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### **The mastery of generic skills amongst students with the aim to increase the employability: IPTA and IPTS**

Dr. Ahmad Bin Esa  
Faculty of Technical Education  
University of Tun Hussein Onn Malaysia

Nazni Hani Binti Arshad  
Department of Information Technology  
Mukah Polytechnic of Sarawak

Assoc. Prof. Dr Baharom Mohamad  
University of Malaysia Sabah

#### **Abstract**

The purpose of this research is an analysis amongst public higher education institution (IPTA) and private higher education institution (IPTS) students on the mastery level of generic skills in order to increase the employability. The sample of this study is comprised 386 IPTA and IPTS final semester students and two industrial representatives. Quantitative and qualitative methods were used as a research design by using questionnaire and interview as research instruments. The questionnaire data then was analyzed using descriptive statistical analysis while t-test had been conducted to compare generic skills among IPTA and IPTS students. Overall the finding indicated that IPTA and IPTS students had high awareness towards the importance of generic skills. And, the mastery level of generic skills amongst IPTA and IPTS students were also rather high. Nevertheless, the result shows that there are differences on the mastering of the generic skills between IPTA and IPTS students. Hence, with the hope, the results of the research can help the IPTA and IPTS to ensure the mastery of generic skills amongst students can fulfill the needs of the employee in the industry.

Keywords: Generic skills, Public higher education institution, Private higher education institution

#### **1.0 Introduction**

In Malaysia, the importance of life long learning has become an acceptable fact in the contemporary era of the late 1990 and the early of 2000 as the world is faced by the revolution in Information Technology and globalization of markets towards technological changes and the needs for continuously to acquire knowledge and skills to develop individual capacities to compete and to become more prevalent. Therefore, lifelong learning program is very much relevant towards the k-economy in Malaysia. To cater for these needs, generic skills play an important role. Moreover, with the increasing of the percentage of the educated employee up to 35%, this will increase the level of educational employee. According to this prediction, undergraduate will face the problem

of compete to get a job in the 21st century. In a nutshell, it happens to be the jobs offered are less than people who apply; public higher education institution (IPTA) students and private higher education institution (IPTS) students need to compete to get a better job.

Education plays an important role in the development of a country. It determines how countries benefit from globalization where the main characteristic is the emerging of new technologies. IPTA and IPTS are the institutions that produce employees which is educated, with high technical skills and thinking skills in various sectors. Yet, the undergraduate acquisition in the skills is not enough; they need to master the generic skills too. Generic skills are “employability” skills used in the application of knowledge. These skills are not job specific, but are skills which cut horizontally across all industries and vertically across all jobs from entry level to chief executive officer. The degrees to which students develop these skills determine how they solve problems, write reports, function in teams, self-assess and do performance reviews of others, go about learning new knowledge, and manage stress when they have to cope with change.

The limitation of the knowledge and the technical skills in some particular sectors need students’ mastery in generic skills. This is because knowledge that students gained during their studies may not be able to apply in the sector involved. Hence, students have to master the generic skills so that they have the initiative to find and master the new knowledge which needed at the workplace. Consequently, the mastery of the generic skills convince an individual to be relevant and capable to compete in the alter workplace and even the challenging era globalization. Generic skills are very important to those University graduates when they involve themselves in the workplace. Thus, students not only need to work hard to get their degree but they also need to involve themselves in curriculum activities and gain some working experiences. For example, they undergo industrial training in building up the skills to prepare themselves to increase the employability.

## **2.0 Literature Reviews**

Nowadays, graduates’ lacking of generic skills has become a global issue. Generic skills are so much needed in own and foreign country. It is to make sure that the graduates from every institutes own the technical skills and can face any challenges in the alter workplace. According to Cotton (2001), the most things that worried the employer is the graduates do not have the generic skills.

