PBL AS A POWERFUL TEACHING AND LEARNING TOOL TO ENHANCE HUMANISTIC SKILLS AMONG UNDERGRADUATES

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Abstract

Teaching undergraduates at tertiary level is surely not an easy task what more when your students are engineering undergraduates who need to be competent not only in the content area but the generic skills as well. Surveys suggest that the generic aspect demand equal if not greater emphasis in order to produce competent marketable graduates. However, in Malaysia many undergraduates come from an exam-oriented schooling system that lacks the ingredient to develop both the content and generic skills. Hence, a proper teaching method should be applied at tertiary level so that the students graduated from universities are competent in generic skills. At University Tun Hussein Onn Malaysia, Problem Based Learning (PBL) has been used as a teaching and learning method since 2005. This method was purposely selected to develop and enhance not only the technical and hard skills but more importantly the generic or humanistic skills of the students. A complete Self Directed Learning module was developed to be a systematic teaching and learning manual for both lecturers and students. A study was then conducted on a group of 140 students in order to see the impact of PBL on the development of students' humanistic skills. This is a descriptive survey research in which it utilises both quantitative and qualitative data. The finding shows that the PBL method has successfully developed many of the essential humanistic skills of the students. Some suggestions have been made for future studies and to improve the implementation of PBL among lecturers.

Keywords: Problem Based Learning, learning skills, generic skills, humanistic skills, undergraduates

INTRODUCTION

Changes taking place at tertiary level education concerning the knowledge development and current technological advancement had also brought some great impacts on the teaching and learning approaches. Hence, excellent teaching and learning becoming one of the critical success factors that a university or polytechnic should pay more attention. Most recent, teaching and learning process at tertiary level had been discovered to be stagnant with the over utilization of lecturing approach. Knowledge, skills and values are failed to be delivered satisfactorily to the students due to the single way approach of teaching and learning which centered mostly around lecturers. Many of the public universities graduates were claimed to be passive and unable to perform their job. Failures during interview sessions surprisingly increased due to the inability of the graduates to communicate effectively and to convince the employers of their humanistic and social skills.

Government as well as educationists all over the country had sensed this situation and the issues have been taken into serious consideration. The Malaysian Ministry of Higher Education for instance has requested all public universities to tackle this problem immediately through the introduction of generic skills or soft skills programs. Since then the efforts had been put into implementation accordingly. One critical way to improve the generic skills of the students is to opt for a proper approach in teaching and learning called the experiential learning in which learning centered around the students rather than lecturers. Unfortunately, most of the public universities are still prone to the rampant utilization of lecturer-centered teaching and learning approaches. They are far from realizing the important of student-centered and experiential learning approaches in order to

suit the needs of the students, the current knowledge and the technological advancement. It was among the major purpose of this research to study the implementation of experiential learning approach particularly PBL as tool to enhance the humanistic skills of the undergraduates at a Malaysian public university.

EXPERIENTIAL LEARNING

Cognitive and experiential are two most essential types of learning. For some reasons, cognitive learning often seen as meaningless and experiential learning on the other hand seen as significant. Cognitive learning is connected to the process of learning academic knowledge such as vocabulary or multiplication tables. It was basically a type of rote learning focuses mainly on the memorization of facts or associations (Ausubel, 1961 and Slavin, 1991). Experiential learning on the other hand, is the learning process concerns about the application of knowledge such as learning about engines in order to repair a car. According to Rogers (1961) the key to the distinction between these two types of learning is that experiential learning addresses the needs and wants of the learner. It also possesses other essential qualities including the personal involvement of the students, self-initiated and self-evaluated and above all, it has a pervasive effects on learner.

Experiential learning is equivalent to personal change and growth. All human beings possess a natural propensity to learn. Therefore, the critical role of the teacher is to facilitate such learning by setting a positive climate for learning, clarifying the purposes of the learners, organizing and making available learning resources, balancing intellectual and emotional components of learning, and sharing feelings and thoughts with learners but not dominating. Learning will eventually facilitated when the student participates completely in the learning process and has control over its nature and direction. Evaluation or assessment in experiential learning is based on self-evaluation which is the principal method to assess the progress or the success of the learning. Learning will also be facilitated when the students are given the opportunity to directly confront with practical, social, personal or research problems. Furthermore, experiential learning should also stress upon the importance of learning to learn (Patterson, 1973 and Valett, 1977).

