Developing Soft Skill in Malaysian Polytechnics

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Abstract

This paper describes a study of lecturer’s feedback on Malaysian polytechnics Industrial Training Soft Skills (ITSS) module. It was conducted using a survey questionnaire, with a 92% response rate (N=46) in four polytechnics in the northern region of Malaysia. Majority of respondents are female (65.2%), 62% of them came from engineering backgrounds, and have been involved in teaching soft skills for more than two semesters (82.6%). The soft skills elements studied were mainly based on the eight elements in the ITSS module: Decision Making, Team Work, Problem Solving, Learning and Interpersonal, Communication, Time Management, Leadership and Report Writing. This study found that polytechnic students have demonstrated these skills in the class environment (mean score above 4). The most highly rated skills were ‘team work’ skill and the least satisfied was ‘decision making’. The lecturers appreciated the importance of soft skills elements structured in the module with mean score recorded above five. Students are considered to be team players equally as much as having good leadership skills. However, ‘team work’ skills were less highly rated by lecturers than communication skills, unlike what has been reported in the literature. Skills like decision making, time management and report writing are seen as the critical areas that need attention. The findings are useful as reflective tools on ITSS curriculum design and delivery for the polytechnic education system in Malaysia in preparation of students for industrial training and employment.

Introduction

In Malaysia the institutions of higher learning, employers, and professional bodies have shared the view that there is a need to develop a workforce that is highly skilled and ready to face the challenges of increased global competition. More than ever, Malaysia needs a workforce that is responsive to economic, social, cultural, technical and environmental changes with employees who can work flexibly and intelligently across business contexts. However, to be able to work effectively in the workplace means more than just having the necessary technical skills, it requires the ability to apply a broad range of soft skills learned in many contexts and through a range of experiences. Institutions of higher learning undoubtedly want to produce graduates with skills that are highly regarded by employers and able to contribute to the country’s prosperity and social capital. Accordingly, the Industrial Training Soft Skills (ITSS) module was developed for Malaysian polytechnic students in order to enable them to meet the challenges of the world of work.
Skills Gap and Role of Institutions of Higher Learning

Malaysian industries are facing the challenges of changing economy, globalization and the increasing role played by the service industry. Consequently, in order for business to be successful, employees not only need to have technical knowledge and skills but also possess soft skills. The failure to fulfil this requirement has been identified as one of the causes of the skills gap amongst graduates, and the problem needs to be addressed seriously (Bradshaw, 1989; Keep & Mayhew, 1999a, 1999b; Lange, 2000; Stasz & Ramsey, 1996). According to Hasbullah and Sulaiman (2002) the acquisition of technical skills may improve the employee’s employment prospects but these skills alone are unable to sustain them through changing economic conditions, customer demands, technical innovations, productivity improvements and the like. The mastery in soft skills has been gradually increased in the Malaysia current employability particularly amongst graduates. As mentioned by the Executive Director of Malaysian Employers Federation (MEF), the increase in the number of unemployed graduates is mainly because many who arrive at the job market are poorly-skilled for a changing economy (The NST, March 20, 2005"Opinion: The Unemployable Malaysian Graduate."). More importantly, beside lacking in technical skills, employers commented that graduates who entered the job market today are lacking in soft skills (Woo, 2006). Ideally future employees should therefore equip themselves with soft skills to secure employment.

Therefore, higher education has a vital role in imparting soft skills to students. They need to place greater emphasis on preparing graduates for the demands of industry (Martin, Milne-Home, Barrett, Spalding, & Jones, 2000). However, these institutions can only provide soft skills settings that are limited and confined to simulated environments, and the students might not be able to learn the real skills required. Hence, a missing link or ‘skills gap’ exists (Askov & Gordon, 1999; Atkins, 1999; Evers, Rush, & Berdrow, 1998; Kivinen & Silvennoinen, 2002; Morley, 2001; Robinson, 2000; Shivpuri & Kim, 2004), and this can only be rectified and established through actual experience. The ‘skills gap’ is the most glaring weakness among the graduates as they are not equipped with the necessary soft skills. The employers feel that higher education has failed by not adequately developing the soft skills of graduates (Daggett, 2006; Evers, et al., 1998). Therefore, more emphasis should be placed on equipping graduates with soft skills across contexts.

