

# The Role of Wood Industries Training Courses in Employment in Shirvan and Effects of Education on It

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## Abstract

Technical and vocational education to train skilled manpower and professional and efficient is one of the key and undeniable factors for economic and social development in any country. And any major investments in various sectors of the economy required to planning and investment in human resource and resource development on this force. In our country, this is the task of education, universities and colleges, and vocational and technical institutions of the country. There is an expert in every country in addition to reducing deaths and injuries while working, increased employment, entrepreneurship, and has been followed by increased production. Therefore, with Consider the importance of training and education, in this research is investigated the relationship between training and education and their role on employment and increasing of national product. This research is part of applied research and method of research is descriptive kind of correlation. Population of this research is No. 3 Center for technical and Vocational Students in the year 1390 so far and Martyr Taghavian Vocational and Technical High Schools Students in third grade of wood and paper technology course in Shirvan at 1389-90 and 1390-91 academic year and sampling method is census. Results show that there is significant relationship between education level and employment after skill learning. There is significant relationship between workshop score and employment after skill learning. Also, 77 percent of students after completion of training and 51 percent of students after the third year Vocational and Technical High Schools has been organized in the acquisition of skills.

**Keywords:** *vocational training, employment, national production, education, vocational.*

## 1. Introduction

In today's world, technical education helps individuals in upgrading knowledge in science and technology domains for a large variety of jobs which require expert skills and technical capabilities. This type of education helps learners to develop flexibility and responsiveness towards societies' expert requirements through increasing his or her knowledge and skills. Technical education should exist in the entire life time as educational system which satisfies every country's especial needs and leads to global technological development. It also may prepare individuals for decision making, participation in brain storming meetings, team works and leadership at work and the society.

Nations' economic developments are significantly influenced by educational growth and development (Psacharopoulos & Patrinos 2004). Econometric studies have identified solid evidence for this claim. (Patrinos, 2004; Hanushek and kimbo, 2000; Presson & Tabelini, 1994; Weale, 1999). In such circumstances, countries which have identified the importance of education and its' role in future economy and simultaneously are concerned with development, consider qualification of educational system as their fundamental mission and a priority (Jorgenson & Fraumeni, 1992) and also spend a significant share of their national gross production on educational system (Organisation for Economic Co-operation and Development (OECD), 2000).one the most important parts of every countries' educational system is the technical educational system and paying attention to it is one of the basic guidelines of every country for training efficient human resources in pre- university levels (Simsek & Yildirim, 2000; Kazamias & Roussakis, 2003) and its effective role in satisfying economic, social and individual goals has not been out of the reach of researches (Psacharopoulos & Loxley, 1985; Neuman & Ziderman, 1991; Fiszbein & Psacharopoulos, 1993; Bennel, 1996; Mundle, 1998; Bishop, 1998).

Lee (1994), Organization of economic cooperation and development, and Hanhart & Bossio (1998) believe that cultural, politic and economic requirements and type of countries' perspective on official technical training have led to emergence of three patterns of work related learning, full-time technical education and apprenticeship.

The first pattern is the same training centers which are established in productive and service institutes and countries such as America, England and Japan use them. In the second pattern, scientific and theoretical educations are provided in shared style and one of its' major features is weak connections with labor market. Countries such as France, Spain and Iran follow this pattern. In the second pattern which is implicated by countries such as Germany, Australia and Swiss education and skill learning are carried out in two environments of school and work and for this purpose, it is called dual system. Work related learning is considered as the fundamental principle of this pattern (Haddleston & Oh, 2004; Damlund, 2011).

Emergence of some signs of inefficiency of high school system, visual growth of technology and necessity of need for expert and semi-expert staff in industries have forced rule makers of the educational system to take actions towards solving this issue through imposing basic changes on societies' formal education body. Establishing branches of skill learning in educational system is one of the outcomes of this decision. In spite of importance of establishing such centers, also provision of mechanisms for their quality optimization is highly significant.

One of the positive effects of growth of technical education is growth of gross domestic production. In addition to its' growth of GDP, as it's suggested by international statistics, it leads to more investments in the context of technical education. Many of modern developed countries have precisely recognized this process decade ago and consequently exerted efforts for simultaneous quantitative and qualitative developments a main action in human development. According to UNESCO, in 2005, among different global domains, euro domain had the highest rate of registrations in technical educations (69 percent). After Europe, it was pacific (62 percent), South America (14 percent) and Asia (11 percent) respectively (Mohammad Ali, 2011).

