

Full Length Research Paper

The challenges for ILKA through providing skilled workers for industrial sector

¹Ahmad Rizal Madar*, ²Mohd Yusop Ab.Hadi, ³Abdul Rasid Razzaq and ⁴Mohamad Zaid Mustafa

Faculty of Technical Education, University Tun Hussein Onn Malaysia 86400, Parit Raja, Batu Pahat, Johor Malaysia

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ILKA is an institute which providing skilled workers for industrial sectors. The purpose of this research is to understand challenges for ILKA through providing skilled workers for industrial sectors. Research instrument is group sampling method that included managements, educators and also ILKA trainees in North zone, Intermediate zone and South zone with total of 210 respondents. These data were analyzed with SPSS (Statistical Package for Science Social) version 12.0. Data was analyzed done by applying minimum score, frequency, percentage and ANOVAs. The results showed that there were significant challengers among trainees by their interest in courses. Besides, there were other high challengers for ILKA in producing skill workers for industrial sector. As a result, ILKA should increase their awareness in these issues to reduce sectors' reliance on foreign workforces.

Keywords: ILKA, industrial sectors, skilled workers, foreign workforce, industrial labor demand, industrial expectation.

INTRODUCTION

In today's Globalization environment, countries are demanding higher competent workers to satisfy industrial sectors' requirements. Industries' advancement activities since two decades ago are shifting human resource planning to be more systematic, thus increasing recruiters' attentions on students' academic achievements (Lee Fui, 2005). It is a long term perspective for trainees and Institutes of Public Skills (ILKA) to understand workforce requirements in industrial sectors. As economy has widely opened for globalization and liberalization, industries and firms have to increase their resistance and competitiveness, changing their structure to more organic that are able to develop strategies according to economy environment, and increase their demand for higher disciplines and well trained employees. Unfortunately, shortage in skilled workforce has impelled industries sector to import labors from other countries. This issue is getting badly when graduates trained by institutes found unmatched with skills required by industries (Mohd Yahya, 2003).

Skilled Manpower

Nartalie M Ferry (2003) brought forward young workforce and trainees from Institute of Public Skills should be given attention in increasing their motivations in learning activities. As they achieved good academic result, they will be more competitive in choosing industries' positions they interesting in as their career. A long term plan should be develop in deciding which sector they should join to start their first steps. Young workforce should ask for advices from their family, educators and communities on how to identify alternatives offer and hence choose the most appropriate position to start their career development. However, their rational analysis is always affected by their close affiliations such as family members and friends. Ability in choosing right career prospects are found much depends on their studying experience, perceptions on the positions, and impact from their families and society. Studying experience gained in their schooling time was found the most infection on deciding their career goal. Economic and social factors are also plays an important role for them to decide further studies or start their career development immediately after graduation. Lastly, Perceptions towards positions avai-

*Corresponding author email: rizalm@uthm.edu.my

lable hold by young workforce and students are their directions in designing their career prospects.

Technical Ability

Institutes of Public Skills are important keys in developing a country as they supplying skilled manpower into industries' operations. Individual abilities and professions starts by interests and desires in certain topics, it is then summarized by their life experiences and consciousness, finally enlarged and empowered by further studies and experiences (Faizal, 2002). Mohd Khapi (2003) stated that quality education providing by Institute of Public Skills should meet industries' expectation and requirements. It must be intensively implemented to promise graduates are able to fit into industries vacancies. Industries' participation in designing curriculums will give a direct advantage in improving students' appropriateness to match with market offerings. According to Mohd Yahya (2003), technical education not only training individuals for technical skills and knowledge, it should at the same time provoking individuals' ability in comprehend, value, utterance and adapt in changing environment. Technical education is actually similar with other field of studies, so it will be better to attach other appropriate non-technical modules for the purpose of increasing their adaptability and applicability.