The employers all over the world find out most applicants lack of the generic skills. Meanwhile, it is hard to get employees which master the generic skills. (Mohd Zaki, 2004; Robinson, 2000). Nowadays, most employer focus on the generic skills that graduates master and the knowledge they gained rather than a piece of degree certificate. Employer also emphasize on other skills such as communication skills, team working and problem solving skills. (ACCI, 2002; Graduate Ltd., 2006; Zainudin, *et. al.* 2005). Therefore, employers put the hope on the institutes to focus on the development of generic skills amongst their students. Those undergraduates are hoping to be trained systematically with the knowledge and the skills that needed in the industry to increase the employability.

According to Dawe (2002), when employer needs new staffs, they will look at the performance, personality and employee's attitude. This is because with the experience that the employer had gone through with the employee, the employer found out that value, attitude and personality are the hardest things to change. Hence, the employer believe it is easy to get such employee as they wish for and the knowledge and the skills related to the job can be learned during their work time. According to Kementerian Sumber Manusia (2001) in Zainudin, *et. al.* (2005), the main factor that cause to graduates cannot get a job in the industry is that employer nowadays need employee mastery in generic skills such as personality, self esteem, able to communicate and able to make decision. However, graduates today cannot fulfill the requirements. In Malaysia, the employers' focal point is on graduates' effort to gain for success. The most important asset in workplace or industry in Malaysia are computer skills, communication skills, language acquisition (English, Mandarin, Japanese and Malay Language), Interpersonal skills, flexible, adaptability, analytic, initiative, leadership, self confidence and team working. (Henwood, 2006; Zainudin, *et. al.* 2005)

With the increasing number of graduates, the limitation of jobs cause to the competition between graduates in getting a job. Consequently, one of the IPTA in Malaysia, Universiti Teknologi Malaysia (UTM), works hard to increase the mastery of generic skills amongst their students. UTM did held up a few strategies like, incorporate generic skills in the teaching and learning process; make sure all UTM graduates own a certificate in the short course which teach some useful and related skills; and give some information about knowledge, skills and students' attitudes. This may help an individual in the world of compete to get a good job. Moreover, UTM also integrate some technical skills (communication skill, long life learning, self esteem and ethical or moral) to help students to get them ready to involve in the world of success. (Mohd. Zaki, 2004; Buletin P&P [Versi Elektronik], UTM Jun 2004).

Here, we know that the generic skills are very important in getting a job and to develop the career continuously. Students can easily overcome the challenges in their careers in future. In 2005, there were 59250 graduates from IPTA and IPTS which still jobless, doing part time job or getting a job which is not related to the qualification or their profession. (Abdul Rahman, 2006) Either IPTA or IPTS, there is a need for them to make sure graduates are well prepared in academic aspect or attitudes. For example, graduates from IT (information technology) or Science Computer in IPTA did not have the interpersonal skill or communication skill, entrepreneurial skill, and expert in arrangement. (Mohd Feroz, 2003) Universities need to complete their program with the needs of career so that students can compete in the workplace. (Mohd Izani, 2006)

From the workable aspect, graduates from IPTS fulfill the requirements especially the development of technology, the mastery of skills and knowledge to make sure the fresh graduates can compete in the world of competition. (Mohd Shukri, 2006) Meanwhile, Kori Ariff (2006) and Syuhada Choo Abdullah (2006) said that IPTA graduates need to equip themselves with the skills that needed by the employer. Thus, graduates need to emphasize on the generic skill. On behalf of that, the research is aim to:

- a) identify the awareness level of IPTA and IPTS students towards the importance of generic skill;
- b) identify the mastery level on generic skill amongst IPTA and IPTS students;
- c) identify the difference on mastery of generic skill between IPTA and IPTS students;

- d) spot the relevant between generic skill that employer need in the industry and the generic skill that master by the IPTA and IPTS students.

### 3.0 Research Methodology

This research was carrying out by using the descriptive analysis in order to explain about the phenomena on the mastery of generic skill amongst IPTA and IPTS students. To obtain a data, 386 final semester students from IPTA and IPTS had completed the questionnaire and two representatives from the industry had been interviewed by using semi-structured questions. The entire respondent had been selected randomly.

