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Obstacles Faced by Heads of Departments and Faculty Members in the Jordanian Public Universities in the Implementation of Vocational and Technical Education Programs from their Perspective

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Abstract

The purpose of the study is to find out the obstacles faced by heads of departments and faculty members at Jordanian public universities in the implementation of vocational and technical education programs from their perspective, and to find out the effect of gender, experience, and academic rank on their perspective. To achieve the aim of the study a questionnaire was distributed among 70 heads of departments and faculty members (38 males and 32 females) from six public universities. The questionnaires were collected and data was analyzed statistically using suitable statistics. Results showed that there are statistically significant differences in the heads of departments and faculty members perspectives about the obstacles they faced in the implementation of vocational and technical education programs, it also showed that there are statistically significant differences at (α= 0.05) in the heads of departments and faculty members perspectives about the obstacles they faced in the implementation of vocational and technical education programs due to the gender variable, and there are statistically significant differences at (α= 0.05) in the heads of departments and faculty members perspectives due to experience variable and academic rank variable.

Keywords: vocational and technical education, obstacles, public universities, programs, heads of departments

1. Introduction

If education is the key to any developmental strategy, then the vocational and technical education is the basis that would change the world of work and economy and to reduce poverty and preserve the environment and improve the quality of life.

Because of its pivotal role in the economic and social development, it is seen as a necessity for many countries to expand educational opportunities and to address unemployment among young people and a means of earning a living product, including the countries of southern and eastern Europe, which re-established strategies to guide education and vocational and technical training to the needs of the labor market (UNESCO, 2005)

Although technical and vocational education and training describes some kind of education and training but what it constitutes and how it is processed differs from state to state (Grubb, 2006). Technical and vocational education has many different names from one country to another, including: education and vocational training, technical and vocational education, technical and vocational education and training, vocational technical education, or education vocational and technical training, all of which mean the same thing.

In general, technical or technical education refers to a post-stage secondary of study and practical training which aims to prepare technicians and supervisors. On the other hand, the training refers to lower secondary education level technical education and training in order to prepare skilled and semi-skilled workers in various professions (National Institute of Science and Technical Education, 2009).

UNESCO defines vocational technical education as a comprehensive term referring to educational processes involves, in addition to general education, the study of techniques science in technology, applied science, agriculture, commercial studies, industrial studies, visual arts, science related to different education, and acquiring skills process and knowledge are aimed at discovering and developing the individual's work in various sectors of economic and social life (Ekpenyong, 2011).

The rationale for comprehensive technical and vocational education lies in Preparation of professional skills for the labor market (Strong, 1990)Continues to change, and vocational technical education may change , And terminology developments and purposes due to population changes such as technological, economic, political and social(Pucel, 1990), where these developments are putting pressure on Governments and policy makers to continue to expand purposes and expectations for vocational technical education.

There is a new awareness among policymakers in developing countries and the international community to the crucial about the role that technical and vocational training play in national development, and in this many foreign studies have highlighted the role of technical and vocational education in development, such as: (Christina , 2012; Kehinde and Adewuyi, 2015; Ohiwerei and Nwosu, 2015; Olajide; 2013) As well as some Arab studies highlight the role played by technical education product through its outputs in the service of Arab societies, such as the study of (Ali, 2009; Mahmoud, 2012), where one of the most important features lies in that vocational and technical training in the direction of the world of work and confirmation Curriculum to acquire the necessary skills to work. Therefore Vocational and technical education should be developed at a high level to train the skilled and pioneering manpower needed by the country to create production and address the problem of unemployment and out of clutches Poverty.

1.1 Statement of the Problem

Grounded on the truth in which it seems that the request for vocational instruction in Jordan is low, even many of the students registered in professional instruction they joined it because of the impossibility of admittance to the academic instruction due to low marks or possibly because they are incapable to cover the expenses of academic study, this means that very few registered in vocational education joined inspired by personal views of the helpfulness and the significance of vocational instruction, so this study arose to find out the causes after this and the difficulties challenged by heads of departments and faculty members in Jordanian universities in the application of vocational and technical instruction.

1.2 Purpose of the Study

This study aimed at finding out the difficulties that the faculty members and heads of departments encountered at public universities in Jordan in the application of professional and technical training programs from their point of view, it also aimed at investigating the effect of gender, academic rank, and experience, on their point of view.