Borzak (1981) stresses that experiential learning involves a direct encounter with the phenomena being studied rather than merely thinking about the encounter, or only considering the possibility of doing something about it. Most often, this sort of learning is sponsored by formal educational institutions and it was usually well planned. Students will normally be given an opportunity to acquire and apply knowledge, skills and feelings in an immediate and relevant setting.

Efforts have been made to develop proper theories and models for the application of experiential learning approach. David A. Kolb and Roger Fry had worked together to develop their model of experiential learning. The model consisted of four important elements, the concrete experience, the observation and reflection, the formation of abstract concepts and testing in new situations. The model was widely used and discussed in the theory and practice of adult education, informal education and lifelong learning.

K.P. Cross (1981) has developed an experiential learning model called the Characteristics of Adults as Learners (CAL) model. The model was developed based on her analysis of lifelong learning programs and it attempts to integrate other theoretical frameworks for adult learning such as Knowles' theory of andragogy, Rogers' theory of experiential learning and lifespan psychology. Knowles' theory of andragogy is an attempt to develop a theory specifically for adult learning. He emphasizes that adults are self-directed and expect to take responsibility for decisions. Learning programs in adult learning therefore must accommodate this fundamental aspect.

Apart from Rogers, Kolb, Cross, Knowles and other modern theorists, there are some other scholars who preceded the quest for the establishment of experiential learning theories. Al-Ghazali,

an 11th century Muslim traditional scholar has long ago practiced and narrated some sorts of experiential learning he was personally embarked. He distinguished between cognitive learning and experiential learning during his search for the reality of the existence. In his book entitled 'Al-Munqidh min al-Dhalal' or the Deliverance from Errors he mentioned that reading and memorization of a book or books would not be able to bring a proper understanding and satisfy the learners. He himself has read and memorized a vast number of books including the one composed by Abu Talib al-Makki, the great scholar of his time. Unfortunately he felt that he has not fully understood the book very well. Thus, he embarked into a spiritual and practical journey which took him 10 years to discover the true knowledge and the reality of the existence (Al-Ghazali, 1983). It was his very personal experience that tells us how important is for us to embark into experiential learning approach.

Experiential learning is a theoretical root for Problem Based Learning (PBL) approach. Nonetheless, not all PBL approaches were built on the same experiential learning theories. In Denmark, the PBL approach was built on Dewey's theories of experiential learning. Other PBL approaches built on Kolb and other theories of experiential learning (Graaff and Kolmos, 2003). This diversity does not bring significant differences among various PBL approaches practiced around the globe. The key point here is that PBL is widely accepted as the most practical approach for experiential learning particularly in terms of developing the generic and humanistic skills of the students. This study is among a number of studies conducted purposely to prove the effectiveness of a systematic PBL approach that could enhance not only the academic but also the generic part of the learning.

PBL AS A POWERFUL TEACHING AND LEARNING TOOL

Learning activities in humanities study are not as interesting as before. The students get easily bored during the classroom activities and get sleepy when the lecturers start to introduce the topic of the day. The student enrolment in humanities study was also decline dramatically bringing some of the established faculties in many universities to the risk of closing some of their programs. Many factors contributed to the lack of interest among students to enrol in humanities study. The lack of potential jobs for humanities and social studies graduates is among the major factors.

However, the important of the humanities study to the students in other areas especially the engineering and other applied sciences increased tremendously due to the absence of the generic skills among the graduates. Humanities study therefore is very essential to these students so that they can be trained to develop their generic and humanistic skills. On the other hand, studying the humanities subjects does not necessarily enabling the students to develop their humanistic and generic skills especially when learning approach is not properly selected and implemented. Thus, in this aspect a suitable learning approach should be properly selected so that the students' generic skills could be well developed.

Teachers and lecturers in humanities studies have long practising the lecturing and lecturer-centered approach. Most often the knowledge has been wrapped up by the lecturers and thrown out to the students within four walls of the classroom. Students are far from learning the knowledge through meaningful approach. Knowledge becomes saturated and stagnant. Realizing this situation, a group of lecturers at Center for Humanities Studies, University Tun Hussein Onn (UTHM) had implemented the Problem Based Learning in humanities studies since end of 2005. Since its first implementation in 2005, a number of studies on the students' acceptance of PBL and the effectiveness of the module were conducted. Table 1 below lists the studies previously conducted on the implementation of PBL at UTHM.