Industry

Malaysia Industries Coordination Act 1975 defined Industrial in a wider scope than simply factories. Factories particularly refer to companies that involve activities in producing raw materials or assembling components for semi-finished or finished goods. In short, factories were parties who supplying goods to either secondary production activities or end users. On the other hand, definition for Industry covers activities in manufacturing, constructing, mining and even servicing. Fong (2002) overture it is the time for industries to draft their strategies in order to develop skillful workforce. In more detail, it is to improve local workforce's ability in their field or more than one field of expertise, so that their value will be increased for every stages of their career path. Efforts should be paid in improving industrial image and working environment; salary and benefits should be review in order to equitable with workforce contributions; company or industrial procedures should revise for a hazard-free working environment; and promotions opportunities need to be well organized to satisfy workers' esteem and self actualization need.

Challenges

According to Zakaria (2005), the main challenge in in-

dustry is scrambling for skillful candidates. Labor market demography clearly shows that all industry sector are competing each others to get their desire candidates. This competitiveness will negatively image a shortage of qualified workforce in the country. However, in reality, this is cause by unprepossessing positions that fail to attract educators to join in this field of studies as their career path and thus result in deficient and goodish quality graduates that will answer for industries' summon. It is easy to found that qualified educators and trainers are more towards joining sectors that providing attractive remunerations, promoting a good working environment, granting better career prospects, and promising a brighter future advancement. On the other hand, other less attractive industry in terms of career prospect like construction will have to suffer a tough reality in employing qualified candidates. CIMP 2005 pointed out two major components that need to overcome that are over-dependent on foreign workforce; and negative image pose by Industry sectors. Over-dependent on foreign workforce will rise up lots of troubles such as social problems. By the way, shortage of qualified manpower in labor market will depress an industry's image. It shows a trend that a positive grow of economy will turn out troubles in grabbing workforce from other industry (Zakaria, 2005). Zakaria (2005) also pointed out challenges that need immediate attention and consideration that are: Shortage in skilled labor; Low remunerations; Unattractive career prospect; and negative Image pose by industry. Construction Confederation (2001) claimed that industries should increase their efforts for achievements and industrial image should be furnished in order to attract young workforce to join in the field.

METHOD

Research Objective

Base on the literature overview above, the purpose of this study was to investigate the challenges for ILKA through providing skill workers for industrial sectors covered population involved managements, educators and trainees in institutes who will join into industrial sectors

Procedures

This research is a survey research that involved collection of quantitative data. Three Institutes named Institut Kenahiran Mara Sungai Petani, Institut Kemahiran Belia Negara Melaka and Institut Latihan Perindustrian Muar were selected. Research population involved managements, educators and trainees in the three institutes mentioned who faced embarrassments in preceding their career prospects into industry sectors.

Table 1. Overall Mean Score for Challenges Relate to Perceptions Hold by Management ILKA on Aspect of Educators' Ability and Curriculum

Aspects	Overall mean	Mean Score Level
Educators' Ability	4.28	High
Curriculums	4.35	High

Table 2. Overall Mean Score for Challenges Relate to Perceptions Hold by Management ILKA on Aspect of Skills and Curriculum

Aspects	Overall mean	Mean Score Level
Skills	4.26	High
Curriculum	4.27	High

Table 3. Overall Mean Score for Challenges Relate to Perceptions Hold by Management ILKA on Aspect of Skills and Interest

Aspects	Overall mean	Mean Score Level
Skills	4.10	High
Interest	3.98	High

Groups of respondents were separated according to their positions. Total samples of 210 respondents despite genders or race were participated. Results were posted in forms of tables and schedules that representing mean scores, whereas hypothesis test were analyzed by Anova One Direction to identify the significant difference among three groups of respondents.

Test Instrument

Instruments for this research was questionnaire method, as it serve as the easiest way to collect quantitative data (SULAIMAN, 2000), and most time efficient and consistent method to receive feedback from respondents (Wiersma, 2001). Faulty test for questionnaires has being carried out before distribute to respondents. Two experience checker from Faculty of Technical Education and Vocational, UTHM and one Educator from IKM Sungai Petani have been participated in this faulty test. Questionnaires were designed as structured questionnaires. There were three set of questions consigned to three groups of respondents that were managements, educators and trainees. Part A of the questionnaires asked about respondents' background, Part B vary among three groups of respondents, and Part C shared common questions about their opinions regarding challenges for ILKA through providing skill workers for industrial sectors.