1.3 Questions of the Study

1. What are the difficulties that the faculty members and heads of departments encountered at public universities in Jordan in the application of professional and technical training programs from their point of view?
2. Are there any statistically significant differences in the difficulties that the faculty members and heads of departments encountered at public universities in Jordan in the application of professional and technical training programs from their point of view due to their gender (Male, Female)?
3. Are there any statistically significant differences in the difficulties that the faculty members and heads of departments encountered at public universities in Jordan in the application of professional and technical training programs from their point of view due to their experience (less than five years, five years or more)?

4. Are there any statistically significant differences in the difficulties that the faculty members and heads of departments encountered at public universities in Jordan in the application of professional and technical training programs from their point of view due to their academic rank (Associate Professor, Professor)?

1.4 Definition of Terms

Vocational education: It is the kind of formal instruction which contains instructive training and acquisition of skills and vocational knowledge which is displayed by educational organizations of level of secondary education and later at university in order to prepare workers who are skillful in various industrial, agricultural, health, administrative and commercial disciplines and they have the ability to implementation and production.

Obstacles: difficulties felt by professionals and faculty members in the Jordanian universities and they believe hinder the development of the educational sector and pose no vinegar in the lives of future students.

2. Review of Related Literature

Madhoun and Saadia (2008) conducted a study entitled "Evaluation of the training process for technical colleges in Gaza governorates from the perspective of trainees" The aim of the study was to evaluate the training of technical college staff in the governorates of Gaza from the perspective of the trainees, and the attempt to reveal the training needs of the employees and the identification and the differences in the evaluation of the training programs of workers in technical colleges according to the variable: gender, Scientific qualification, field of work, years of experience, and college. The study population consisted of all employees in six technical

colleges, for the academic year (2004/2005) the researchers used analytical descriptive research to reach the results of the study, and the study tool was a questionnaire applied to a random sample of (186) employees.

Among the most important findings of the study:

1) There is a clear failure to identify the training needs, do not take into account the job description the results of the performance evaluation, the possibility of promotion or transfer of a new post.

2. The technical colleges' management pay little attention to the evaluation of the training process, since it does not have regular assessment plan (before, during and after) training.

3. Technical colleges do not follow incentive and incentive policies to participate in the training process.

4. Training of staff in technical colleges with public and private supervision and agency relief is better advanced than in state-run technical colleges.

The study recommended:

1. The need to establish a special department for training and human development in the Ministry of Education and higher education; to develop the staff of the technical colleges, and continuously improve their performance.

2. The need to commit to evaluating the effectiveness of training, and the use of various evaluation methods and methods.

3. To support the training materially and morally with all available capacities, as a main tool for change and the need to pursue its effects and implications on the educational field with full effectiveness.

4. Technical colleges should adopt training policies as an integrated system.

Shuwaikh & Hamdan (2004) conducted a study entitled "Practical Training in Technical Colleges in Palestine" The study aimed to identify the reality of practical training in both internal and field, in technical colleges in Palestine, as well as identify the problems of training and make proposals to raise the level in those colleges, the descriptive approach was used. The sample included (53) teachers and (104) students, randomly chosen from four technical colleges, and the questionnaire was a tool for gathering information.

Among the most important findings of the study:

1. Practical training methods contribute to the preparation of technical cadres capable of creativity and innovation.

2. Lack of laboratories, workshops, equipment, and raw materials for applications due to lack of material resources for training. The study recommended that workshops and laboratories should be equipped with sufficient equipment for practical application by specialties.

Vertakon & Rousseas (2003) conducted a study entitled "Vocational Education and Training in Greece" it was an analytical study showing the status of vocational education in Greece, where the study showed that vocational education training is the last thing young people resort to despite the state's ongoing efforts to raise vocational education training is an option equal to other options available to young people, despite the results, research shows that VET graduates face fewer difficulties in finding employment more than others who are graduates of general academic education. In the last decade, education has been witnessed professional training is developed and flexible in the specifics of advanced training and advanced competency on professional knowledge and skills through accredited national means and methods. The philosophy of higher secondary education was formed to include two tracks: First: Comprehensive schools without vocational guidance. Second: Vocational and technical schools.

Among the most important findings of the study:

1. Schools were specially designed for vocational and technical education.

2. On-site training through apprenticeship programs.

3. The first year of vocational education shall be subject to full financial coverage by these institutions.

4. Some state institutions and the private sector offer job offers to graduates of these schools.

5. The study found that Greece in 2000 spent 8.3% of the total income on education and less than 2.5% on vocational education.