Table 1 Studies Conducted on PBL

Duration	Focus of the Study	Instrument	Findings					
December	The implementation	Interview	Students are satisfied with the					
2005- April	of PBL		implementation of PBL					
2006								
July –	The implementation	Questionnaire	Students are satisfied with the					
October	of PBL		implementation of PBL and a number					
2006			of generic/humanistic skills were					
			gained					
December	The implementation	Questionnaire	Students are satisfied with the					
2006 –	of POPBL	and Interview	implementation of PBL and a large					
October			number of generic/humanistic skills					
2007			were gained					
December	The implementation	Questionnaire	Students are highly satisfied with the					
2007 – April	of Self Directed	and Interview	module and a number of					
2008	Learning for PBL		generic/humanistic skills were gained					

Out of these studies, there were a number of papers presented at national and international seminars and conferences. Apart from that, there was also a book entitled "Pembelajaran Berasaskan Masalah Untuk Pembangunan Komuniti Lestari" compiled by the researchers and published by UTHM in 2009. The book is essentially a compilation and content analysis of students' experiences conducting the projects during the historic flood disaster hitting Johore and other southern parts of Peninsular Malaysia at the end of 2006 and early 2007. This paper will purposely discuss in detail the findings of the study on the implementation of PBL using Self Directed Learning Module, i.e. during December 2007 – April 2008 study.

OBJECTIVE OF THE STUDY

The objective of the study is to identify:

- 1. Students' overall perception on PBL as a new approach of learning
- 2. Students' perception on the effectiveness of PBL in developing their learning motivation and skills
- 3. Students' perception on the effectiveness of PBL in enhancing their generic skills

Based on the above objectives we could list down among the most critical research questions that need to answered;

- 1. How was the overall perception of the students about PBL as a new approach of learning after they have concluded one semester of learning?
- **2.** What is the perception of the students on the effectiveness of PBL in increasing their learning skills and motivation?
- 3. What is perception of the students on the effectiveness of PBL in enhancing their generic skills?

METHOD OF THE STUDY

This study is a descriptive study research utilizing both quantitative and qualitative data. The quantitative data was collected using a set of questionnaire comprises of 25 questions using a 5 Likert scales of 1=Extremely disagree, 2=Disagree, 3=Uncertain, 4=Agree and 5=Extremely agree. The questions were designed according to the above objectives and the research questions. The data was then analyzed and reported in form of percentage and mean score. While for the qualitative data, the

students were asked to reflect on their learning experience at the end of the semester. The reflection was then analyzed using content analysis method. The qualitative data serves as a supportive for the overall finding.

The population of the study consist of 186 students from three classes taking two compulsory subjects offered by Center for Humanities and Communication Studies, UTHM. The selection of the population is based on the fact that these students were exposed to PBL under the supervision of a same lecturer and using the same module. A total number of 180 sets of questionnaire were distributed and 140 of them returned. Out of this 140 respondents 75 of the respondents are male (53.6%) and 65 (46.4%) are female. The quantitative data collected was analyzed using Statistical Packages for Social Sciences (SPSS version 13.0). The data was reported in form of percentage and mean score. The five Likert scale was summarized into three scales of "Agree" (comprises of "Extremely Agree" [5] and "Agree" [4] scales, "Uncertain" [3] and "Disagree" (comprises of "Extremely Disagree" [1] and "Disagree" [2] scales). Mean score is based on the scores between 1 (the lowest) and 5 (the highest).

DATA ANALYSIS AND FINDINGS

Table 2 below shows the data on the first research question which asked, "how was the overall perception of the students about PBL after they have concluded one semester of learning?" For this research question, six questions have been asked to the respondents. The data shows that a large majority of the respondents (84.3% - mean score 4.17, extremely high) agree that PBL activities are easy to follow.

