

Obstacles of Orienting Vocational Education in the School of Future - A Survey of Educational Supervisors' Views in Gaza Strip

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Abstract: *The study aims at identifying obstacles of orienting vocational education in the school of future in Gaza Strip according to educational supervisors' views in public schools in Gaza Strip. This study highlights those views according to the variables of the study data (gender, educational qualifications, years of service) and suggests recommended solutions to overcome them. In order to achieve the study results, the study depicts the analytic descriptive method by distributing a questionnaire consisted of (32) items covering four major fields related to the nature of the study. The study population includes all educational supervisors in public schools in the Ministry of Higher Education (MOHE) in Gaza Strip in the academic year 2016/2017. The study recommended the need to raise the level of awareness of all society segments as a whole; its institutions and the educational community to the importance of orienting vocational education in the school of future in Gaza Strip.*

Keywords: Vocational education, the school of future

1. Introduction

The school reflects the reality and aspiration of any country. It is the place where the process of translating the philosophy of the community into thoughts is presented to build the future in the form of curricula, methods of teaching and ideas inside classrooms [1]. In the light of rapid changes in the present era in all sectors, particularly the technical revolution; a trend or a vision, that seeks to look into the future has recently emerged in helping to prepare nations for the different requirements of the future. Since the school played a major role in the renaissance of the nations, the research of the future of the school was one of the concerns of the educators. Hence, the so-called "school of the future" appeared on the educational surface.

Othman [2] described the school of future as "a reality and hope" while Goodlad [3] referred to the school of future as "a framework in facing the future". Furthermore, Al Zboun [4] stated and clarified the features of the school of future. Looking at the school of future realistically gives us deep insight in dealing with different data for the development of that school. Those data highlight what deserves to begin with according to importance, what can be delayed, what can be applied including the required financial support, what works for our society, what does not, and finally what needs to be changed. Therefore, in the end, those who will outperform others in the post-information age era are those countries that have invested in developing their intellectual capital wisely [5] and [6]. Al Zoubi [7] defines the school of Future as follows:

A school that contributes to enhancing the quality of education, enabling education to contribute effectively to human capacity building and development, and educating the generations of nations to meet the renewed scientific and cultural challenges promoted by contemporary economic

globalization. It is an environment that meets the psychological, cognitive and the performance needs of children within the working team in wider educational settings that integrate the role of the school, family and community environment.

There is no doubt that human reconstruction is the true guarantee of development, and that the true wealth of the nation is its human educational wealth. Man is the purpose and means of development in the same time. Vocational education has thus assumed an important place in the educational policies of developed and developing countries alike because of its many advantages in the education system and the field of work [8]. As a result of the witnessed scientific development, vocational education has become a major concern because of its importance in providing human resources [9], [5] and [10]. Furthermore, it helps in preparing the young people who are theoretically and practically qualified to contribute to the development of societies by employing them as human resources in various development plans to improve society. The needs of the community have imposed the educational institutions to dedicate the efforts and to make a change to ensure that these issues are considered and implemented, as a part of the comprehensive reform process [11].

Vocational education is indivisible from the educational system in its large form. Vocational education in its broad form is the type of education that makes an individual more capable of working in a group of professions than in another. This is different from the general form of education, which is equally important, even though individuals are not prepared to be qualified to do vocational work [12]. Vocational education is the kind of formal education that includes educational preparation and imparting skills and professional vocational knowledge which carried out by regular educational institutions at the secondary level for the purpose

of preparing skillful workers in various industrial, agricultural, medical, administrative and commercial fields [13]. This is also the formal education which includes educational preparation and behavioral guidance in addition to acquiring skills and professional abilities of the regular institutions at the secondary level for the purpose of preparing skilled workers from different fields and professional disciplines. It makes them able to carry out the tasks assigned to them, and formulate a link between technical skills for graduates of technical education institutes and unskilled workers. Preparation for this kind of education takes from two to three years after the basic education stage level and the students' age groups range starting from fifteen years old [14].

Furthermore, vocational education system is a recent concern compared to other educational formal systems. The majority of the Arab countries, including Palestine, have been paying more attention to public formal education system than vocational one. The development of vocational preparation systems began in the early 1970s in terms of policies, objectives, structure and programs. Governments worked to improve the quality of vocational education outputs to become more up-to-date and to meet the needs and requirements of the fields of work and development [15], [1] and [16].