The study recommended allocating an appropriate budget for the development of vocational education.

Liu (2001) study entitled "Restructuring and Developing Vocational Education in China" The study aimed at how to develop and reform vocational education in China over the past 20 years and its structure is in several levels, starting from the lowest level to the highest level which are linked to the industrial sectors and are linked to regular secondary education, this development took place within three years stages, where secondary vocational education has been reformed since 1980 while development has been initiated effective education system in the vocational education system since 1994. In 1998 interest began to facilitate communication between vocational education and higher education.

Among the most important findings of the study:

1. The unwillingness of the private sector to cooperate with the vocational education system.
2. Outputs of vocational education do not meet the needs of the labor market.
3. The structure of the vocational education system is not the formation court.

The study recommended that further studies should be undertaken to develop vocational education in China.

Abdul Samad (2000) conducted a study entitled " "Technical education and its role in achieving the requirements of the labor market in the Arab Republic of Egypt." The study aimed to develop a vision for the assessment of technical education to raise its efficiency starting with the philosophical dimension to the content and justifications to what technical education should have to meet the requirements labor market. The researcher used the field approach.

One of the most important findings of the study is that technical education suffers from many problems, the most important of which are:

1. Incompatibility with labor market requirements.
2. There are a number of new professions that are not found.
3. Lack of an existing or future plan that education planners can rely on to determine what is required of professions and disciplines in the labor market.

The study recommended that technical education should be planned in light of future needs of the forces operating in the light of economic changes globally, regionally and locally.

3. Design and Methodology

3.1 Population of the Study

The study population comprised of all faculty members and heads of departments and at public universities in Jordan.

3.2 Sample of the Study

The study sample comprised of (70) faculty members and heads of departments, (32) females and (38) males from public universities; the researcher distributed a questionnaire among them.

3.3 The Study Tool

After reviewing the previous literature in the field of vocational education, and revising many studies and make use of the tools used in these studies, the researchers designed a questionnaire and distributed it among the heads of departments and faculty members, the questionnaire comprised of (25) paragraphs. Various variables were involved such as experience, academic rank, and gender.

3.4 Reliability of the Tool

In order to guarantee the reliability of the tool, the researchers used a pilot sample of (17) faculty members and heads of departments out of the study members in the same universities and they distribute the questionnaire among them, then they redistribute it after fourteen days. The researchers used correlation coefficient to calculate the reliability; they found it (0.89) this ratio is appropriate to apply the study.

3.5 The Study Procedures

The researchers distributed a questionnaire among (70) faculty members and heads of departments at public universities in Jordan about their point of view about the application of professional and technical instruction programs. Then they analyze the data statistically after they collect it.

4. Findings of the Study

This study aimed at investigating the difficulties that the faculty members and heads of departments at public universities in Jordan in the application of professional and technical instruction from their point of view, it aimed also at investigating the impact of experience, academic rank, and gender on their point of views. The researchers distributed a questionnaire among (70) faculty members and heads of departments from public universities in Jordan. The researchers used means and standard deviations and T-test in order to analyze the data.

Results related to question one: What are the difficulties that the faculty members and heads of departments encountered at public universities in Jordan in the application of professional and technical training programs from their point of view?