RESULTS

Table 1 answered research question about how far the challenges relate with perceptions hold by management ILKA towards Industrial sectors on aspects of educators' ability and curriculum. Table 1 above has showed the mean score and its level for part B in questionnaires designed. Analysis was made for overall items in questionnaires from the aspect of educators' ability and curriculum. Mean score for educators' ability is 4.28 at a high level of mean scored, whereas overall means for curriculum is 4.35 at a high level of means scored as well. However, mean score by educators' ability is lower 0.07 than mean score by curriculums.

Table 2 answered research question about how far the challenges relate with perceptions hold by educators' ability in ILKA towards Industrial sectors on aspects of skills and curriculums. Table above clearly showed mean score and its level for part B in questionnaires designed. Analysis was made for overall items in questionnaires from the aspect of skills and curriculum. Mean score for skills is 4.26 at a high level of mean scored, whereas overall means for curriculum is 4.27 at a high level of means scored as well. However, mean score by skills is lower 0.01 than mean score by curriculums.

Table 3 answered research question about how far the challenges relate with perceptions hold by trainees in ILKA towards Industrial sectors on aspects of skills and interest. Table above clearly showed mean score and its

Table 4. Difference in Challenges Relate with Trainees' Skills And Their Courses

	Sum of Square	df	Mean Square	F	Sig.
Between Groups	3.27	2	1.635	5.598	0.05
Within Groups	38.551	132	0.292		
Total	41.821	134			

Table 5. Difference in Challenges Relate with Trainees' Interest And Their Courses

	Sum of Square	df	Mean Square	F	Sig.
Between Groups	3.27	2	1.635	5.598	0.05
Within Groups	38.551	132	0.292		
Total	41.821	134			

level for part B in questionnaires designed. Analysis was made for overall items in questionnaires from the aspect of skills and interest. Mean score for skills is 4.10 at a high level of mean scored, whereas overall means for interest is 3.98 at a high level of means scored as well. However, mean score by interest is lower 0.12 than mean score by skills.

Table 4 indicated research result analyzed by average mean value and Anova One Direction. Significant value that fixed was 0.05 (5%). This analysis was done through chosen trainees in ILKA according to their courses. Analysis results showed that there was no significant difference in challenges relate to trainees' skills and their courses.

Table 5 shows the results analyzed by average mean value and Anova One Direction. Significant value that fixed was 0.05 (5%). This analysis was done through chosen trainees in ILKA according to their courses. Analysis results showed that there was no significant difference in challenges relate to trainees' interest and their courses.

DISCUSSION

Total numbers of 210 questionnaires have been collected back from three sets of respondents that were managements, educators, and trainees from Institut Kenahiran Mara Sungai Petani, Institut Kemahiran Belia Negara Melaka and Institut Latihan Perindustrian Muar. According to the information gathered, there were major numbers of Male respondents than Female respondents, which mean that male staffs were more experience than female staffs. Trainer respondents were the most respondents than management respondents and educator respondents. For educator respondents, Male educators were much more than female educators, which shown that male staffs are more career-oriented towards skills based ability than female staffs. Overall working

experiences for educator respondents were more than three years; this showed that they are capable enough to carry out responsibilities.

According to analysis compiled, overall mean score for educators is 4.28 that stated a high mean, where overall mean score for curriculum is 4.35. This has clearly understood that ILKA management has provided sufficient educators and proper curriculums that are able to train up skillful graduates to join industrial sectors. An opinion from Abu Hassan (2004) and Nurul Najwa (2004) stated institutes cannot ignore the facts and reality that curriculums and program designs must review and accepted by industrial sectors to make sure that course ingredients meet industries' demand. Managements and educators in institutes should work together to develop suitable courses that will fit in industrial sectors' workforce requirements. According to Yahya (2005), managements in institutes should develop proper and attractive training facilities and design more corporate visits that consistent with educators' field of expertise so that they are able to share their experience gain from the visit with trainees.