Vocational education aims primarily at bringing changes in the attitudes of individuals and groups to make industry, science, technology, professional and manual labor, values and concepts as essential parts of the culture of society [17]. Therefore, vocational education is becoming more and more popular with governments support, encouraging and supporting students' attitudes towards this type of education, since it is connected to the needs of the community. It is no less important than other traditional educational forms, especially after the specter of unemployment has threatened a large number of academic graduates with specializations that have no place in the labor market [18] and [19]. Therefore, it becomes an urgent need to rectify the path towards vocational education, mastering occupations and integrating them into labor market. However, the main problem is thus the negative perception for students who turn to choose this path of education. Many students choose their course of study based on social factors of customs and traditions, and seek jobs and occupations that the society considers good and secure rather than being indicators and integral needs of the real labor market.

Vocational education in Palestine serves many of the poorest and most disenfranchised in the Palestinian society in a context of profound structural obstacles to wellbeing achievement. These obstacles are inextricably linked to the continued occupation and the seventy years of refugee status endured by millions of the Palestinians. Moreover, for young Palestinian women in particular there are also cultural norms that constrain aspirations, and the achievement of wellbeing [20]. Al Zubai and Janabi [13] consider vocational education to be one of the most important links between the educational system and the world of work and development. According to their study, vocational education is the main tool for change and one of the basic means to prepare

personnel and to qualify them for the professions with the required skills in the labor market. Therefore, the coming era requires all vocational and technical education institutions to move in their strategic plans towards the development of education and training systems and patterns with important focus on research in adopting the best policies and structures that provide an effective response to the needs of current and future society.

2. Vocational Education in Gaza Strip

Vocational education is one of the branches of education in Palestine. It contributes effectively in providing human outputs that possess skills that enable their owner to make a positive and distinctive change towards the development of the society and to achieve economic development and to meet the requirements and needs of the Palestinian labor market with skilled and qualified human resources both locally and internationally [1], [15] and [21]. Vocational school is a school that offers its students a dual educational program that combines academic education with specialized vocational education. It qualifies its graduates to join the labor market and to specialize in a profession on one hand and to help them to enroll in the institutions of higher education on the other hand.

Through its interest in vocational education, the Ministry of Higher Education (MOHE) seeks to increase the chances of choosing the profession of life to meet the wishes and aspirations of the students. This contributes to the development and the diversification of human resources that can meet the imposed challenges and keep abreast of the scientific and technological development in societies. There are three public vocational schools in the Gaza Strip, Deir Al-Balah Secondary Industrial School in Deir Al-Balah district, Gaza Girls Vocational School in Gaza City, and Hani Na'im Agricultural School in Beit Hanoun district. The student enrolled in these vocational school studies for two years after the tenth grade. Through this period, students receive academic sciences such as religious education, Arabic and English, and specialized professional sciences such as vocational sciences, practical field training and vocational training.

As for the specializations in vocational schools, Deir Al-Balah Secondary Industrial School for males offers computer maintenance, radio and television maintenance, industrial electronics maintenance, electricity maintenance, car electricity, auto mechanics, carpentry and decoration. Gaza Girls' vocational school enables the female students to study computer maintenance, fashion design, beauty care and cosmetology. Hani Na'im agricultural school for males teaches agriculture and animal production.

The Ministry of Higher Education (MOHE) grants the certificate of completion of secondary school (Vocational Certificate) to the students after the success in the general secondary examination and in all academic and professional courses. This certificate enables the student to join various universities and colleges or to integrate in the labor market directly. The Ministry also grants the certificate of

completion of secondary school (Applied Vocational Certificate) to students after success in the general secondary examination in the field of professional specialization only, enabling them to join the labor market only.

The students in vocational schools will take the general secondary vocational examinations. After passing the exam, they will have to choose one of three tracks: either joining the labor market directly where the students have acquired the needed skills and experience of their profession, or joining a technical college or a university to complete their university studies in their field of specialization. They also can join the labor market and at the same time enroll in universities that offer an open education system. The last track is to be enrolled in the vocational training through the vocational training centers of the Ministry of Labor or through the training centers of the non-governmental institutions, and then join the market directly in the field of their profession. It should be noted that graduates of these centers cannot complete their studies in a university after passing the high school exam.