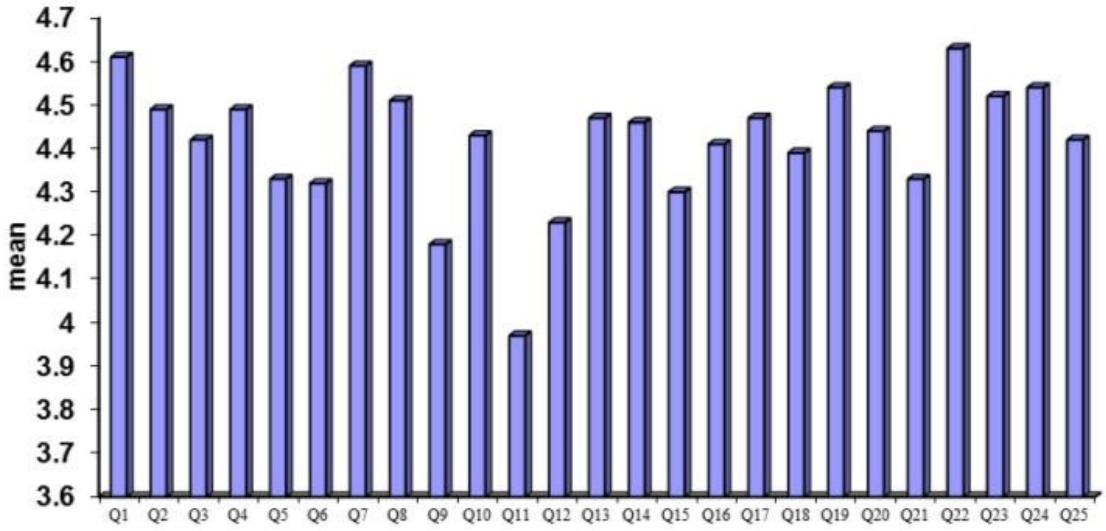
To answer this question, the researchers distributed a questionnaire among the study sample and they calculate means and standard deviation. Results are clear in table (1)

Table 1: difficulties that the faculty members and heads of departments encountered at public universities in Jordan in the application of professional and technical training programs

	Item	Mean	Std. Deviation	Rank
1	Vocational education doesn't show creativity	4.61	.698	High
2	Vocational education never help eliminate unemployment	4.49	.715	High
3	Demand for vocational education is necessary to meet the labor market needs of skilled hands.	4.42	.805	High
4	I think that vocational education doesn't contribute to economic prosperity.	4.49	.858	High
5	I think that the ignorance of the importance of professional study reduce the trend towards it	4.33	.848	High
6	financial payoff of vocational education is not suitable	4.32	.767	High
7	The nature of the profession of a parent has an impact on the trend towards vocational study	4.59	.693	High
8	The lack of demand for vocational education because of lack of job opportunities for graduates	4.51	.732	High
9	Orientation towards vocational education may reduce the social status	4.18	.907	High
10	The social status of the family does not enhance the trend towards vocational education	4.43	.877	High
11	vocational education doesn't provide guaranteed income in the future	3.97	1.000	High
12	Jordanian curriculum does not enhance the trend towards professional study	4.23	.884	High
13	Parents do not like the trend towards vocational education	4.47	.905	High
14	Orientation towards vocational education may not be compatible with academic trends of the student	4.46	.880	High
15	The desire of students to have comfortable future business enhance them to study academic stream	4.30	.837	High
16	Universities are not equipped enough to fit vocational education	4.63	.679	High
17	Students believe that vocational education is dedicated to the failures in the study	4.47	.759	High
18	There is risk in the application of some types of vocational education	4.39	.879	Moderate
19	There are no qualified instructors for vocational education	4.54	.741	High
20	Libraries in universities are not supplied with enough books on vocational education	4.44	.784	High
21	The equipments for vocational education are very expensive	4.33	.945	High
22	Lack of vocational guidance that enhance the student to the vocational study	4.41	.806	High
23	There is geared towards vocational education by female students, it is much less than male students	4.52	.755	High
24	There are no governmental plans for vocational education	4.54	.672	High
25	There is no governmental financial support for the universities to equip the labs	4.42	.812	High
	QALL	4.42	.584	High

It is clear in table (1) the existence of statistically significant differences in the difficulties that the faculty members and heads of departments at public universities in Jordan encountered in the application of professional and technical instruction programs from their point of views. The results of the questionnaire which was distributed among (70) faculty members and heads of departments about the difficulties they encountered in the application of vocational and technical education programs. The researchers calculate the means and standard deviations and it is clear that paragraph 16 (Universities are not equipped enough to fit vocational education) got the maximum average which was (4.63); question 11 (vocational education doesn't provide guaranteed income in the future) got an average of (3.97) and comes next.
Standard deviation for question 16 was (0.679) this value is more than ($\alpha \leq 0, 05$) it is statistically significant. While standard deviation for question (11) was (1.000) it is statistically significant.

Diagram 1: difficulties that the faculty members and heads of departments encountered at public universities in Jordan in the application of professional and technical training programs



In the diagram it is obvious that the mean of paragraph 16 got the maximum mean, and then comes next paragraph 11. The mean of the (4, 8, 19, and 24) are almost the similar, so heads of departments and faculty members viewpoints in the application of vocational and technical education programs are positive viewpoints.