Table 2
Students' Overall Perception on PBL

No.	Statement	Agree	Uncertain	Disagree	Mean	SD
1	PBL activities are easy to follow	118	19	2	4.17	0.708
		(84.3%)	(13.6)	(1.4%)	EH	
				1 missing		
2.	PBL attracts me to take part in	122	17	1	4.22	0.679
	learning activities	(87.1%)	(12.1%)	(0.7%)	EH	
3.	PBL challenges my ability to search	131	9	0	4.37	0.604
	for new knowledge	(93.6%)	(6.4%)		EH	0.004
4	PBL is more effective compare to	117	18	4	4.24	0.786
	the traditional lecture classroom	(83.5%)	(12.9%)	(2.9%)	EH	0.786
5	PBL is very interesting	112	21	7	4.09	0.856
		(80.0%)	(15.0%)	(5.0%)	EH	
25	I would choose PBL rather than the	119	16	2	4.32	_
	traditional lecture approach	(85%)	(11.4%)	(1.4%)	4.32 EH	0.737
				3 missing	ЕΠ	

A larger percentage (87.1% - mean score 4.22, extremely high) also agree that PBL attracts them to take part in their learning activities. More stunning fact shows that PBL has indeed challenges the students to search for new knowledge. The data recorded 93.6% of the respondent agree to this fact. Does PBL more effective compare to the traditional way of learning? 83.5% (mean score 4.24, extremely high) of the respondents agree that PBL does more effective compare to the traditional way of learning. PBL was also seen as an interesting new way of learning. For this fact, 80% of the respondents agreed. Although not all of the respondents were finally ready to choose PBL as their future way of learning, a big percentage (85%, mean score 4.32, extremely high) has voiced out their interest to choose PBL rather than the traditional way of learning. Many of them have seen the big different brought by PBL as Siow Yen Yen, a Multimedia and Information Technology

student reflects, "I found that there are big different from the primary and secondary education teaching methods which concerned more about reading on moral values. I learnt about moral studies through research and how it could be applied to the real world." This view was also shared by Chan Kai Ming, a second year Electrical and Electronic Engineering student who says, "At the end of semester, I gained a special learning experience that totally different from the learning method during my primary and secondary school."

What is the perception of the respondents on the effectiveness of PBL in developing their motivation and learning skills? Among the important learning skills focused in this study are self directed learning, group learning, mastery of cognitive, psychomotor and affective learning aspects, life long learning skill and ICT learning skill. Except for the self directed learning, a large percentage of respondents (as showed in table 3) i.e. more than 80%, agreed that PBL has managed to enhance many of their learning skills.

Table 3
Students' Perception on the Effectiveness of PBL in Developing Motivation and Learning Skills

No.	Statement	Agree	Uncertain	Disagree	Mean	SD
6	PBL provides more opportunities to polish my self directed learning skill	97 (69.3%)	29 (20.7%)	14 (10%)	3.86 High	0.954
7	PBL provides more opportunities to increase my group learning skill	122 (87.2%)	15 (10.7%)	3 (2.1%)	4.24 EH	0.755
8	PBL increases my level of knowledge more compare to lecturing method	114 (81.5%)	22 (15.7%)	3 (2.1%)	4.09 EH	0.727
9	PBL increases my skill of understanding the subject	118 (84.2%)	22 (15.7%)	0	4.06 EH	0.614
10	PBL increases my level of mastering moral values	121 (86.5%)	17 (12.1%)	2 (1.4%)	4.19 EH	0.695
11	PBL encourages me to search for additional learning resources	134 (95.7%)	5 (3.6%)	0 1 missing	4.46 EH	0.568
12	PBL increases my ICT skills to search for more new knowledge	126 (90%)	12 (8.6%)	2 (1.4%)	4.3 EH	0.700
13	PBL increases my confidence in learning	122 (87.1%)	16 (11.4%)	2 (1.4%)	4.22 EH	0.700
14	PBL increases my learning motivation	121 (86.5%)	17 (12.1%)	2 (1.4%)	4.1 EH	0.692

While for the self directed learning skill, majority of the respondents (69.3%) agreed that PBL has also contributed to the improvement of this skill. However, there are some 30.7% respondents were undecided or disagree upon this statement. This fact indicates that there are certain obstacles and difficulties faced by students while developing their self directed learning skill. Susana Jill, a second year Electrical and Electronic Engineering student reflects upon some of the challenges she was facing during the PBL exploration, "As a second year student, a lot of things I had learnt throughout this semester. Most important thing is that I have to be more independent on doing and taking every task given because it was tougher than previous semester...I struggle a lot and had to learnt to present in front of the class members."