In Iran, after establishment of Academy (Darolfonoon) more attention was paid to new concepts and in addition to establishing normal schools which were growing rapidly, also some expert schools were established (Marjani, 1992). In about a century, Iran's technical education programs had a relative growth despite of tolerating several ups and downs. Designing the curriculum for technical education in new high school system in the form of a five year technician training program was one of the actions taken for correction of high school education system, decreasing space density for entering universities and responsiveness to the need of economic sections to expert and skilled labor (Office of technical and vocational high schools, 2001).

According to a research carried out in America, 83 percent of respondents believed that schools should put more emphasis on preparedness of learners for work. And in response to a question of place and performance of technical education, 76 percent of respondents believed that these educations must receive more attention. 90 percent of them were agreeing that technical educations improve individuals' interest in continuing their studies in higher levels. 98 percent of respondents considered apprenticeship educations in working environments necessary for learners and only 4 percent believed that technical educations lacked high jobs authentication (V.O.C.H, 1997).

Khani (2002) discussed the employment condition and elements related to employment of work and

knowledge high schools graduates in Khorasan province and concluded that 20.6 percent of graduates were employed, 34.1 percent were unemployed, 24.4 were college students, 8.1 percent were serving for military, 12.5 percent stayed at home and 3 percent were religious sciences students.

Barzegar (2003) in his research titled as "discussing the employment condition of graduates of Computer and electronics fields of work and knowledge high schools in Tehran". He concluded that form the total number of 382 graduates. 24 percent were employed, 40 percent were unemployed, 28 percent were studying and 8 percent were serving for military.

In discussing the employment condition of graduates of architecture and accounting fields of work and knowledge high schools in Tehran, carried out by Barzegar (2004), it was concluded that 28 percent of graduates were employed, 45 percent were unemployed, 14 percent were studying, 5 percent stayed at home and 8 percent were serving for military.

Shariat Zadeh (2010) discussed the academic and employment condition of graduates of work and knowledge high schools in majors of computers, finance and accounting and agriculture and compared them to theoretical fields' graduates. In this research graduates of work and knowledge branch (study group) and theoretical fields (comparison group) of the entire country's high schools are compared during educational years of 2000-2001 until 2002-2003. Sample size was determined through simple random sampling. The main instrument of the research was questionnaire. Results of the research demonstrated that most students who were absorbed by aforementioned work and knowledge majors are in median or higher academic levels and their personal interest is the most important factor for them to join work and knowledge field. Results indicated that 45.2 percent of graduates of theoretical fields and 23.2 percent of work and knowledge graduates were interested in continuing to study their major in university. 17.7 percent of graduates of work and knowledge and 15.8 percent of theoretical fields' graduates were employed at the time of research and most of graduates of work and knowledge fields were employed through introduction of friends and acquaintances. Also relation between work and knowledge graduates' major and their current jobs was reported higher than mean level. Optimizing the quality of work and knowledge trainings, taking a decentralized approach in planning in work and knowledge fields and equilibrated development in computer, finance and accounting and agriculture fields are among proposals which are introduced with application of the results of this research.

## 2. Methodology

In terms of goal, this research is an applicable research carried out descriptively and is of correlational type. The population includes students of number three technical center of Shirvan in wood industries major. Cyclic participants of this major are counted as 90 individuals since 2011 until now. Also the entire population of third year students of Martyr Taqavian technical school counted as 35 people was studied through census sampling.

Research instruments were evidence and documents of final exams during the aforementioned time scale and interviews with students and academic workbook of students of mentioned high schools in the second and third year. Scores of final exams and weighted average of three workshop lessons (basic wood workshop, 4 units; production workshop, 3 units and project building workshop, 2 units) was extracted for each student and further, they were analyzed via SPSS.

## 3. Results

Analysis results for employment condition after finishing the learning period are provided in table 1 with academic degree distinction.

Table1. Employment condition analysis for wood industries' students after finishing the year

Sum	B.A	Semi B.A	diploma	Under diploma	Academic degree
69	4	14	42	9	employed
76.67	100	100	82.35	40	Employed percentage
21	0	0	9	12	unemployed
23.33	0	0	17.65	60	Unemployed percentage
90 = 100 %	4	14	51	21	sum

In table 1, it is suggested that employment level among semi B.A and B.A graduates is 100 percent after finishing the learning period, while this rate is 82 percent for diploma holders and 40 percent for under diplomas.