Results of question two: Are there any statistically significant differences in the difficulties that the faculty members and heads of departments encountered at public universities in Jordan in the application of professional and technical training programs from their point of view due to their gender (Male, Female)? To answer this question the researchers calculated the means and standard deviations the results are shown in table 2.

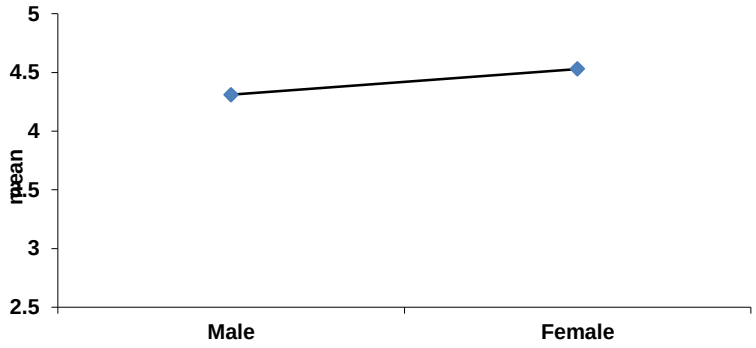
Table 2: t-test, means, and standard deviations due to gender variable

Gender	Number	Mean	Std. Deviation	t-test	Degree of freedom	Significance (2-tailed)
Male	38	4.31	.685	-2.542	168	.012
Female	32	4.53	.425			

It is clear in table (2) the existence of statistically significant differences due to gender variable. The results of the questionnaire which the researchers distributed among the study members about their point of views about the difficulties they encountered in the application of professional and technical instruction programs. The researchers calculated means and standard deviations and the findings indicated that males got lower means than females which was (4.31, and 4.53,) respectively; this result shows that gender has an effect on the study members' point of view.

On the other hand, standard deviation for females was (0.425) more than ($\alpha \leq 0, 05$) it is statistically significant. Standard deviation for males was more; it was (0.685) it is statistically significant. Thus, it is clear in table the existence of statistically significant differences due to gender variable in favor of females. i.e. females believe more that there are more obstacles facing the application of vocational and technical education.

Diagram 2: t-test, means, and standard deviations due to gender variable



As shown in diagram 2 males have less positive point of views about the difficulties they encountered in the application of professional and technical instruction programs in the public universities in Jordan.

Results of question three: Are there any statistically significant differences in the difficulties that the faculty members and heads of departments encountered at public universities in Jordan in the application of professional and technical training programs from their point of view due to their experience (less than five years, five years or more)? To answer this question the researchers calculated means and standard deviations and results are clear in table 3.

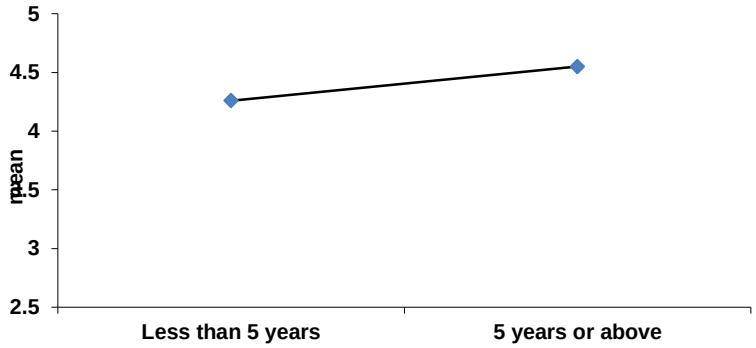
Table 3: t-test, means, and standard deviations and due to experience variable

Experience	Number	Mean	Std. Deviation	t-test	Degree of freedom	Significance. (2-tailed)
Less than five years	29	4.22	.721	-3.386	167	.001
five years or above	41	4.51	.384			

It is clear in table (3) the existence of statistically significant differences due to experience variable. The results of a questionnaire which the researchers distribute among the study sample about their point of view about the difficulties they encountered in the application of professional and technical instruction programs. The researchers calculated the means and standard deviations and results show that study members whose experience less than five years got a minimum mean than the study members whose experience more than five years which was (4.26, and 4.55) respectively; this means experience have an impact on the point of views of the study subjects.