Questionnaire contains nine items which means to identify the students' awareness of generic skills (Section A) and 102 items were developed to determine students' generic skills (Section B). Since in this research, the variables for generic skill were too many, factor analysis method was used to group the independent variables in order to present the dependent variables (Barbara and Fidell, 2001). Besides, the reliability of the questionnaire was tested by internal consistency method.

To achieve this purpose, pilot test had been carried out by involving 33 final semester students (39.4% male and 60.6% female) enrolled in certain higher education institute at South Peninsular of Malaysia. Factor analysis was grouped up to 16 types of skills. There are leadership skills; management skills; ability to make decision; communication skills; ability to make interpretation; assessment skills; interpersonal skills; problem solving skills; initiatives ability; professional ethical and moral; ability to communicate in Malay language; teamwork skills; ability to manipulate a self-potential; ability to make an arrangement; ability to communicate in English language; and Entrepreneurship skills. The *alpha Cronbach* values is 0.799 and 0.984 for Section A and Section B respectively.

### 4.0 Findings

#### 4.1 The level of students' awareness towards the importance of generic skills

According to Table 1, the mean score for the awareness level for IPTA1 is  $M = 4.54$ ,  $SD = 0.327$  and for IPTA2 is  $M = 4.48$ ,  $SD = 0.420$  respectively. While students from IPTS1 and IPTS2 is  $M = 4.27$ ,  $SD = 0.545$  and  $M = 4.60$ ,  $SD = 0.350$  respectively. According to Lendell (1997) the mean score at these levels is high. This finding seems to be precise since the value of the standard deviation is below 1 and can be explained that the response towards the items is focus to the agreed scale.

**Table1:** Mean score for the awareness level towards importance of the generic skill

No	Item (skills)	IPTA1		IPTA2		IPTS1		IPTS2	
		M	SD	M	SD	M	SD	M	SD
1	Communication	4.88	0.327	4.68	0.584	4.62	0.622	4.75	0.437

2	Problem Solving	4.62	0.488	4.56	0.556	4.41	0.627	4.55	0.619
3	Management	4.58	0.496	4.42	0.572	4.22	0.717	4.57	0.540
4	Entrepreneurship	4.16	0.545	4.04	0.680	3.77	0.691	4.26	0.917
5	Team Working	4.45	0.520	4.49	0.703	4.27	0.805	4.75	0.437
6	Leadership	4.45	0.557	4.38	0.749	4.08	0.859	4.35	0.822
7	Decision Making	4.67	0.514	4.65	0.500	4.42	0.708	4.71	0.454
8	Interpersonal	4.48	0.559	4.47	0.611	4.24	0.725	4.71	0.478
9	Arrangement Making	4.54	0.501	4.66	0.497	4.39	0.689	4.68	0.469
<b>Total Score</b>		<b>4.54</b>	<b>0.327</b>	<b>4.48</b>	<b>0.420</b>	<b>4.27</b>	<b>0.545</b>	<b>4.60</b>	<b>0.350</b>

Note: M = mean; SD = Standard Deviation

## 4.2 Mastery Level on generic skill amongst IPTA and IPTS students

The mean score for all institutes is not too varying in terms of mastery level on generic skill. Among of the concerned higher education institutions, IPTA1 records the highest of the mastery level on generic skills ( $M = 4.29$ ,  $SD = 0.358$ ). On the contrary the lowest is IPTS1 ( $M = 3.99$ ,  $SD = 0.396$ ). However, in whole, students from both IPTA and IPTS reported to have a good generic skill. These can be observed by the value of standard deviation is less than 1 shows that the response for each skills is focus to the agreed scale (see Table 2).