3. Obstacles of Vocational Education in Gaza Strip

Numerous studies and statistical data indicated rapid and significant changes due to political, economic, social and psychological instability and the blurring of the general vision, which has affected the developmental process of the Palestinian society. The indicators indicate an increase in the unemployment rates and poverty in Gaza. Israel's repressive measures have resulted in imposing siege, starvation, and cutting off of any possible contact with the outside world. Israeli has also closed its labor market for Palestinian workers [9]. The study of Asbeh [22] shows that the vocational system in Palestine is a dispersed system, in terms of types of institutions, objectives, supervision, responsibility and historical framework. Most of the secondary school students in the West Bank and Gaza Strip go to (Academic) branches, the proportion of students enrolled in vocational education is low at best to reach (5%) of the total number of secondary school students. Some studies stated that the low correlation between vocational and technical education and vocational training tracks compared with the academic education tracks, led to a decrease in the quality of training. As a result, there becomes the high cost of vocational education and the low number of its participating students.

Not all of Palestine's problems can simply be linked to the occupation. Traditional Palestinian gender norms may also act as a further constraint on young women of being able to be active members in the labor market and to achieve those aspects of wellbeing they most value [20]. Individuals make individual choices concerning their education, but these choices have a strong economic impact through the resulting increase in the total factor of productivity and improving livelihoods [23]. The Palestinian vocational education in Gaza Strip is also facing a number of challenges including the reduction need of the unemployment rate, dealing with an annual population increase, the need to increase the

participation rate of the current low of labor force and the establishment of a powerful infrastructure for a semi-destructive economy, which is completely dependent on the Israeli economy.

4. Theoretical Framework and Hypotheses

To determine the conceptual framework of the current study, relevant literature was reviewed. In exploring the concerns of obstacles facing vocational education in Gaza future schools, the study been strongly influenced by the growing literature on vocational education and human development. Most of the studies highlighted the role of vocational education in Palestine in general [21], [9], [24] [8], [25] and [22]. On one hand, some of the studies investigated the issue of vocational education in Arab countries such as [26], [17] and [13]. Other studies, on the other hand, appointed this role in other countries such as the United States of America in [27] and in Greece in [33].

An examination of vocational education uncovers a serious problem regarding its size, student caliber, fragmentation, program provision and most significant of all, its gender disparity. The fact that the vocational education has occupied a second rank position in comparison with academic education for several decades goes back to the days of the Greek philosophers who made a sharp division between manual work and intellectual work. Vocational education has been used as a hand-aid solution to social, economic and political problems arising in times of tension, crisis and/ or transitional phases. The historical development of vocational education in Palestine indicates that it started as a palliative solution to social and political problems [15]. Al Haddad [9] study aimed at identifying the role of technical and vocational training in creating job opportunities for trainees at Gaza Training College (UNRWA). It works to improve and develop technical and vocational training through the study of technical and vocational training branches, and to link the factors influencing the identification of these branches.

Vocational education does not only appeal to be the saving opportunity for the thousands of ques of graduates seeking for future life job, but also it is the Palestinian country generally and Gaza Strip in specifically, current choice, to move the wheel of development a step forward. Most of the reviewed literature has stated this concept. Hillal [21] indicated that vocational education serves many of the poorest and most disenfranchised in the Palestinian society in a context of profound structural obstacles to wellbeing achievement. Her study analysis showed a very positive story of how vocational education has helped highly disadvantaged young Palestinians, particularly young women, to make progress on their human development.

Asbeh [22] identified the problems of vocational education in Palestinian vocational secondary schools from the point of view of vocational teachers and students. In addition, it determined the impact of different variables such as gender, specialization, qualification, years of experience and district for vocational teachers. The study also explained the effect

of gender, grade, vocational branch, and district on students to determine the degree of problems facing vocational education in Palestinian vocational secondary schools. Some studies argue that vocational education has been micro-managed from the center for decades. This is a bad idea, and not just because it is inherently ineffective. It also means that government takes direct public responsibility for success and failure, and finds it correspondingly impossible to be honest [28]. Despite the previous studies, Al Ramahai and al De'eefi [25] identified the reality of young women in vocational education in the West Bank and Gaza Strip. In addition, it reflects ways of activating the role of vocational education in enhancing the position and opportunities for young women in vocational education system and in the labor force. Their study states that responsible ministries adopt their licensing policies for vocational education institutions based on the need for the changing market for disciplines. The study focused on strengthening the self-capacity of vocational education graduates, and focusing on the practical application of women's professional behavior. The study also highlighted to achieve geographical balance in the distribution of institutions and programs through the expansion of vocational education in priority programs in governorates, communities and priority areas. However, Matar [8] identified the attitudes of secondary school students in Gaza towards vocational education according to the variables of professional interest, vocational education, students' gender and students' branch.

