Learning Opportunities In Technical Institutes Beyond The Classroom

Mumtaz Naeem, Asma Bibi

ABSTRACT: The present study is designed to establish relationship between learning Opportunities and job requirement in technical institutes of TEVTA in Pakistan. Data were taken from 273 students and 22 instructors’ through random sampling technique. Two self-developed questionnaires were used for data collection that were of students and instructors. The results showed that students and instructors were satisfied with learning opportunities. The findings of the study showed that the skills taught in the technical education programs were more practical oriented and thus enhanced job opportunities for employment. Moreover, some programs needed the revision of courses by job market. There is a requirement of safety instructions/ to be included courses in the syllabus of technical institutes to develop safety habits in students. Industrial visits must be attached to such courses so to get the up to date knowledge and equipment utilization to enhance their skills. Refresher courses must be designed for trainers/instructors for their continuing education and professional development to get the best output.

Keywords: Learning opportunities, Job requirement, Technical Education and Vocational Training Authority, technical education programs, job market

INTRODUCTION

Learning is a universal phenomenon that brings purposeful change in individual behavior. It has strong influence on development of adaptive behavior. In learning definition “it is getting knowledge through training, practice and experience.” Learning has two perspectives i.e., theoretical and practical. In theoretical learning, knowledge was an adaptation of new skills according to environmental changes. In learning theoretical framework teachers demonstrated new teaching methods like cooperative learning, anchored learning and investigation of students centered learning. Practical learning was ability to understand rules of professional learning in social behavior pattern. It motivate learner for scientific knowledge and interest in laboratory skill (Mara, 2010). Education system provides equal opportunity for each learner because local government is responsible to providing circumstances for equality of educational. Learning opportunities are school zone, pre-school attendance, outside variable is parental controlled, parental education and family income. When learning opportunity is not provided to all learners, it outcomes affect their achievements. Some Policies directed to increase learners’ school attendance. It indicates reforms of learners in these areas school choice, community participation, innovation and supporting diversity (Aziz dos Santos, 2015). Learning provides opportunities to students to get up to date knowledge, understanding and skills in technical education. Learning in technical institutes provides professional knowledge by the job market for trainees’. Teachers develop professional development programs for trainees. It is implementation of practical knowledge (Council, 2016). Technical learning is a positive psychological factor of human development and experience. Technical learning is meaningful learning of students. It is self-directed and self-motivated for learners. School reform learning model is important.

In technical education, curriculum is based transmission of knowledge of schools. For successful technical education, instructors adopted curriculum framework, teaching methodology, philosophy of education and preferences. Technical education can develop professional skills in learners like technicians, engineers and technologist (Hansen, 2008). In classroom environment, technology enhances learning that increases learning. It has not affected with educational territories like distance, time and space. However, effective learning provided web based learning, educational resources and online courses for learner. Continues learning is more influenced with face to face online learning. Technological learning is new innovation and attract users’ attention. It’s another educational resource that is web retrieval information. Information sources have two factors that has trainees’ judgment of relevance and decision of the open resources of internet. Learner learning domain is interest and perceived information. Technology enhanced learning is replaced textbooks (Singh, 2016). In developing countries, technology is not very easily spread because of socioeconomic condition. Formal learning implemented through virtual learning environment and technological enhanced learning. Educational resources of internet were voluntary study for college students (Singh, 2016). Canada, England and Germany technology teachers spend their career to learn but their profession was problematic. Their experimental values were persistent matter. Technology teachers of Germany comparison with other countries have not coped with stratification problems in their institutes. Problem is that their roots of schools in technical learning and thinking makes it reconstruct of technical education (Hansen, 2002). In western countries technical teachers faced some problems in learning. Their teaching methodology and curriculum framework were too narrow with workplace and life preferences of teach. Technological teachers are professionally trained because they are highly achievers of university education (Hansen, 2008). Asian countries Australia, Malaysia, China and Japan is the example of human professional development. Technical education and vocational training can enable human growth and social development for professional skills (National skill strategy, 2008). In Pakistan technical and vocational institutes develop professional skills. Technical Education and Vocational Training Authority (TEVTA) have 456
institutions in Punjab. These training programs meet emerging needs for professional development of this era (Naeem, 2013). Punjab Government has designed five economical strategies for these programs:

i) improving governance 
ii) strengthening fiscal and financial structure
iii) creating a supportive environment for private sector-led growth
iv) reforming the delivery of public services