**Table 2:** Mean score for generic skills which recognise in higher education institutes

No.	Skills	IPTA1		IPTA2		IPTS1		IPTS2	
		M	SD	M	SD	M	SD	M	SD
1	Leadership	4.35	0.372	4.26	0.482	3.94	0.539	4.24	0.440
2	Management	4.25	0.466	4.15	0.505	3.89	0.538	4.15	0.537
3	Making decision	4.35	0.444	4.29	0.530	4.13	0.483	4.25	0.487
4	Communication	4.48	0.473	4.45	0.532	4.27	0.502	4.31	0.575
5	Interpretation	4.03	0.525	4.02	0.657	3.55	0.736	3.73	0.676
6	Assessment	4.31	0.424	4.15	0.605	3.96	0.684	4.22	0.577
7	Interpersonal	4.51	0.442	4.36	0.506	4.25	0.531	4.40	0.490
8	Problem Solving	4.30	0.473	4.25	0.590	3.92	0.560	4.17	0.553
9	Initiative	4.14	0.551	4.17	0.594	3.89	0.588	4.01	0.541
10	Professional ethical and moral	3.95	0.521	3.93	0.556	3.71	0.497	3.97	0.569
11	Using of Malay Language	4.30	0.729	4.49	0.592	3.69	0.969	4.45	0.612
12	Team Working	4.35	0.491	4.31	0.552	4.06	0.534	4.30	0.526
13	Self esteem	4.45	0.526	4.39	0.581	4.27	0.629	4.27	0.626

14	Making Arrangement	4.22	0.604	4.13	0.654	3.77	0.798	4.21	0.715
15	Using of English language	4.47	0.594	4.43	0.600	4.48	0.548	4.26	0.660
16	Entrepreneur	4.19	0.594	4.12	0.595	4.01	0.617	4.10	0.655
<b>Total Score</b>		4.29	0.358	4.24	0.406	3.99	0.396	4.19	0.408

Note: M = mean; SD = Standard Deviation

#### 4.3 The difference in mastery on generic skill amongst IPTA and IPTS students.

T-test was conducted to identify the difference of the generic skills amongst IPTA and IPTS students. There were differences on generic skills amongst IPTA and IPTS students in almost all of domains of skill (see Table 3). By considering the significance level at 0.05, findings shows that IPTA and IPTS students did not show any difference in entrepreneur skill; professional ethical and moral; and ability to communicate in English language. In a nut shell, the value for mean for each skilled domain show those IPTA students are more expert in generic skill than IPTS students.

**Table 3:** T-test for mastery on generic skill amongst IPTA and IPTS students

No. Item	Skills	IPTA	IPTS	Sig. (2-tailed)
		Mean Score	Mean Score	
1	Leadership	4.31	4.09	0.000
2	Management	4.20	4.02	0.001
3	Making decision	4.32	4.19	0.007
4	Communication	4.47	4.29	0.001
5	Interpretation	4.03	3.64	0.000
6	Assessment	4.23	4.09	0.018
7	Interpersonal	4.44	4.32	0.024
8	Problem Solving	4.27	4.05	0.000
9	Initiative	4.16	3.95	0.000
10	Professional ethical and moral	3.94	3.84	0.060
11	Communicate in Malay Language	4.39	4.06	0.000
12	Team working	4.33	4.17	0.005
13	Self esteem	4.42	4.27	0.013
14	Making arrangement	4.17	3.99	0.011
15	Communicate in English language	4.45	4.37	0.231
16	Entrepreneur	4.16	4.05	0.098
<b>Total Score</b>		<b>4.27</b>	<b>4.09</b>	<b>0.000</b>

#### **4.4 The relevant between the needs of generic skills by the employer in the industry with the mastery of generic skill amongst IPTA and IPTS students.**

Interview was carried out to find several generic skills needed in job market. Two representatives from oil and gas background firm were chosen as respondent. On the whole, both of them have the same opinion of the essential of generic skills. From first representative (R1), she agreed that generic skills are important like academic achievement and had been a crucial requirement to entering in a job market:

*R1 : Degree is just a starting point, as a passport for you to get employed but generic skill is a supporting towards for you to be in the organization and to survive in organization...in interview structure, we doesn't look at the (academic) qualification but what we will consider is the skills and quality of the graduates.*

Meanwhile, second respondent (R2) tended to insist on the worker's capability to communicate in English language. According to him, graduate cannot communicate properly especially during some undergo presentation. In multinational industrial field, workers need to develop skills continuously. For that purpose, the way of how the skills are gain is via communication to approach the information, technology, administration and management, in globalize condition.