On the other hand, standard deviation for the study members whose experience less than five years was (0.722) this is more than ($\alpha \leq 0$, 05) so it is statistically significant. While standard deviation for the study members whose experience more than five years was lesser; it was (0.385) it is statistically significant too. Thus, table 3 indicates the existence of statistically significant differences due to experience variable in favor of five years or more. Which means those whose experience is longer, believe that there are more obstacles facing the application of professional and technical education.

Diagram 3: t-test, means, and standard deviations due to experience variable



It is obvious in diagram 3 that the study members whose experience is five years or more got more positive point of views about the difficulties they encountered in the application of professional and technical instruction programs than the study members whose experience less than five years.

Results of question four: Are there any statistically significant differences in the difficulties that the faculty members and heads of departments encountered at public universities in Jordan in the application of professional and technical training programs from their point of view due to their academic rank (Associate Professor, Professor)? To answer this question the researchers calculated means and standard deviations and results are clear in table 4.

Table 4: t-test, means, and standard deviations due to academic rank variable

Academic rank	Number	Mean	Std. Deviation	t-test	Degree of freedom	Significance. (2-tailed)
Associate Professor	55	4.20	.850	-2.298	168	.023
Professor	15	4.45	.479			

It is obvious in table 4 the existence of statistically significant differences due to academic rank variable. The results of a questionnaire that the researchers distributed among (70) faculty members and heads of departments at universities in Jordan about their point of views about the difficulties they encountered in the application of professional and technical instruction programs were displayed. The researchers calculated means and standard deviations and the results indicated that the study members whose academic rank is Professor got a higher mean than those whose academic rank is Associate professor which was (4.47, and 4.22) respectively; this indicates that the academic rank has an effect on the heads of departments and faculty members' perspectives.

Standard deviation for the heads of departments and faculty members whose academic rank is Professor was (0.482) which is higher than ($\alpha \leq 0, 05$) so it means that it is statistically significant. Standard deviation for the heads of departments and faculty members whose academic rank is Associate Professor was higher; it was (0.853) which is also not statistically significant. So, table 4 shows there are statistically significant differences due to academic rank variable in favor of Professor.

Hence, the previous table indicates the existence of statistically significant differences in the heads of departments and faculty members' perspectives due to academic rank variable in favor of Professor, which means that professors believe more that associate professors that there are more obstacles facing the application of vocational and technical education.

Diagram 4: t-test, means, and standard deviations due to academic rank variable

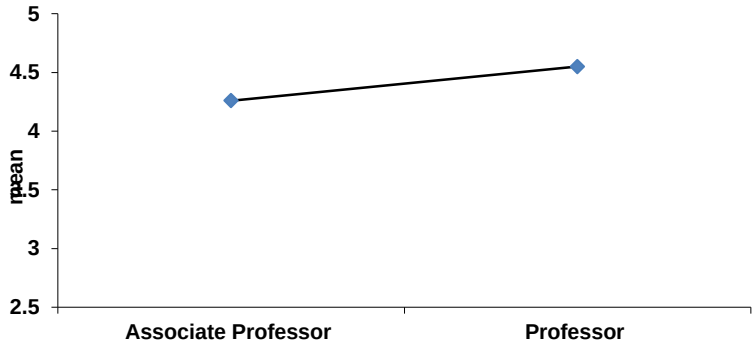


Diagram 4 shows that the academic rank "Professor" got more positive perspectives about the obstacles facing them the implementation of vocational and technical education programs in the Jordanian public universities than the academic rank "Associate Professor".

Conclusion

Vocational education is spread greatly recently in most of the countries all around the world, Jordan also pay a great attention to it. In the secondary schools there were in the past only scientific stream and literary stream, but in the past two decades a new stream was added which is vocational stream. Then in universities the ministry of higher education also added new vocational specializations and the government in turn tried its best to offer jobs for the students who graduate from vocational specializations.

4.1 The recommendations of the study

In light of the above findings, the researchers recommend the following:

1. Educating students about the vocational education through the media and indicative flyers and visits and field trips to colleges and professional institutes.
2. Working to raise the trends of society and the related environment of the school to the vocational education and to clarify its importance to the community and give children positive attitudes towards it.
3. Establish modern vocational and technical specializations and enhance students to enroll it and serve the changing conditions in the community.
4. pay attention to vocational colleges, institutes, and schools, develop it and providing it with Modern equipment and supplies to keep pace with changes in society.
5. Teaching students to Study in vocational education start at an early stage such as the fifth grade, for example, then it extends to the end of secondary stage

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