The Need for Soft Skills

The students’ technical skills will have little value if their soft skills are poor. No matter what technical knowledge the students learn, without the ability to convey it to potential employers, their knowledge and skills may go undiscovered and unused.
According to Gregson & Bettis (1991), technical skills unlike soft skills, do not easily lead to recognition, promotion and other opportunities. Termination in employment and failure in promotion amongst employees were always caused by human behaviours that usually reflected from inadequate work value or poor attitude rather than because of deficiencies in job skills or technical knowledge. In other words, lack of soft skills is more likely to get an individual’s employment terminated than lack of cognitive or technological skills.

In recent years, there has been increasing focus on the importance for the institutions of higher learning to better prepare students for employment (Dunne & Rawlins, 2000; Keep & Mayhew, 1999b; Ministry of Higher Education Malaysia, 2005; Ong, Sharma, & Heskin, 2003). The academic world, however, is adapting slowly even though it is aware of the importance of soft skills (Coll, Zegwaard, & Hodges, 2002; Evers, et al., 1998; Lange, 2000; Verney, Holoviak, & Winter, 2009). What is happening now is many students are equipped with the latest technical certifications and solid work experience but lack the non-technical skills (Kamsah, 2006). While graduating students may enhance their employability by obtaining an extra degree or certificates, they may not realize on the payoff in acquiring soft skills until after graduating (Brown, Hesketh, & Williams, 2003). According to Brown et al. (2003), employers are likely to maintain the view that graduates are not being properly prepared for jobs in the industries. The graduating students should therefore enhance their soft skills in order to be more marketable.

**Soft Skills in Institutions of Higher Learning**

The conceptualisation of soft skills in higher education has seen a number of definitions and interpretations (Bennett, Dunne, & Carre', 2000; Drummond, Nixon, & Wiltshire, 1998). A number of terms are used to describe characteristics that people should develop and demonstrate through education and training. They are variously referred to as skills, competencies, qualities, or attributes. Perhaps because of this lack of conceptual clarity, the terms have been used interchangeably with many other terms such as essential skill, general skills and core skills to name three examples. As a consequence, different stakeholders can be using the same language but not necessarily sharing the same understanding or mindset. Soft skills have been defined as those common to more than one occupation or field of knowledge (Golding, Marginson, & Pascoe, 1996). Bennett et al. (2000) defined ‘soft skills’ as those skills which can support study in any discipline and also skills that have the potential to be transferred to a range of contexts, education and workplace. The definition emphasises that soft skills are common skills which can be applied in any kind of environment. They further describe these skills as not industry specific, but useful in different contexts in the workplace, further study, and adult life in general. In minimizing the scope of soft skills, this study will be using the term soft skills and referred it as non-technical skills necessary for an individual to develop their fullest potential in an area of study, context or workplace.
Soft skills are something beyond just classroom skills, they should be applied at all times. Most educators believe that by gearing their teaching to the context of real-world situation, the students will be able to transfer the skills learnt to the workplace (Bettina, 2002). This includes how to practice and demonstrate them across a variety of settings. However, according to Bettina, the students’ contextual learning should be well monitored to ensure their optimum learning outcome and the real challenge lies in finding the way to do it effectively. Guile (2002), for example stated that one of the reasons why learning opportunities are not distributed equally is due to the differences in workplace experiences. Hence, “work experience often ended up affirming the idea that its main purpose is to assist young people to learn how to reproduce pre-existing activities” (pp. 268-269). Another source of monitoring the effective learning context is by acquiring information from the industry. According to Kivinen & Silvennoinen (2002) higher education should develop a relationship with industrial personnel to determine what skills employers are seeking in graduates. In addition, graduates need to be more creative and sociable in the workforce (Brown, Hesketh, & Williams, 2003). Therefore, the need exists for higher education institutions to explore ways which can assist graduates to be better prepared for the world of work before they leave the institutions.