*R2: Workers have a good result in English Language in Sijil Pelajaran Malaysia but they are not perform well when asked to do a presentation...(Communicate in English) are important to develop a skill, either in management skill or whatever skills in industrial field to do the job.*

To identify the generic skills that required by employee, the interviewee was asked to list the vital generic skills which needed. R1 clarified the communication skills, interpersonal skills and self-confidence are skills that needed in industry and it should be compliment to any technical skills:

Similar with R1, R2 also adds the sensible to manipulate the self-potential as fundamental skills for new workers to assimilate themselves into uncertain situation of jobs market:

*R2: Communication perspective is important. But sometimes they good during communicate with others rather than doing well in their jobs. As instance, we have a bashful worker before. He can't elaborate information briefly. After seven month we train him then he change and can perform a jobs with confidence.*

Consistent with the interviews, IPTA and IPTS students should alert about the importance of generic skills to suite themselves at the workplace other than focus on the knowledge they gain in the institutes. Besides, the research also show those students from IPTA and IPTS had mastered a few generic skills during their studies in the institutes. From the 16 generic skills listed, the four top skills that master by students are communication skills, communicate in English, interpersonal skills and self esteem. The four skills above are the focal points of the industry according to the 2 representative from the employment in industry. During the interview, both representative also agreed that the generic skills are very important for either the IPTA or IPTS students to suite themselves in the workplace.

## 5.0 Discussions

This study was aim to seek out the student's awareness and the mastery level of generic skills. While the secondary purpose of this study is to identify is there are dissimilarities of generic skills between IPTA and IPTS students. We also try to discover either the generic skills mastered by students had fulfill to the requirement of the employer.

Collectively we had found that student had positive awareness towards the needs of generic skills. Roughly most students realize that communication skill is an essential. At least it can be a good sign for educators to plan their teaching and learning process in order to encourage communication skills. They could insists student centered-learning such as discussion, debating, presentation and others learning methods that creating a personality. Even though entrepreneurship had lowest attention from students, but they are somehow agreed about the important of generic skills in their life. Perhaps social entrepreneurship courses in higher education should be taught more clearly on knowledge and realistic. In industrial field, workers especially management level must be skilled in selling, marketing and trading because they often known as profit-oriented firm. Hence, there are always challenges in the field in various ways. In any case, they can survive to ensure the persistence of live by using the skills that they learn in such courses.

The polemic mentioned that a higher education graduates nowadays recognized as passive rather than being proactive workers can be argued. Our finding shows students tend to look themselves completed with generic skills. In learning environment at higher education, students mostly do an academic administration by themselves. From academic registrations to financial, they ought to manage by seeking a right person, asking, solving problems, making a decision and struggling in order to be a contemporary student with their colleagues. This scenario indirectly can improve their generic skills. The high distributed score of our data also can be interpreted that student have blended skills. To being a proactive graduate we believe it is depend on how students can manipulates their skills. For instance, representatives from industrial field are tending to have fluency workers. This probably will be an obstacle for several graduates that do not have such capability. Instead they can learn to be skilful in communication by assimilating other skills like interpersonal skills, initiative skills and team working towards their working environment.

We also found that there is difference in mastery of generic skills between IPTA and IPTS students. It is interesting that generic skills amongst IPTA students are better than those students enrolled in IPTS. Although the reason is unclear for this dichotomy, this finding explains graduates from IPTA may be having more quality to enter jobs market. Yet this study also shows both higher educations provide skills of entrepreneurship, communication in English, and professional ethical and moral. IPTS should do something for boosting up student's acceptance towards generic skills along technical skills.

In order to enter globalize and rapidly-changes of jobs market, graduates may have slightly no difficulties. Initially students realize several generic skills are being a key to get a job. We can presume while they aware about such matters, they referred themselves as a focal point in terms of future workers. Thus the possibilities to raise their attitudes towards generic skills can be made up. Furthermore, it is found that the skills



mastered by students - communication skills, ability to communicate in English, interpersonal skills and self esteem – are similar to industrial field requirements. In other words, student's capabilities and the needs of employer are congruent in terms of generic skills.