Mean score analyzed for overall expertise posed by trainees were consider high at 4.10 where mean score for overall interest is 3.98. The high aspect of expertise was due to effective learning system that directly link with industrial requirements. This result were further supported by Yahya (2005), which stated institutes should publicize themselves in schools and ILKA to attract interest and awareness from public about positive career prospects in industrial sectors. Low interest to join industrial activities was mainly due to low exposure about career prospects in industrial sectors. Natalie M. Ferry (2003) proposed that young generations and institutes trainees should be given attention in provoking them interest and confidence to properly develop their career path among sectors. Mohd Krapu (2003) stated quality education must be implemented by Institutes of Public Skills to meet industries' requirements. Institutes may

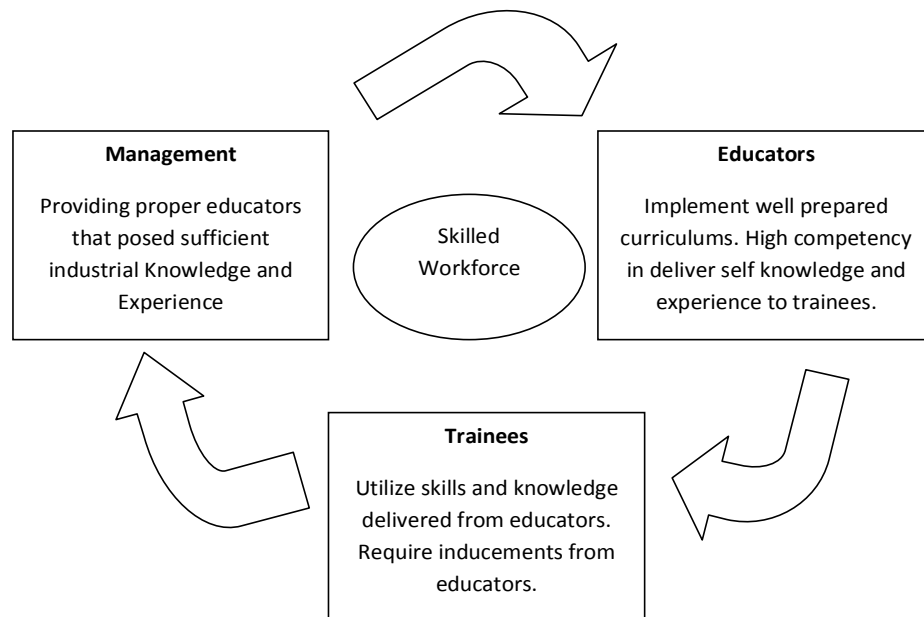


Figure 1. Challenges in Preparing Skilled Workforce for Industrial Sectors.

invite industry sector to participate in designing curriculum or even involve in teaching and learning process.

Research outcome revealed that there was no significant difference about challenges to deliver courses ingredients to trainees. This was due to the delivering method were consistent in all Institutes and among every educators, despite their own industrial knowledge and experience gained. Educators for all courses offer in Institutes are equipped with sufficient experience and proper qualifications, together with systematic and consistent teaching method, the challenges in educating trainees were written off.

Analysis results showed a significant difference in attracting trainees' interest according to courses provided. Trainees pose different and unique interest and inclination. According to mean score obtained from questionnaires, trainees from Electric courses would more prefer to join in Industrial sectors. This significant difference may due to low exposure to trainees about job vacancies and career prospects in industrial sectors. Researcher view that this significant differences may also cause by high competitive with foreign workforce, low remunerations that are not equal with workload of the positions, and insufficient understanding about working environments in industrial sectors. This finding was further supported by Yahya (2005), which advocated institutes should publicize themselves to increase public interest and awareness. Trainees' low interests to join industrial sectors were mainly cause by insufficient knowledge and understanding about career prospects in industrial sectors.