Institutions of higher learning can assist in this preparation by incorporating soft skills into the curriculum. Indeed, the call to incorporate soft skills into the curriculum has been seriously pursued by the Ministry of Higher Education (MOHE) for the past two years (Ministry of Higher Education Malaysia, 2005). The institutions of higher learning have been urged to review the curriculum to ensure graduates are equipped with skills and knowledge required by industry and employers. The soft skill subjects such as communication, problem-solving and language skills (especially English), have been introduced into institutions of higher learning (Shah, 2008). In the year 2006, apart from government policy, the demand from the industrial sector was one of the reasons that led to the implementation of the soft skills module in polytechnic education. As a consequence, the soft skills module has been included in the curriculum as part of the industrial training program as this program will offer the appropriate training ground for students to practice the skills learnt immediately.

**Industrial Training**

Industrial training or internship or job training (this study will be use the term “industrial training”) can assist in bridging the gap that exists between education and employment. It has become a recognised method for developing the carrier potential of students and making education more relevant (Hymon-Parker & Smith, 1998). Industrial training presents the student with an opportunity to gain invaluable experience. Classroom learning alone is no longer sufficient to adequately prepare students for the demands of industry. The right training can be the key to a great job because it gives the student a change to take on real responsibilities while working side-by-side with professionals. According to Dennis (1996, as cited in Verney, Holoviak, & Winter, 2009), “internships can help expand upon immediate skills that can improve course performance, such as better time management and communication skills, better self-discipline, heightened initiative and an overall better
self-concept”. These skills can’t be properly developed if it is just from classroom learning. Students will have the opportunity to personally experience the real working culture besides helping them to sharpen their job skills. Mihail (2006) asserted that industrial training can instil the real work values, gain direct access to job sources, impress potential employers and assist in making wise career choices, all of which can help to improve future job opportunities. Hence, in order to compete and survive in the challenging and competitive working environment, students must develop their work skills, both hard and soft through real work experience.

This real work experience has been employed by the polytechnic education system in developing soft skills in students. The real job setting is expected to enhance student’s soft skills effectively. Research also suggested that the development of any skill is best facilitated by giving students practice and not by simply talking about it or demonstrating how to do it (D.R. Woods, et al., 1997 as cited in Kamsah, 2006). A study by Cook, Parker and Pettijohn (2004) has shown that industrial training has improved the general ability to get along with people in work situations, increased confidence level and influenced the future career of the graduates. Industrial training provides real life settings and business environment. Hence, several other non-content related factors that can affect the success in the workplace should be accommodated by using real life training and settings (Hymon-Parker & Smith, 1998; J.Cook, Parker, & Pettijohn, 2004). Therefore, the industrial training can be a better platform for students to practice and apply the theory of soft skills. It can also be a training ground for students before entering the employment market.

Industrial training gives students the opportunity to examine career possibilities in a realistic and ‘real world’ environment and to explore a possible fit with a particular agency (Kapoor, 2000; Waryszak, 1999 as cited in Beggs, Ross, & Goodwin, 2008). It is a very valuable opportunity to acquire and experience a real life setting given the specific detailed knowledge required in today’s workplace (Busby, 2003). According to Crossley, Jamieson & Brayley (2007), industrial training is “an opportunity to have an intensive, work-based exposure to a broad range of operations within a company”(p.312). Employers nowadays value the experiences that graduates are likely to bring into their employment such as prior work experience, contribution or participation in university events, research work, co-curricular activities and internship or industrial training (Jusoh, Razak, & Chong, 2007).

Industrial training is a valuable experience for the student and employer, as well as the institutions of higher learning. It has been described as "mutually beneficial to both students and organizations" (Taylor D., 1999 as cited in Ross & Elechi, 2002). It is not a novel concept, as it has been a skill acquisition method for many occupations since medieval times (Ross & Elechi, 2002). As for the institutions, they can benefit from industrial training by strengthening the connection with industries. The strengths and weaknesses of the institutions, particularly in the curriculum for practical work, can be tested and improved continuously. Industrial training according to Allen (2004) can be considered as a performance measure and as such is thought to be more valid than traditional paper and pencil tests in classrooms. Indeed, industrial training can be a very effective assessment vehicle in evaluating the quality of academic
product. Usually if employers are satisfied student or graduate performance, it is generally assumed that the institution’s curriculum has met or even surpassed the employers’ needs (Verney, et al., 2009). Collective feedback obtained from these evaluations can also be used to revise the curriculum in order to improve student performance and meet employers’ needs and expectations in the future. Issues such as the lack of practical application as commented by the employers can be minimized and the students can develop various applied workplace skills for transition from the classroom to the world of work. Peacock & Ladkin (2002), in their study, have shown that one of the ways for educators to ensure they are providing the right skills for their students is through industry’s involvement in course design. Therefore, development of soft skills with the participation of industry is projected to be more effective.