Nevertheless our findings should be accepted with cautious. The students' generic skills were simply identified by using a cross-sectional survey. In reality, our findings may not parallel with actual students generic skills. However it is sufficient to use these findings as an indicator for education institutions to provide relevant workers into crucial working environment. Perhaps in other researches an appropriate assessment may be conducted with the intention of determining actual students' generic skills.

## **6.0 Conclusion**

Generic skills play a very important role in a workplace. It is a significant depth for students or an individual to face the challenge in future from time to time. An individual who master the skills will be an innovative and flexible individual in consistent to the needs of human resource. In fact, education is going to be an underpinning core in increasing students' mastery of generic skills to provide professional workers.

The understanding of human personality is able to form up generic skills. The education and economy community should be integrated to fulfill the needs of human resource in jobs market. Thus, with the hope that the findings of this research can help IPTA and IPTS to make sure the generic skills that mastered by students are the needs by employer in industry.

## **References**

- Abdul Rahman Maiden (2002). "Pembentukan graduan kukuh pasaran terbuka". Kertas kerja di "Seminar Antara Sektor dan Institusi Pengajian Tinggi Awam." 6 August 2002 di Hotel Equatorial, Bangi. Unpublished.
- Abdul Rahman Sulaiman (2006). "Meniti Arus: Data lengkap atasi segera pengangguran (11 Oktober 2005)" : National Economic Malaysian Council.
- Abdul Rashid dan Abdul Aziz (1999). "Pengurusan Projek: Perspektif Industri Pembinaan." Pulau Pinang: Universiti Sains Malaysia. P. 8-102
- Ahmad Atory (1996). "Pengurusan Organisasi." Kuala Lumpur: Utusan Publications & Distributors Sdn. Bhd. P. 157-177.
- Ahmad Esa (2007). "Penerapan Kemahiran Generik Menerusi Kokurikulum Di Politeknik Bagi Memenuhi Keperluan Industri di Malaysia". KUiTTHO: Thesis KUiTTHO.
- Ahmad Esa, Jailani Mohd. Yunus, and Noraini Kaprawi (2005). "Kebolehpercayaan Inventori Kemahiran Generik." *Jurnal Sains Sosial : Kolej Universiti Teknologi Tun Hussein Onn*. Vol I. 1 P. 41-57.
- Ahmad Esa, Jailani Mohd. Yunus, and Noraini Kaprawi (2004). "Peranan Kokurikulum dalam Pembangunan Kemahiran Generik." *Jurnal Sains Sosial : Kolej Universiti Teknologi Tun Hussein Onn*. Vol. 1. P. 81- 94.