Figure1. Employment conditions diagram. After finishing the period

Figure 1 is the diagram of number of employed and unemployed learners according to academic degree. According to the diagram, semi B.A and B.A graduates are entirely absorbed by labor market and no unemployment is evident among them. Most unemployed individuals are related to under diploma group.

Obtained data were analyzed through SPSS and Spearman correlation test and the results are manifested in table 2.

Table2. Correlation coefficient (academic degree and employment)

employment	Academic degree	
0.471** 0.000 90	1 -- 90	Academic degree correlation Significance level number
1 -- 90	0.471** 0.000 90	Correlation coefficient for employment Significance level number

\*\* Correlation is significant at 99 percent

In table 2, results of correlation test between academic degree and employment is shown. Results indicate that correlation between academic degree and employment is significant at 99 percent.

Weighted average analysis for learners' scores in third grade of Martyr Taqavian technical schools' wood industries major during educational years of 2010-11 and 2011-12 are described in table 3.

Table3. Descriptive analysis of workshop scores of wood industries students during educational years of 2010-11 and 2011-12.

sum	deviation	variance	range	min	max	average	num
521.54	1.96368	3.856	7.22	11.67	18.89	14.90	35

Results of table 4 were obtained while discussing the employment status of Martyr Taqavian technical schools' students. Based on this table, 51 percent of wood industries' third year students had chosen a job in this context.

Table4. Analysis of employment status among graduates of wood industries major.

Workshop scores' average	percentage	number	Employment status
16.47	51.4	18	employed
13.24	48.6	17	unemployed
14.90	100	35	total

Table 5 indicates the Spearman correlation tests' results for workshop scores and employment of wood industries students' employment status in Martyr Taqaavian technical school. According to the yielded data, correlation between workshop scores and employment is significant at 99 percent.

Table5. Correlation coefficient (workshop scores and employment).

employment	Academic degree	
0.835** 0.000 35	1 -- 35	Academic degree: correlation coefficient Significance level number
1 -- 35	0.835** 0.000 35	Employment: correlation coefficient Significance level number

\*\* Correlation is significant at 99 percent

#### 4. Conclusions

According to obtained results, there is a 99 percent relation between academic degree and employment of students. May be the element of obtaining social character is effective in men's employment after graduation but the obvious is men's more efforts in higher levels for employment and taking the responsibility of life and the quest for freedom and maybe becoming prepared for developing an independent life. Also the reason of high rate of unemployed graduates in under diploma level is a consequence of participation of many interested students in skill learning courses. Many of these students enter universities after graduation and continue their schooling and also many are serving for military. In any case, results of efforts of students with higher degrees on one hand increases access to learning and degree of skills and on the other hand provides higher motivations for obtaining a job. This indicates that university graduates have spent more efforts for obtaining a job and among them; learning has a relative more effect in increasing national productivity and reaching an entrepreneur status.

Also according to obtained results, there is 99 percent significant relation between workshop scores of wood industries students and their employment in contexts related to their study field. This indicates the fact that individuals who had been more interested in workshop works, had obtained higher scores and were basically successful in employment after graduation. Studies conducted by Hosseini (1998) and Kadivar (2003) suggest that students who have necessary motivations for continuing schooling, have a more successful academic development. This academic success causes these students to have more chances of employment for entering labor market.

Comparison of the results of this research with previous researches (Barzegar, 2004 and 2005; Khani, 2003; Shariat Zadeh, 2010) indicates that level of employment in wood industries major is relatively higher than studied majors of researches of other researchers. A major reason for this difference may lie in the fact that this major is more applicable and that there are vast markets

for wood artifacts supply and relative high benefits of activity in this major which intensifies employment intensives.

As a consequence of importance of productive employment, the following recommendations are provided towards research findings:

Wood industries major in high schools should be equipped with modern machines as a result of high employment capability compared to other majors and also department of education must try to supply their consumable materials.

Trainings should be provided according to requirements of the market and operation of the most advanced modern machines must be taught to students.

With respect to importance of wood industries major in employment and increasing national productivity, and with further respect to the fact that our country is generally an importer of wooden artifacts especially furniture, expert furniture construction learning is recommended in high schools and technical education centers.

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