**Polytechnics’ Industrial Training Soft Skill Module**

There are no specific skills listed as “soft skills” in the Malaysian higher education context (Shakir, 2009). However, a framework of how to develop soft skills has been developed by the Ministry of Higher Education as a guideline for all institutions of higher learning. Hence, all institutions can adopt and, at the same time, develop their own soft skills elements which may vary from institution to institution or even within the faculties of one institution. The Industrial Training Soft Skills (ITSS) module was designed for polytechnics with the aim of developing soft skills in students prior to industrial training. Soft skills in this study has been refers to as skills which cut horizontally across all industries and vertically across all jobs and as a minimal proficiency required to successfully functioning in practical training or one's career field based on the elements in the ITSS module (adapted from Cotton, 2001). It was developed by the Curriculum Division of the Ministry with the cooperation of Polytechnics’ Industrial Training Unit. Feedback from industries collected during the students’ industrial training program has been used as a foundation in designing the ITSS module. The ITSS module consists of elements such as positive personality, communication skills, work etiquette, work exposure and report writing. It is offered in the context of preparing polytechnics students for industrial training and employment and was officially launched by the Minister of Higher Education on 23rd September 2006.

The ITSS module has been designed as a stand-alone module to be carried out in semester two and three for certificates and diploma students respectively. All students must enrol in the module prior to industrial training. This module is allocated with one hour credit and students are not allowed to enrol in industrial training without going through the module. During their industrial training the students are evaluated by their employers and polytechnics lecturers. Besides monitoring the students’ progress in the industrial training program, polytechnics lecturers will also received feedback and suggestions from the training companies. Hence, the skills identified are expected to be broadly consistent across all industrial sectors and applicable to both entry level and established employees working at all levels in the organization. However, it is expected that there will be differences in priorities for different job roles and different levels of complexity for different skills.
The Implementation of ITSS Module

The module incorporates a mixture of theory and practice through class activities and project assignments. Industrial training which commences after the completion of the module will be the real-world context for students in applying the soft skills learnt. As a stand-alone module, students are exposed to theoretically underpinnings of soft skills prior to their practical training, through a variety of teaching and learning methods. Students are taught to carry out tasks and solve problems both through class activities and in real situations. This will assist the students to understand and apply the knowledge and skills to different conditions. Classroom activities and projects are designed to challenge the students to use their new skills. Students are given problem-solving tasks which provide them with the opportunities to apply their skills, evaluate solutions, and adapt outcomes to new problems. These tasks are sequenced to guide the students through successful learning of increasingly complex and difficult skills and knowledge. The activities designed are expected to develop soft skills amongst the students and it is also to ensure that polytechnics’ students are able to fulfil the needs of industry. It is hoped that what has been taught in class will have to be at par (if not the same) with industry expectations. Hence, upon completing the module the students will be emplaced in various industries for practical training or internship. The soft skills learnt from the module can be directly practised in the real work environment.