Refer to the research result, researcher has formulated elements related to challenges in training up candidates to join industrial workforce as indicated in Figure 1 above. Management side should always assist educator in providing high quality Teaching and learning activities and suitable curriculums that will match with industrials' expectations and demands. Both managements and educators should have positive and close relations so that discussions for curriculums enhancement can be successfully carried out for their ultimate purpose of supplying high quality graduates into industrial workforce. Besides, educators showed a direct relation with trainees that build on teaching and learning processes educator deliver to trainees. Educators should focus on industrial demand and design their curriculums for trainees, at the same time backup by management in maintain good relation with industries to effectively receive information about industries' expectations and requirements. Lastly, trainees should at their best absorb and practice the knowledge and skills acquire from their educators and further effectively utilize the knowledge and skills in industries. This means that trainees should build up and maintain good relationship with educators to acquire experience and knowledge that will becoming their advantages in future. Moreover, trainees are also highly depends on educators to promoting their motivation in studies as well.

CONCLUSION

In summary, this research has fulfilled the purpose and

objective with proper research result attached. This research has indirectly mirrored out challenges faced by Institutes of Public Skills in supplying skilled workforce into Industrial sectors. As it, Institutes of Public Skills should foster further ability and capability improvements for all managements, educators and trainers. At the same time, institutes should re-organize their strategies and organization design as to attract local industries to employ local ILKA graduates. Managements in institutes play an important role in maintaining close relations with industries in designing more corporate visit to update with educators industrial knowledge; and collecting more feedback in amending current curriculums. Educators are in responsibilities to sharing latest information in industrial sectors with trainees. Besides, they are the most effective role in provoking trainees' interest and confidence to join industrial workforce. On the other hand, educator should also stay close with management to update themselves with industrial evolutions or incidents. Lastly, trainees should always aware about their role as students, and at their maximum absorbing knowledge and experience from their educators. Trainees are advice to build reliance with their educators to increase their opportunities in recommend for good vacancies directly from industries.

References

- Abu Hassan Othman (2004). "Amanat naib Censelor Tahun 2004. USM Satu Dasawarsa: Memaknakan Usaha Memperkayakan Ilmu, Memperkasakan bangsa dan Membangunkan Negara".
- CIDB News (ms 1-10) (2005) Kuala Lumpur: Lembaga Pembangunan Industri Pembinaan Malaysia (CIDB)
- Construction Confederation (2001). "Construction Industry Master Plan For Malaysia"
- Fong Chan Onn (2007). "Dialog Kementerian Sumber Manusia". Kuala Lumpur
- Lee Fui Tong (2005). "Identifying Essential Skills in Students Engineering Education."
- Mohd Faizal Sulaiman (2001). "Kemahiran Operasi Individu Pelajar Kejuruteraan Mekanikal Sebagai Persediaan Dalam Latihan Industri".
- Mohd Khapi Kosnin (2003). "Keperluan Bidang-Bidang Kemahiran Di Sektor Perindustrian Masa Kini: Satu Tinjauan".
- Mohd. Yahya Nordin (2003). "Persidangan Kebangsaan Pendidikan Dan Latihan Teknik Dan Vokasional".
- Natalie M. Ferry (2003). "Turning Points: Adolescents And Young Adults Reasoning Choices". Publisher The Engineering And Technology Board.
- Nurul Najwa Md. Yusof (2004). "Model Jaminan Awal Kualiti Pendidikan Berterusan Teknikal Di Kolej University Teknologi Tun Hussein Onn." Kolej Universiti Teknologi Tun Hussein Onn: Tesis Sarjana
- Wiersma W (2001). "Research Method In Education: An Introduction". Botson
- Zakaria (2005). "Tenaga kerja di Sektor Binaan- Kemana Perginya Tenaga Kerja Tempatan". Anjuran Fakulti Pendidikan, UTM.