In the nutshell, PBL has developed the students' confidence and motivation for learning. This is so obvious as seen from the data in table 3 in which 87.1% (mean score 4.22, extremely high) of the respondents agreed that PBL has increased their confidence for learning and 86.5% (mean score 4.10, extremely high) agreed that PBL has increased their learning motivation. This is also in

line with students reflection on their learning experiences. For instance, Cheng Szi Mian, a first year Technology Management student reflects, "I learnt a lot of knowledge and gained experience not only from the lecturer but mostly from my classmates. I enjoyed this learning process very much." Thanagarajah s/o Ganeson, a first year Civil and Environmental Engineering student reflects on his learning experience, "Overall, I found out that this type of learning is fun and much more relax compare to the traditional lecture. This is my first time experiencing this type of learning and hopefully other subjects could do the same."

Finally, among the most important role of PBL is to develop the student's generic skills, the critical skills required not only during the study period but more importantly after the graduation and joining the workforce. The data in table 4 shows that a large number of respondents agreed that PBL in many ways has enhanced their generic skills. 90% (mean score 4.29, extremely high) of the respondents agreed that PBL has increases their communication skill.

Table 4
Students' Perception on the Effectiveness of PBL in Enhancing Generic Skills

No.	Statement	Agree	Uncertain	Disagree	Mean	SD
15	PBL increases my communication skill	126 (90%)	12 (8.6%)	2 (1.4%)	4.29 EH	0.682
16	PBL increases my team working skill	129 (92.2%)	9 (6.4%)	2 (1.4%)	4.34 EH	0.695
17	PBL increases the feeling of respect and admiration to my self and others	130 (92.9%)	9 (6.4%)	1 (0.7%)	4.32 EH	0.626
18	PBL increases my problem solving skill	122 (87.2%)	18 (12.9%)	0	4.21 EH	0.651
19	PBL increases the level of my thinking skill	128 (91.4%)	8 (5.7%)	(2.1%)	4.32 EH	0.683
20	PBL increases my ability to manage and execute the given tasks	121 (86.4%)	16 (11.4%)	1 (0.7%) 2 missing	4.25 EH	0.681
21	PBL increases my creativity	121 (86.4%)	18 (12.9%)	0 1 missing	4.23 EH	0.663
22	PBL increases my ability to manage the information	123 (87.8%)	16 (11.4%)	0 1 missing	4.22 EH	0.634
23	PBL increases my ability to search for new opportunities of learning	123 (87.8%)	16 (11.4%)	1 (0.7%)	4.29 EH	0.694
24	PBL increases my ability to act wisely	125 (89.3%)	14 (10%)	1 (0.7%)	4.24 EH	0.656

Such of this large percentage were also recorded for other generic skills including team working skill (92.2% - mean score 4.34, extremely high), ethical skills (the feeling of respect and admiration to the self and others - 92.9% (mean score 4.32, extremely high), and the ability to act wisely - 89.3% - mean score 4.24, extremely high), problem solving skill (87.2% - mean score 4.21, extremely high), thinking skill (91.4% - mean score 4.32, extremely high), management skill (86.4% - mean score 4.25, extremely high), creativity (86.4% - mean score 4.23, extremely high), information management skill (87.8% - mean score 4.22, extremely high) and life long learning (the ability to search for new opportunities of learning - 87.8% - mean score 4.29, extremely high). Chong En Kee, a first year Technology Management student has everything to tell us about how PBL managed to enhance his generic skills. He reflects, "Moral studies had taught us to work efficiently in a big group. Every group member need to cooperate so that the task could be accomplished on time. Beside that, we have also improved our communication skills and problem solving skill since we have to communicate with each other and working hard to solve the problems arise in doing

group work. As the task needs us to finish on time, we also develop in us the time management skill. Moreover, creativity and thinking skills were also learnt by most of the group members while participating in group discussion. Our group managed to work together because of the tolerance among each group member."