- Ahmad Esa, Jailani Mohd. Yunus, and Noraini Kaprawi (2001). "Memenuhi Keperluan Pihak Pengurusan Klang Terhadap Graduan ITTHO Dalam Aspek Kemahiran Teknikal: Satu Kajian Kes Di Zon Perindustrian Batu Pahat." Universiti Teknologi Malaysia: Penyelidikan Jangka Pendek.
- Australian Chamber of Commerce and Industry (ACCI) (2002). Employability Skills-an Employers' Perspective.  
<http://www.actchamber.com.au/PDF/EmployabilitySkillsOverview.pdf>. Retrieved on 14 March 2006.
- Barbara, G. Dan Fidell, S. L. ( 2001). "Using Multivariate Statistics." Boston : Allyn and Bacon.
- Buletin P&P [Electronic Version], 1 Edition. ( Jun 2004). "Pembinaan Atribut Graduan dan Penerapan Kemahiran Generik Di Kalangan Pelajar UTM." Universiti Teknologi Malaysia : Centre for Teaching and Learning.
- Cascio, W.F. (1995). "Managing Human Resources." New York:McGraw-Hill, Inc..
- Chua Yan Piaw (2006). "Asas statistik penyelidikan". Kuala Lumpur: McGraw Hill (M).
- Commonwealth Department of Education Science & Training (2002). "Employability Skills for the Future."  
[http://www.acci.asn.au/text\\_files/reports/Employability\\_Skills.pdf](http://www.acci.asn.au/text_files/reports/Employability_Skills.pdf). Retrieved on 14 March 2006.
- Cotton, K. (2001). "Developing Employability Skills." School Improvement Research Series : Northwest Regional Educational Laboratory.
- Gibb, J. and Curtin, P. (2004). "Overview : Generic Skills : Research Readings." Kensington Park: National Centre for Vocational Education Research (NCVER) Ltd..
- Henwood, R. (2006). "Careers In Malaysia."  
[http://www.asia.hobsons.com/regional\\_outlook/careers\\_in\\_malaysia](http://www.asia.hobsons.com/regional_outlook/careers_in_malaysia). Retrieved on 14 March 2006.
- Kementerian Pengajian Tinggi (2006). "Garis Panduan Modul Pembangunan Insan (Soft Skills) Untuk Institusi Pengajian Tinggi Malaysia."
- Kerajaan Malaysia (2001). "Rangka Rancangan Jangka Panjang Ketiga 2001 – 2010." Kuala Lumpur : Percetakan Nasional.
- Kori Ariff (2006). "IPTS Tidak Lebih Baik Berbanding IPTA." Kementerian Pengajian Tinggi.
- Kwok, M. (2004). "Disciplinary Differences in the Development of Employability Skills of Recent University Graduates in Manitoba : Some Initial Findings." *Higher Education Perspectives*, 5(1), ms. 60-77.

- Lendell, K. (1997). "Management by Menu." London : Wiley and Sons Inco.
- Mohd Feroz Abu Bakar (2003). "Kualiti Graduan IT Tidak Tepati Kehendak Industri." Berita Harian, 14 June 2003.
- Mohd Izani Mohd Zain (2006). "Membina Mahasiswa Berkelas Dunia." Dewan Masyarakat, February 2006.
- Mohd Shukri Ab Yajid (2006). "Untung IPTS Cuma Tampung Operasi: Pasaran Pekerjaan Bagi Graduan Lebih Besar berbanding Calon IPTA." Berita Harian, 28 August 2006.
- Mohd. .Zaki Kamsah (2004). "Developing Generic Skills in Classroom Environment : Engineering Students' Perspective." Centre for Teaching and Learning Universiti Teknologi Malaysia.
- Raihanah Khudri, Halmi Samad dan Syura Radin Shamsuddin (2006). "Kemahiran Insaniah Tingkatkan Nilai Pasaran Graduan." Sisipan Khas Kementerian Pengajian Tinggi, Utusan Malaysia, 23 Disember 2006.
- Robinson, J. P. (2000). "The Workplace." *Alabama Cooperative Extension System*. v1(3).
- Syuhada Choo Abdullah (2006). "100,000 Jalani Penilaian KI : Pelajar IPTA Perlu Mengikuti Program Pelengkap Sebelum Tamat Pengajian." Berita Harian, 23 Ogos 2006.
- Uma Sekaran. (2003). "Research Methods for Business." United States of America : John Wiley & Sons.
- Zainudin Hassan, Mohd Anuar Abdul Rahman, Mohd. Najib Abdul Ghaffar and Kamariah Zakaria (2005). "Penerapan kemahiran generik dalam pengajaran kejuruteraan di Sekolah Menengah Teknik di Terengganu. Johor : Universiti Teknologi Malaysia.

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Ahmad Esa (Ph.D) – Contact Person  
Head of Department  
Profesionalism Department  
Faculty of Technical Education  
Universiti Tun Hussein Onn Malaysia  
Tel: (6)074538206  
Fax:(6)074541050  
[ahmad@uthm.edu.my](mailto:ahmad@uthm.edu.my)

Nazni Hani Binti Arshad  
Department of Information Technology  
Mukah Polytechnic of Sarawak

Assoc. Prof. Dr Baharom Mohamad  
University of Malaysia Sabah