TEVTA institutes were effective, meet the industry needs, fulfill the expectations of trainees and accepted by the instructors. Graduates of TEVTA can learn necessary skills for further education. Its curriculum is appropriate for students. Lack of facilities in these institutes face like shortage of books, equipment of labs, furniture, training material and funds. In-service trainees’ training was effective. Trainers can improve their teaching techniques were implemented in classroom. Trainers also faced some problems: lack of incentives, lack of international exposure and shortage of physical resources. These problems solved with staff development and sufficient funds (Shah, Rahman, Ajmal and Hamidullah, 2011).

METHODOLOGY
This study was descriptive by nature because survey method was used. Sample of study was collected in district Attock. Self-developed questionnaire was used for data collection. The population of the study was Technical Education and Vocational Training Authority’s institutes of Punjab. The simple random technique was used for data collection. Sample of the study was collected from institutes of TEVTA in Attock. There were 273 trainees and 22 instructors of Attock district. There responses rate was 100%. The data were collected from five institutes of Technical Education and Vocational Training in district Attock. These were as follows:

(i) Government Technical Training Centre Hassanabdal.
(ii) Government Technical Training Centre Jand.
(iii) Government Technical Training Centre Fateh Jang.
(iv) Government Technical Training Centre, Attock city.
(v) Government Technical Training Centre Pindi Gheb.

The sample of the study was 273 trainees. There were as under: 93 trainees of Government Technical Training Centre Hassanabdal, 37 trainees of the Government Technical Training Centre Jand, 55 trainees of Government Technical Training Centre Fateh Jang, 9 trainees of Government Technical Training Centre, Attock city and 79 trainees of Government Technical Training Centre Pindi Gheb. The questionnaire was used an instrument for the data collection. Questionnaire was very useful in this situation because the population was distributed on wide scale. In order to collect trends and precise answer of the respondents, Close ended type of questionnaire was framed. Five point Likert scale was used for measuring answers of respondence. Interpretation of data was calculated by mean. A pilot study was conducted to determine the reliability of the instrument. In order to know the total score of each item, all responses were added against SA, A, UNC, DA, SDA after multiplying the original response to their respective five Likert scale i.e., 5,4,3,2, and 1. The validity and reliability of the research instrument was ensured through two professors of university. Researcher personally visited theses institutes for data collection. The 273 questionnaires collected from trainees and 22 instructors. Questionnaires were also developed for instructors to check their actual performance of training. It also measured latest situation of courses, workshops and tools and equipment. Pearson Product Moment correlation test was used for assessing correlation in learning opportunities with job requirement and independent t-test was applied to differentiate in responses of means.

RESULTS
The results of study were based on the following objectives:
1. To assess learning opportunities of trainees’ with instructors’ perception in TEVTA institutes.
2. To explore trainees’ job requirement with opinions of instructors in TEVTA institutes.
3. To find relationship of learning opportunities with job requirement of trainees in TEVTA institutes.
4. To establish relationship of learning opportunities with jobs requirement opinions of instructors in TEVTA institutes.

These hypotheses based on objectives of the study:

\[ H_0 \] There is no significant difference between the learning opportunities of trainees and perception of instructors.

\[ H_1 \] There is no significant difference between the learning opportunities of trainees and perception of instructors.

\[ H_2 \] There is no significant correlation between learning opportunities and job requirement of trainees.

\[ H_3 \] There is no significant correlation between learning opportunities and job requirement of trainees.

\[ H_4 \] There is no significant correlation in perception of learning opportunities with opinions of instructors about jobs requirement.

Table 1 Descriptive statistics associated with learning opportunities.

<table>
<thead>
<tr>
<th>variable</th>
<th>Participants</th>
<th>M</th>
<th>SD</th>
<th>t</th>
<th>df</th>
<th>P(sig)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Learning opportunities</td>
<td>Trainees</td>
<td>4.275</td>
<td>.275</td>
<td>2.189</td>
<td>22</td>
<td>.006</td>
</tr>
<tr>
<td></td>
<td>Instructors</td>
<td>3.895</td>
<td>.534</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Independent-t test was applied to assess trainees’ needs of learning opportunities with perception of instructors.