Purpose and Objectives

The ITSS has been implemented mainly due to the feedback from industry concerning the lack of soft skills amongst polytechnic students and graduates. Hence, students who are to undergo industrial training have been identified as the target group to be exposed and equipped with soft skills. Although the importance of soft skills has been acknowledged by the management strata of Malaysian polytechnics, the implementation of soft skills training in depth is still new in the Malaysian tertiary education system, particularly in polytechnics. The issue now is the imparting process so that this values education takes place in the learning process. Hence, questions have been raised as to how well the module has been implemented? It is therefore very important that the effectiveness of the module is evaluated. Not only do we need to determine whether the students have acquired the knowledge about soft skills, we also need to know whether they are applying what they have learnt, whether the skills they have acquired actually meet the employers’ needs, whether improvement is needed in delivering them and lastly, whether these soft skills can be effectively taught. Thus, in order to ascertain the important and the effectiveness of soft skills implementation, the perceptions of stake holders (students, lecturers and employers) were collected and investigated. This has led to the purpose of the study, which aims to identify the effectiveness on the implementation of soft skills amongst polytechnics students as preparation for industrial training. The specific objectives were to:
1. Describe the level of preparation and knowledge on soft skills before attending the module.
2. Describe the level of importance of soft skills to be instilled to polytechnics students.
3. Describe the perceived level of competency amongst polytechnics students in soft skills.
4. Determine if difference exists in the level of importance and competency in soft skills.

However, in this study only perception from the academic perspective, will be discussed – the lecturer. In Malaysian context, the lecturer perceived as having a very important role in instilling soft skills to students. Without question, they’re faced with challenges trying to provide an adequate learning environment and to prepare their students for productive lives in rapidly changing world. They are the group who know their students better both academically and personally. Hence, in evaluating soft skills their perceptions are vital as part of the method to measure effectiveness of the module.

**Methodology**

The study will mainly look at the perceptions of the lecturers on the skills taught, learned, assessed and applied after the completion of the module. The lecturers who were directly involved in delivering the ITSS module were selected as respondents. The lecturers’ views were sought to determine the importance of soft skills apart from their perceptions on the level of students’ soft skills knowledge and application.

**Instrument**

The survey instrument was a questionnaire adapted from a study on Perceptions of Employers of Graduates of the Agricultural Systems Management Program Regarding Skills and Competencies Needed for Successful Employment by Snyder (2008). The questionnaire was modified to include statements of skills and abilities identified in the literature and soft skills module. The polytechnics representatives from various disciplines and Industrial Training Coordinators were invited to validate the content of the survey questions. The questionnaire was divided into three parts: Section one of the questionnaires consisted of six questions about the demography of respondents. The second section was designed to measure, in general, the preparation and importance of knowledge, skills, and abilities of polytechnics students in soft skills before attending the module. The respondents were required to state their agreement on students’ soft skills knowledge and ability using a scale from 1 (Disagree) to 6 (Agree). Questions related to material used in soft skills teaching and learning and their opinion on soft skills were included. In section three, respondents were asked to rate the importance of the various soft skills elements and the students’ competency in performing those skills on a scale ranging from 1 (not important at all/not competent)
to 6 (very important/very competent). In addition, there was an open-ended question pertaining to the skills which were not included in the module, but might be good to include in the module in the future.

The data gathered from the survey on the lecturers was analysed to establish the perceived need for soft skills and the levels of competence of the polytechnics’ students. Descriptive statistics (mean) were used to measure the degree of importance and level of students’ soft skills competencies. This is of importance as it will reflect the preparedness of the students who will be undergoing industrial training as well as future employment. Indeed, a hierarchy established from the mean importance and competency level from the lecturers’ perceptions will help in examining the effectiveness of soft skills in the module.

**Analysis and Findings**

A total of 50 questionnaires were distributed to four polytechnics in the northern region of Malaysia and 46 were returned which gave a 92% return rate. From the analysis it was found that the majority of the respondents are from the engineering discipline (n = 28), followed by commerce (n = 10). This corresponds to engineering and commerce being the main disciplines offered by these polytechnics. The breakdown according to academic background is: engineering - 61%; commerce - 28%; hospitality - 13 %; and information technology 4%. Female respondents were more dominant with 30 (65.2%) and only 16 males (34.8%). Most of the respondents (76.1%, n = 35) have been involved in soft skills teaching for more than 3 semesters which is since the programme started in July 2006. Only 17.4% (n = 8) have taught soft skills for the first time. “Soft-skills trained” lecturer with teaching experience of more than a semester is considered as an experienced lecturer and their number is even less (6.5%, n = 3). Senior lecturers with vast teaching experience were believed to have fully utilised their knowledge and experience in teaching soft skills. As shown, 58.7% of the lecturers (n = 27) have at least 5 years teaching experience, a further 32.6% (n = 15) have 3 to 5 years teaching experience and only 8.7% (n = 4) of them has 1 to 2 years of teaching experience. The details are shown in Table 1 beneath.

