

TERTIARY-PARTITE PARTNERSHIP AMONG STUDENTS–POLYTECHNIC -INDUSTRY TO IMPROVE THE STUDENTS SOFT SKILLS

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Abstract—The rapid growth of Engineering science and technology in the Ministry of Human Resource Development (MHRD), Government of India has initiated the scheme of Community Development through Polytechnics (CDTP) to uplift the rural downtrodden people of the country. To provide non-formal, short term, employment oriented skill development programs to various sections of the community by this scheme. Upgrade the Curriculum in order to students to meet the current scenario of competitive job market demand. Despite continuing efforts made to improve student's soft skills, the industry commented that graduate engineers had failed to master the soft skills needed in their employment. On above of this, efforts to improve soft skills among students will not be successful without a strong commitment and participation .This paper investigates smart synergy model of tertiary-partite partnership among students-polytechnic-industry in the industrial orientation training program. The main aim is to create a tertiary-partite partnership among students-polytechnic-industry to improve the student's soft skills through polytechnic. First, the trends of partnership in industrial orientation training programs among students-polytechnics-industry in India are analysed this paper emphasizes strategies to fill up the existing gaps in this matter.

Keywords— Soft Skills; Industrial Training; Students-Polytechnic-Industry Partnerships

1. INTRODUCTION

The sole purpose of this scheme is to provide technical & professional education at free of cost to rural mass by approaching their door steps and guiding them for employment in Industrial area and Self employment opportunities. Apart from this, the scheme also provides technical education, technical services and community services to weaker section for all classes. This scheme envisaged the Community Polytechnics to act as important centres for the application of Engineering Science and Technology in rural areas and generate self and wage based employment opportunities, through non formal training and need basic courses, in various trades and multiple skills. Asrecognition of the programmes conducted by GRG Polytechnic College in the field of rural development and its close linkage and interaction with the local community, the Ministry of Human Resource Development, Government of India sanctioned the Community Polytechnic Scheme (CPS) in 1996.

Since 2008, GRG Polytechnics have involved and implemented Soft Skills module as one of the valued add on programmes taught in preparation for the student's practical training from basic skills concept based on industrial needs. These skills are taught while the students are in the third semester to six semesters in various departments of corresponding fields. The objective of the soft skills module is to prepare the students with essential skills needed during their industrial training. The module emphasizes improvement of the student's skills including:

- Essential needs of soft skills
- Demands of soft skills
- Effective communication
- Good working ethics
- Fundamental concept of relevant fields
- Good working Environment to be Provided
- Effective documentation
- Give a deep practical Knowledge in relevant field

2. REVIEW OF LITERATURE SURVEY

The students are expected to be proactive and with a positive mind set upon the successful completion of this module. In addition, the module aims to develop students' understanding and carried out tasks given. According to Riam (2010), it is offered in the context of benefiting the students in preparing them for industrial training and Employment.

There are numerous benefits that derive from university-industry relationship, including benefits to society, universities, and companies. Most of the partnerships relay on these two parties (Gill, 2009; W.T. Carpenter, Jr., et al.2004; Junaini et.al, 2008; Abdul Hamid et.al 2009). However this study adds the students as a formal party involved in the relationship.

The aim is to create the smart partnership between academic institution, industry and students. The successful relationship of the three parties hopes to improve the soft skills of the students and this will be called a smart tri-partite partnership.

This paper describes a conceptual framework of university-industry technology transfer relationships, and outlines the evolution of these relationships in Hong Kong. The technology transfer process between university and industry has evolved from a series of random, short term transactions (Phase Z) into purposeful relationships geared toward technology transfer of several years' duration (Phase ZZ). Recently, universities, government and firms have become the laying of foundation for long-term cooperation (Phase ZZZ) to enhance Hong Kong's technology infrastructure. Finally, Hong Kong's universities have become initiatives with business enterprises in the People's Republic of China, potentially ushering in an era of technological cooperation between Hong Kong and China.

Zaharatul Akmar Ahmad Zainuddin et al, This paper proposes a smart synergy model of smart tri-partite partnership among polytechnics-industry-students in the industrial training program. The main aim is to create a Smart Tripartite partnership among polytechnic-industry-students to improve the students' soft skills. This paper emphasises strategies to fill up the existing gaps in this matter. First, the trends of partnerships in industrial training programs among polytechnic-industry and students in Malaysia are analysed.

The industrial training program in this study, involves three parties, namely the polytechnic as the academic institution providing formal education and training; the industry that provides on-job training to the students; and the students who are required to undergo the industrial training programme. Although it has been identified that all three parties; the polytechnics, industries and students, are responsible in determining the success of programme, the study looks only on the role that the students play.

This is based on comments by the companies that hire them stating that the students still lack the requisite soft skills to function in their organizations (Abdullah, 2009; Zaharim et.al, 2009; Angelina et.al 2011; Lee, 2003). It shows that there are still gaps in the present method of developing soft skills among polytechnic students.

3. METHODOLOGY

This paper aims to highlight the importance of strategic partnership which will result in students becoming a better skilled as perceived by employers in engineering organizations in India. It is hoped that this study will provide relevant information for polytechnics and the industry to develop a partnership along with the students who are fully involved in the partnership. This will enable educational institutions to produce engineering graduates those who are well accepted by the industry.