By comparison, the trainees (n = 273) were associated with a numerically high needs of learning opportunities M = 4.275 (SD = .275) as compared to instructors (n = 20) learning opportunities M = 3.895 (SD = .534. To test the null hypothesis significant difference was found. P value was found smaller than .05 (P=0.06 < .05). Which means that null hypothesis was rejected.

\[ H_0 \] There is no significant difference between the learning opportunities of trainees and perception of instructors.

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Table 2 Descriptive statistics associated with job requirement.

<table>
<thead>
<tr>
<th>variable</th>
<th>Participants</th>
<th>M</th>
<th>SD</th>
<th>t</th>
<th>df</th>
<th>P(sig)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jobs Requirement</td>
<td>Trainees</td>
<td>4.57</td>
<td>.139</td>
<td>1.854</td>
<td>10</td>
<td>.093</td>
</tr>
<tr>
<td></td>
<td>Instructors</td>
<td>4.36</td>
<td>.240</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Independent-t test was applied to explore trainees’ needs of job requirement with opinions of instructors.

By comparison, the trainees (n = 273) were associated with a numerically high of jobs requirement M = 4.57 (SD = .139) as compared to instructors (n = 20) opinion of jobs requirement M = 4.36 (SD = .240. To test the null hypothesis significant difference was found for P value which was found to be greater than .05 (P=0.09>.05) which means that null hypothesis is accepted.

**H0 2**: There is no significant difference between the job requirement of trainees with opinion of instructors.

Table 3 Correlation between learning opportunities and job requirement

<table>
<thead>
<tr>
<th>N</th>
<th>Variables</th>
<th>Mean</th>
<th>SD</th>
<th>Sig2</th>
<th>r</th>
</tr>
</thead>
<tbody>
<tr>
<td>Trainees</td>
<td>Learning opportunities</td>
<td>4.275</td>
<td>.275</td>
<td>0.01</td>
<td>.91</td>
</tr>
<tr>
<td></td>
<td>Jobs requirement</td>
<td>2.288</td>
<td>2.39</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Pearson Product Moment correlation’s test was applied to analyze a correlation in between learning opportunities with jobs requirement of trainees. There has been found a significant correlation in the form of r =.91. Therefore the null hypothesis has been rejected and it was found that there was very high positive correlation in between learning opportunities and jobs requirement of trainees.

**H0 3**: There is no significant correlation between learning opportunities with job requirement of trainees.

Table 4 Correlation between perception of learning opportunities and opinion of jobs requirement

<table>
<thead>
<tr>
<th>N</th>
<th>Variables</th>
<th>Mean</th>
<th>SD</th>
<th>Sig2</th>
<th>R</th>
</tr>
</thead>
<tbody>
<tr>
<td>Instructors</td>
<td>Learning opportunities</td>
<td>3.89</td>
<td>.534</td>
<td>0.40</td>
<td>.26</td>
</tr>
<tr>
<td></td>
<td>Jobs requirement</td>
<td>2.18</td>
<td>2.28</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Pearson Product Moment correlation’s test was applied to analyze a correlation in between perception of learning opportunities with job requirement of instructors. There has been found a significant correlation in the form of r =.26. Therefore the null hypothesis has been rejected and it was found that there was very low positive correlation in between perception of opportunities and opinion of job requirement of instructors.

**H0 4**: There is no significant correlation in perception of learning opportunities with opinion of instructors about jobs requirement.