<table>
<thead>
<tr>
<th>Polytechnic</th>
<th>Number</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Polytechnic A</td>
<td>12</td>
<td>26.0</td>
</tr>
<tr>
<td>Polytechnic B</td>
<td>14</td>
<td>30.0</td>
</tr>
<tr>
<td>Polytechnic C</td>
<td>10</td>
<td>22</td>
</tr>
</tbody>
</table>

Table 1: Demographic Profile of Lecturer (n=46)
<table>
<thead>
<tr>
<th>Academic Background/Discipline</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Engineering</td>
<td>28</td>
<td>61.0</td>
</tr>
<tr>
<td>Commerce</td>
<td>10</td>
<td>22.0</td>
</tr>
<tr>
<td>Information Technology</td>
<td>2</td>
<td>4.0</td>
</tr>
<tr>
<td>Hospitality</td>
<td>6</td>
<td>13.0</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Gender</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>16</td>
<td>34.8</td>
</tr>
<tr>
<td>Female</td>
<td>30</td>
<td>65.2</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Soft Skills Teaching Experience</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>First semester</td>
<td>8</td>
<td>17.4</td>
</tr>
<tr>
<td>2 - 5 semesters</td>
<td>35</td>
<td>76.1</td>
</tr>
<tr>
<td>More than 5 semesters</td>
<td>3</td>
<td>6.5</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Teaching Experience</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1 -2 years</td>
<td>4</td>
<td>8.7</td>
</tr>
<tr>
<td>3 - 5 years</td>
<td>15</td>
<td>32.6</td>
</tr>
<tr>
<td>More than 5 years</td>
<td>27</td>
<td>58.7</td>
</tr>
</tbody>
</table>

**Perceived Importance of Identified Soft Skills and Competency Level**

This is the discussion of results analysed from section three of the questionnaire. The responses were separated into eight sub-categories according to the following soft skills elements: decision making, team work, communication, report writing, problem solving, time management, leadership, learning and interpersonal skills. The soft skills elements were then ranked according to their mean score (M). Analysis of the rankings by the lecturers has shown most of the soft skills elements having means importance of greater than five. The respondents have acknowledged the importance of instilling soft skills to students. The results reflected positively on the application of soft skills learnt amongst the student. Learning and interpersonal skills were rated as very important (M = 5.1382) and the least important skills was report writing (M= 4.8370). It was observed that interpersonal skills tended to be recognised as highly important skills that could successfully contribute to work performance. This finding is consistent with the feedback from the Malaysian National Computer Association.
with regard to the importance of interpersonal skills and knowledge-acquiring skills (Quek, 2005). However, this skill has not been highly demonstrated by students (M= 4.6087 at the 3rd ranking). Table 2 has the details:

Table 2 Lecturers’ Perception on the Importance and Perceived Level of Students’ Competency in Performing Soft Skills in Rank Order (n = 46)

<table>
<thead>
<tr>
<th>Soft Skills Elements</th>
<th>Mean</th>
<th>Soft Skills Elements</th>
<th>Mean</th>
<th>Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Importance)</td>
<td>(Importance)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Decision Making</td>
<td>5.0399(6)</td>
<td>Decision Making</td>
<td>4.4855(8)</td>
<td>0.5544(2)</td>
</tr>
<tr>
<td>Teamwork</td>
<td>5.0036(7)</td>
<td>Teamwork</td>
<td>4.8370(1)</td>
<td>0.1666(8)</td>
</tr>
<tr>
<td>Problem Solving</td>
<td>5.0725(5)</td>
<td>Problem Solving</td>
<td>4.5580(4)</td>
<td>0.5145(5)</td>
</tr>
<tr>
<td>Time Management</td>
<td>5.0870(3)</td>
<td>Time Management</td>
<td>4.5145(7)</td>
<td>0.5725(1)</td>
</tr>
<tr>
<td>Communication</td>
<td>5.0870(4)</td>
<td>Communication</td>
<td>4.5580(5)</td>
<td>0.5290(4)</td>
</tr>
<tr>
<td>Leadership</td>
<td>5.1033(2)</td>
<td>Leadership</td>
<td>4.6685(2)</td>
<td>0.4348(6)</td>
</tr>
<tr>
<td>Learning &amp; Interpersonal</td>
<td>5.1382(1)</td>
<td>Learning &amp; Interpersonal</td>
<td>4.6087(3)</td>
<td>0.5295(3)</td>
</tr>
<tr>
<td>Report Writing</td>
<td>4.8370(8)</td>
<td>Report Writing</td>
<td>4.5435(6)</td>
<td>0.2935(7)</td>
</tr>
</tbody>
</table>