Case study investigated in which a method involving more than ten polytechnic students who were undergoing their In-plant training at some of engineering companies around college. Engineering students were chosen based on information gathered from the polytechnic industrial training unit advising that the civil engineering students as well as mechanical engineering students had encountered many problems during their industrial training.

The students were interviewed to gain insights into their perception of soft skills. The interviews were employed together information from the students. As the aspects of the mind-set, Learn methodology, basic skills, Time management & Professional ethics, importance of engineering drawing and notion of soft skills were known only to students themselves, this would provide vast information and insights into the student's perceptions of learning and developing soft skills.

4. OVERVIEW AND DISCUSSION

The preparation of industrial training begins with the teaching of the soft skills module in third semester. In addition, the students were provided with training and prior support, during and after the industrial training. Counselling sessions and briefing were given to the students before they embarked on their industrial training to equip the students with knowledge to face the challenges of the working world. This corroborates with literature which highlights the fact that the fundamental purpose of training is to prepare students for employment through exposure to the real working environment (Masika & Kondoro, 2008; Abdul Hamid et.al (2009). Hence, the programmes provided at polytechnics should ideally enhance the students' employment experiences. The industry will then play an active role in coaching the students with expertise and skills required in their employment; (Junaini, 2008; Gill, 2009). However, comments from employers contradict this as they grumbled that students still lacked essential soft skills.

Data gathered from the interviews with the students was coded and segregated into themes. From the interviews, it showed that the students lacked initiative and confidence. The students' perceptions were divided into seven major themes; the students' mind-set, learning methodology, basic skills, Time management, professional ethics, importance of engineering drawing and notion of soft skills.

4.1 Mind sets

Despite the preparations provided by the polytechnics, the interviews reveal that the students were not ready to embark on the industrial training. The result from the analysis shows that the students' mind set for change were lacking as they were not proactive and not willing to learn new things. This is despite the fact that they were aware that such

knowledge gained was beneficial and useful. However, they acknowledged that soft skills helped to improve their confidence but they didn't appreciate the importance of soft skills in their day to day life.

4.2 Learning methodology

The result from the analysis shows that the students were complacent and did not utilise lessons learned, they also seemed uninterested in participating in any programmes organised by the Polytechnic. The students were more exam oriented and unwilling to participate in activities related to soft skills.

4.3 Basic skills

After analysing, the result shows that the students were not interested to study the basic skills and they only did memorised study for examination point of view but there didn't know about basic skills in relevant field

4.4 Time management & professional ethics

The result shows that students are lacking in time management and they did not work in long duration in industry so that industries suffer a lot.

4.5 Importance of engineering drawing

They haven't interest to be able to understand the industrial engineering drawing and know about how to study drawings from basic one.

4.6 Notion of soft skills

The result from the analysis shows that the students believe that soft skills are important for their career development however, it was observed that the students put in little effort to learn and master these skills. Even though the students perceived and believed that positive notion towards soft skills was important, it was not reflected in their actions to change.

5. TERTIARY-PARTITE PARTNERSHIP

The analysis above shows that a lot needs to be done to realise the Ministry's vision of empowering polytechnic students with relevant soft skills. A continual joint effort amongst students- polytechnic-industry could make this vision possible. The Polytechnics should implement soft skill curricular through its teaching and learning and activities within or out of the campus. At the same time, the industry should ideally provide assistance to coach the students not only in how to master their trade but also to improve the students' self-confidence.

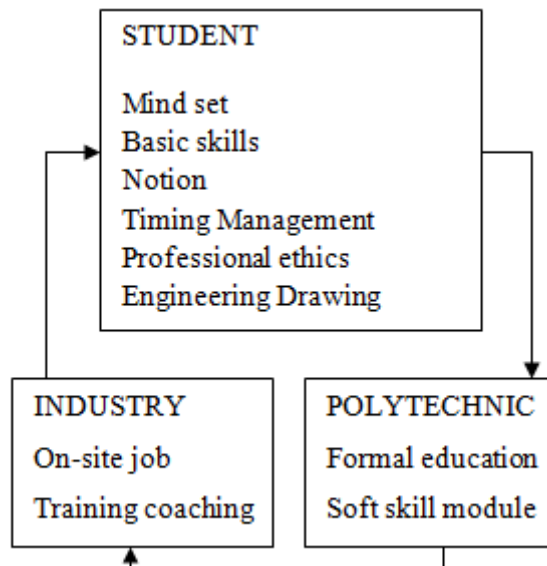


Figure 1. Tertiary-Partite Partnership

Indirectly, the industry's vision, ideas and suggestions towards implementation of soft skills shall further enhance the student's willingness to improve the skills. Polytechnics need support from other parties in the partnership especially from the industry in providing on-site job training and coaching of the students. They also need to educate the students with a positive mind-set, learn methodology, basic skills and Time management and professional ethics, importance of engineering drawing and notion of soft skills. Encouragement from the polytechnic and industry should help the students to acquire the soft skill effectively.

6. CONCLUSION

This paper exposed to the importance for students to inculcate positive mind set, learning Methodology, basic skills and notion of skill in soft, Timing management & Professional ethics, Importance of Engineering drawing in order to develop their soft skills. The Tertiary-Partite Partnership among polytechnic, industry and students is essential to ensure the development. They should be reliable in completing the Tertiary-Partite Partnership and develop the soft skills needed by the industry. The partnership should be successful upon active involvement and participation by the students – Polytechnic-industry. Success of the Tertiary partnership shall boost job market demand for polytechnics students.

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