CONCLUDING COMMENTS

Generally, the subjects taught in humanities studies are among the most critical subjects that should inculcate and enhance humanistic skills among students. Unfortunately, the regular practice of the traditional approach of teaching, namely the lecturing method has weakening the ability of the subjects to mediate the transmission of the humanistic skills. The implementation of PBL will hopefully be able to open the door of great opportunities for the lecturers and teachers to adopt a proper change in teaching and educational methods. PBL which focuses on the process of experiential learning is truly an active and constructive model of learning. This method is highly demanded for today's development in students' learning styles. The students today are more energetic, active and creative particularly those at the tertiary level. Such of these students need more appropriate learning environment so that the knowledge, skills and values can be properly mastered. University students in Malaysia have long been exposed to the rote learning environment in which spoon feeding practice is rampantly practiced by the teachers at primary and secondary schools. They were indeed getting more and more discouraged to have themselves entered the classroom and listening to long and bored lectures. Learning humanities and social studies is more discouraged when the lecturers focus more on the classroom lectures ending up with the meaningless terminologies stored in students' mind. Some students may potentially possess the power of memorization and he or she might be able to perform better in the examination. But the truth is that the students are not in fact mastering the knowledge as it is, he or she may only mastered the meaningless terminologies in which the true meaning lie outside of the classroom lectures. He or she will learn the true meaning of the terminologies when going outside and face the true scenarios of the terminologies being taught. Thus, this needs the lecturers to change their teaching strategies so that the rote learning environment can be transformed into meaningful environment.

REFERENCES

Al-Ghazali (1983). *Pembendung Daripada Kesesatan*. Trans. Abdulfatah Haron Ibrahim. Kuala Lumpur: Dewan Bahasa dan Pustaka.

Anderson, J. A. (1988) 'Cognitive styles and multicultural populations', *Journal of Teacher Education*, 39(1): 2-9.

Ausubel, D.P. (1961). In Defense of Verbal Learning. Education Theory. Vol. 11, pp. 15-25.

Berhannudin M. Salleh, Hussain Othman, Ahmad Esa, Abdullah Sulaiman, Zulida A. Kadir and Hasyamudin Othman (2008). "Problem-based Learning for Effective Mastery of Learning Competencies Among Engineering Undergraduates in Malaysia." Paper presented at United Kingdom-Malaysia Engineering Conference 2008, 14-15 July 2008, University College London, United Kingdom.

Berhannudin M. Salleh, Hussain Othman, Ahmad Esa, Abdullah Sulaiman and Hasyamudin Othman (2007). "Adopting Problem-based Learning in the Teaching of Engineering Undergraduates: A Malaysian Experience", Paper presented at International Conference on Engineering Education, ICEE 2007, 3-7 September, Coimbra, Portugal.

Borzak, L. (ed.) (1981) Field Study. A source book for experiential learning, Beverley Hills: Sage Publications.

Combs, A.W. (1982). Affective education or none at all. Educational Leadership, 39(7), 494-497.

Cross, K.P. (1976). Accent on Learning. San Francisco: Jossey-Bass

Cross, K.P. (1981). Adults as Learners. San Francisco: Jossey-Bass.

Dewey, J. (1933) How We Think, New York: Heath.