(Rank order is shown in brackets)

As for student’s competency level, there is a disparity between the actual level perceived and the expectations by the lecturers. The mean score for students’ level of competency perceived were less than 5 for all the skills listed: teamwork (M = 4.8370), leadership (M = 4.6685), learning and interpersonal skills (M = 4.6087), problem solving and communication (M = 4.5580), time management (M = 4.5145) and lastly decision making (M = 4.4855). The skills deficiency is the difference in mean ratings between the expected skills and actual performance of students. The skills elements which exhibit the biggest deficiency are time management (0.5725), decision making (0.5544), followed by learning and interpersonal skills (0.5295) and communication (M=0.5290). The lowest mean gaps were displayed by teamwork skills (0.1666), leadership (0.43480 and communication skills (0.4420). These discrepancies will steer the lecturers to the areas that need more emphasis in delivery of the module in the future.
Conclusions

In conclusion, the respondents have acknowledged the importance of soft skills. They basically agreed that soft skills are very important and need to be imparted to students prior to industrial training. Their perception of students’ level of soft skills was also positive, indicating a certain degree of success of the soft skills module for the students. However, when compared the perceptions on the importance of soft skills and perceived level of students’ competency, none of the students’ competencies were above five mean scores. The disparities reflected on the students’ as still not up to the expectation of the lecturer. This has given the impression that the application of the module has not been fully successful. The students need to improve in decision making, time management and report writing skills.

Given that these groups of students will undergo industrial training in the near future, there is a possibility that the situation will not improve much more when they are in the real-world setting. However, this finding will be very informative for future improvement of the module. Studies need to be conducted to investigate the major causes of these disparities. Undeniably, the lecturers have played an important role in imparting soft skills to the students. On the other hand the lecturer themselves can play their role in imparting soft skills and continue to improve their teaching and learning process. The lecturers, like employees in any organization have to adjust to challenges and changes, which involves the development and utilization of various skills. In fact the development of soft skills was articulated as a major challenge for technically and disciplinary oriented institutions (Hagmann, et al., 2003). In particular, competent and motivated lecturers were identified as a central requirement to meet future demands (p.22). Hence, flexibility and being aware of changes particularly about the business world are both recommended for the lecturer in the academic world to enhance effective teaching and learning.

Based on these findings, it is recommended that the Polytechnic Curriculum Division examine the following changes in the soft skills module to minimize the differences found between the level of preparation and importance of each of these skill areas:

1. Commitment by all lecturers to enhance students’ learning and interpersonal skills
2. Require more writing and presentation as part of the course program.
3. Incorporate more “hands-on” teaching in the classroom. Students must be given more opportunities to apply the skills learnt in their course work.
4. Expose more lecturers to industrial real job experience.
5. Get more involvement from other stakeholders particularly from industry in order to seek on-going input into the curriculum.

In summary, this study suggests that lecturers, representing academic staff are contented with the ITSS module. However, these cannot be the absolute answer to justify the effectiveness of the module. Perhaps, a study from other stake holders will verify the outcome expected. Therefore, in enhancing an overall outcome, further research should include studying from other relevant stake holders.
References:


Shah, N. Z. (2008). Are Graduates to be Blamed? Unemployment of Computer Science Graduates in Malaysia,  