DISCUSSION

The objective of study to establish relationship between learning opportunities with jobs requirements beyond the classroom in technical institutes. The present study explored learning opportunities with two perspectives, i.e. needs of learning opportunities of trainees and perception of instructors beyond the classroom in technical institutes. These factors were measured in learning opportunities: study material of technical institutes were according to mental levels of trainees. The existing curriculum programs of TEVTA institutes was cater the needs of its trainees. Technical training courses gave enough technical training opportunities to trainees. Technical programs provided up to date audio Visual Aids for instructions. Technical educational programs also developed safety habits in trainees. The existing curriculum of technical institutes provided skill oriented education. These programs emphasized on practical skills rather than theoretical work. Moreover, these programs provided sufficient technical expertise based on latest technology. The results showed in table.1 that learning opportunities beyond the classroom of trainees and perception of instructors were not coordinated. The findings of the study were consistent with the findings of Shah at el. (2011). There were also measured effectiveness of technical institutes programs with these factors: responsiveness to the needs of industry, meeting expectations of the students employment needs, acceptance of employer and meeting future needs. Their results of responses were agreed in on these factors. Jobs requirement was also measured with trainees and instructors perspectives. Jobs requirements of trainees and opinion of instructors about jobs requirement were assessed through these factors: Study material of technical institutes in accordance with the job market, technical courses prepare and equip of trainees to provide free tools kits to their graduates.it also provide trainees wage employment or self-employment. Technical institutes of TEVTA fulfill needs free tools kit at the end of courses to start their self- employment. Technical training fulfill trainees’ jobs requirements’ needs. Technical educational institutes deliver training in TEVTA institutes. The programs offered by TEVTA create opportunities of employment. Furthermore technical educational institutes provide equal employment opportunities for adolescents of urban and rural areas. The results showed in table.2 job requirements of trainees and opinions of trainers about jobs were same. Shah at el. (2011) also measured these factors. Their rating on wage employment and self-employment were high. The results showed in table.3 that learning opportunities of trainees beyond the classroom and job requirement in technical institutes of TEVTA were according to trainees’ jobs requirement. The study of Shlett at el. (2011) supported these results. They observed independent learning with jobs requirement of students. The results depict that in table.4 perception of learning opportunities was related to job requirement in technical institutes of TEVTA. The results of the study were consistent with
findings of Dieffendorff, Richard and Croyle (2006). They found supervisor perception correlated with employees’ job impact. Learning in technical institutes provided professional opportunities to trainees. Trainers developed learning programs that included practical knowledge in trainees. Classroom environment created new opportunities for learners. It means that technical education equips trainee with skills, understanding and knowledge. It also makes new youth to face new challenges of professional education.

**FINDINGS**

1. There was significant difference between the learning opportunities of trainees and perception of instructors about learning opportunities.
2. There was no significant difference between the job requirement of trainees and opinion of trainers.
3. There was significant correlation in between the learning opportunities and job requirement.
4. There was significant correlation in between the perception of learning opportunities of instructors and their opinions about job requirement.

**CONCLUSION**

The conclusion is based on the findings of the study.

1. It was found that learning opportunities of trainees were different to instructors’ perception. These programs emphasized on professional skills rather than course work. These are technical programs based on modern technology and modification of course work is to be prepared according to learning opportunities. TEVTA technical institutes deliver up to date Audio Visual Aids to trainers to convey technical training and also develop safety habits.
2. It was found out that jobs requirement of trainees were according to the opinions of instructors. TEVTA technical Institutes complete their program in specific time but students’ requirement are not fulfilled in that time. These programs need latest revision of courses according to job market.
3. It was found that learning opportunities of trainees were according to their job requirements. The students are aware that learning opportunities are relevant to the needs of trainees. Such training program is according to the job market. The learning material is according to the mental level of trainees. The graduates of TEVTA institutes engage themselves in their wage employment or self-employment. They also require free tools kit at the end of their course to start their self-employment. TEVTA graduates require jobs in their professional fields when they complete their technical training.
4. It was found that perception of instructors about learning opportunities of trainees was according to their job requirements. It is evident from the response of the Instructors that study material of their programs training were according to the needs of job. The quality of TEVTA programs was remarkable. These programs provided job to the youth of urban and rural areas. However, there is lack of teaching aids in TEVTA institutes.

**RECOMMENDATION**

The following recommendations were based on conclusion:

1. It was found that learning opportunities of trainees were different to instructors’ perception. The TEVTA institutes course work attached to factories and industries so that the students can easily learn latest technology. This may be covered under apprenticeship on nominal wages to get hands on experience.
2. It was found that jobs requirement of trainees were according to opinions of instructors. Refresher courses must be designed for trainers for their technical education and professional development to get the best output.
3. It was found that learning opportunities of trainees were according to their job requirements. Industrial visits may be attached to such courses to get the up to date knowledge and equipment’s use to improve their skills.
4. It was found that perception of instructors about learning opportunities was according to requirements of jobs market. Registration/certification and accreditation of such technical educational programs to be made to get the credible human resource in the international and national job market.

**REFERENCES**