- Graaff, E de and A. Kolmos (2003) 'Characteristics of Problem Based Learning', *International Journal of Engineering Education*, 19 (5), pp. 657-662.
- Houle, C. (1980) Continuing Learning in the Professions, San Francisco: Jossey-Bass.
- Hussain Othman (2003). 'Rote Learning and Meaningful Learning: A Survey from Western and Islamic Concepts of Education', *Jurnal Kemanusiaan*, 1 (Oktober): 39-58.
- Hussain Othman, Abdullah Sulaiman, Mohd Zain Mubarak dan Nik Kamal Wan Mohamed (2006). "Pembelajaran Berasaskan Masalah Dalam Bidang Pengajian Kemanusiaan", Paper presented at Seminar Pembangunan Pelajar Peringkat Kebangsaan 2006, anjuran SPACE, UTM, 8-9 Ogos 2006, Hotel Grand Seasons, Kuala Lumpur.
- Hussain Othman, Abdullah Sulaiman dan Berhannudin Mohd Salleh (2007). "Learning Social Skills Through PBL: A Case Study on Engineering Students", Paper presented at International Conference on Engineering Education and Research (iCEER 2007), 2-7 Disember 2007, Victoria University, Melbourne, Australia.
- Hussain Othman (2007). "Experiential Learning in Humanities Study: A Case Study on the Implementation of Problem Based Learning in Tertiary Education Classroom", Paper presented at International PBL Symposium, 7-9 March 2007, Republic Polytechnic, Singapore.
- Hussain Othman, Abdullah Sulaiman, Berhannudin Mohd Salleh and Syed Muhammad Dawilah al-Edrus (2008). "Enhancing Students' Social Interaction and Communication Skills Using Project Oriented Problem Based Learning (POPBL) Approach", paper presented at International Conference on Communication and Media 2008, 15-16 June 2008, Chorus Hotel, Kuala Lumpur.
- Hussain Othman, Abdullah Sulaiman, Berhannudin Mohd Salleh and Syed Muhammad Dawilah al-Edrus (2008). "Sharing the Plight of Flood Victims and Improving Students' Humanistic Skills Through Project Organised Problem Based Learning" paper presented at International SEFI 2008 Conference, 2-5 July, 2008, Aalborg University, Denmark.
- Hussain Othman, Abdullah Sulaiman, Berhannudin Mohd Salleh and Syed Muhammad Dawilah al-Edrus (2008). "Ke Arah Melahirkan Modal Insan Kelas Pertama Melalui Pendekatan Pembelajaran Berasaskan Pengalaman (PBL Dan POPBL) Dalam Subjek Berteraskan Pendidikan Islam Di Peringkat Pengajian Tinggi", paper presented at Wacana Pendidikan Islam Kebangsaan ke 6, Fakulti Pendidikan, Universiti Kebangsaan Malaysia, 9-11 May 2008, Riverside Hotel, Kuching, Sarawak.
- Jarvis, P. (1994) 'Learning', *ICE301 Lifelong Learning*, Unit 1(1), London: YMCA George Williams College.
- Jarvis, P. (1995) Adult and Continuing Education. Theory and practice 2e, London: Routledge.
- Knowles, M. (1975). Self-Directed Learning. Chicago: Follet.
- Knowles, M. (1984). Andragogy in Action. San Francisco: Jossey-Bass.
- Knowles, M. (1984). *The Adult Learner: A Neglected Species* (3rd Ed.). Houston, TX: Gulf Publishing.
- Kolb, A. and Kolb D. A. (2001) *Experiential Learning Theory Bibliography 1971-2001*, Boston, Ma.: McBer and Co, http://trgmcber.haygroup.com/Products/learning/bibliography.htm
- Kolb, D. A. (1976) The Learning Style Inventory: Technical Manual, Boston, Ma.: McBer.
- Kolb, D. A. (1981) 'Learning styles and disciplinary differences'. in A. W. Chickering (ed.) *The Modern American College*, San Francisco: Jossey-Bass.
- Kolb, D. A. (with J. Osland and I. Rubin) (1995a) *Organizational Behavior: An Experiential Approach to Human Behavior in Organizations* 6e, Englewood Cliffs, NJ: Prentice Hall.
- Kolb, D. A. (with J. Osland and I. Rubin) (1995b) *The Organizational Behavior Reader* 6e, Englewood Cliffs, NJ: Prentice Hall.
- Kolb. D. A. and Fry, R. (1975) 'Toward an applied theory of experiential learning;, in C. Cooper (ed.) *Theories of Group Process*, London: John Wiley.
- Patterson, C.H. (1973). *Humanistic Education*. Engelwood Cliffs, NJ: Prentice-Hall.
- Rogers, C.R. & Freiberg, H.J. (1994). *Freedom to Learn* (3rd Ed). Columbus, OH: Merrill/Macmillan.
- Rogers, C.R. (1969). Freedom to Learn. Columbus, OH: Merrill.
- Slavin, Robert. E. (1991). Educational Psychology: Theory into Practice. Boston: Allyn and Bacon.

Schön, D. (1983) *The Reflective Practitioner*, New York: Basic Books Tennant, M. (1997) *Psychology and Adult Learning* 2e, London: Routledge. Valett, R.E. (1977). *Humanistic Education*. St Louis, MO: Mosby.

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