagement for high quality placements, particularly during internships should be encouraged too. The planning of the course teaching should also emphasize on application and outcome-based learning according to specific needs and expectations. This will then facilitate a learning-based supportive environment that will be necessary in churning out competent graduates for the workforce. The language teaching process too becomes a real-world learning environment that provides a platform for knowledge transfer from acquired knowledge to holistic and life-long learning experience.

References:

Altbach, P.G. (2002). Knowledge and education as international commodities: The collapse of the common good. *International Higher Education*. Retrieved from
 http://firgoa.usc.es/drupal/node/31829

Cronin. K. (2008). Transdisciplinary research and sustainability. Overview report prepared for the Ministry of Research, Science of Technology of New Zealand.

Delors, Jacques et al. (1996). Learning: The treasure within. Paris, UNESCO. Retrieved from unesdoc.unesco.org/images/0010/001095/109590eo.pdf

EF English Proficiency Index Report (2011). Overview of English learning today. Retrieved from http://www.ef.com/epi/

Graddol, David (2000). The future of English? A guide to forecasting the popularity of English Language in the 21st century. The British Council. U.K.

ICEF Monitor (2012). *Malaysia Aims to be sixth-largest education exporter by 2020*.

Ministry of Higher Education (2009). Retrieved from
http://monitor.icef.com/2012/05/malaysia-aims-to-be-sixth-largest-education-exporter-by-2020/

Johnson, Elaine.B (2002). *Contextual teaching and learning. What is it and why is it here to stay.* SAGE. U.K.

McClelland, D. C. (1973). Testing for competence rather than for "intelligence." *American Psychologist*, 28(1), 1-14.

Ministry of Higher Education (2009). Retrieved from
http://www.mohe.gov.my/educationmsia/index.php?article=mohe

Netten. J. (2000). Transdisciplinary approach and intensity in second language   learning/teaching. *Canadian Journal of Applied Linguistics.* Vol.3:1-2. Pg: 107 – 122.

Nicolescu, B (1996). The transdisciplinary evolution of the university condition for sustainable *development.* Presented at the "Universities responsibilities to society. Bangkok: Chulalongkorn University. Retrieved from
http:perso.club-internet.fr/nicol/ciret/bulletin/b12/b12c8.htm

Omar Osman, (2005). Skills and competencies in the workplace – An overview of current problems and the balancing role for higher education in Malaysia. National Conference on Skill & Competencies in Education, Universiti Sains Malaysia.

Pandian. A., Koo, Y.L and Kell, P(eds.) (2007). *Innovation and intervention in ELT. Pathways & practices.* Universiti Putra Malaysia Press.

Rotherham. A. J. and Willingham. D. (2009). *21st Century Skills: The challenges ahead. Teaching for the 21st Century.* Vol. 67:1. Pg: 16-21

Sarjit Kaur, Morshidi Sirat dan Norzaimi Azman (2008). The Scenario of Internationalisation and Globalisation of Higher Education in Malaysia. In Sarjit Kaur, Morshidi Sirat and Norzaimi Azman. *Globalisation and Internationalisation of Higher Education in Malaysia*. Pulau Pinang: Penerbit Universiti Sains Malaysia.

Yu Ji., (2013, July 27) *Close to half of Malaysian graduates either jobless or employed in mismatched fields*. The Star Online. Retrieved from
http://www.thestar.com.my/News/Community/2013/07/27/Close-to-half-of-Malaysian-graduates-either-jobless-or-employed-in-mismatched-fields.aspx/

Wei Sieng Lai. (2011). Proceeding of the International Conference on Social Science, Economics and Art 201. Hotel Equatorial Bangi-Putrajaya, Malaysia, 14 - 15 January 2011 ISBN 978-983-42366-5-6

2012/2013 Course Booklet, (Bachelor of Arts) English for Professionals. Division of Academic and International Affairs, Universiti Sains Malaysia.