As an analytical study, Sravrou [33] analyzed the status of education and vocational training in Greece. The study showed that education and vocational training is the last resort for young people, despite the State's ongoing efforts to raise vocational education and training. The study stated that vocational education graduates face fewer difficulties in finding employment than graduates of general academic education. Meanwhile, Hofstrand [27] determined the relationship between technical and vocational education and secondary school programs. The study found that the students showed great agreement that vocational education should be an integral part of the secondary school curriculum, and also approved three purposes for secondary technical education, namely:

- 1) Collaborative experience in work and apprenticeships.
- 2) Skills and technical information to enter the field of work.
- 3) Discovery, orientation and awareness of the field of work.

Maclean, R., & Wilson [30], OECD Publishing [31] and Pratzner [32] discuss enhancement methods for vocational education through training. In their study, Tessaring & Wannan [29] stated that:

Some countries are building research and training programs to reflect the integration of subject matter and pedagogy in vocational education teaching. New goals and content or vocational teaching and learning have developed to reflect changes in the skills needed in knowledge-based economy. Most countries have introduced ICT or e-literacy into the vocational education curriculum. Some have implemented ICT action plans (e.g. Czech Republic, Denmark, Turkey) to promote specific ICT content in different

occupational fields. Others have introduced vocational education pathways for ICT occupation integrating formal and non-formal learning (e.g. Germany, Austria).

In conclusion, there are many foreign and Arab studies that have examined the subject of vocational education and its future vision implementation in the school of future. The results of these studies have agreed on the effect of some variables and differed in others.

This study focuses on the obstacle facing vocational education being oriented in the school of future in Gaza Strip. The study argues that vocational education can be integrated in the early stages of education to be a distinctive remark of the future schools, however, some obstacles ranging in different fields connected to school education may hinder this. The study highlighted these fields according to vocational supervisors working in Gaza Strip. The obstacles are categorized in different fields starting from the educational administration regulations and policies, student studying in vocational schools, teachers teaching in these schools and finally the community. A lot of studies stated the obstacles and problems facing the vocational education in general without limiting it to school education only.

The current study benefited from these studies in setting the current study objectives, questions and procedures. This study targeted a group of experts and specialists of vocational educational supervisors in the Ministry of Higher Education (MOHE), who have experience and knowledge and a prior perception of the general status of vocational education. This image will help to integrate vocational education in the school of the future. The current study payed a focus on the obstacles that prevent the orientation for this kind of education in all dimensions and aspects of the vocational education process including: educational administration, teachers, students, and community.

5. The Problem of the Study and Justifications

Palestinian society in general is considered as an educated society in which both, male and female, seek knowledge and obtain university degrees in a large scale. However, the huge number of graduates per year does not suit the needs of the labor market, which in turn drives some of them to the regional market to look for jobs while the others work in a field that is completely different from their specialization. Therefore, large proportion of them become vulnerable to unemployment [25].

Vocational education in Palestine continues to grow very slowly and needs a long time to stand independently on its feet. The Ministry of Higher Education (MOHE) has inherited a heavy legacy, which is the negative attitudes of the community toward vocational education, and they rank it among the lowest salaries in the educational ladder. Those who have not been fortunate in academic education are enrolled in this type of education. In addition, vocational education system still classifies its participants into eligible and others who are qualified to train for business or crafts.

During the 30 years of its occupation of the West Bank and Gaza Strip, the occupation authorities created a vocational education system that serves the Israeli economy and meets the needs of the Israeli labor market, especially in the construction sector, the agricultural sector and the handicrafts [9].

The main shortcoming of the Palestinian vocational and technical education system in general, and the experience of vocational education in particular, is the lack of sufficient scientific and practical knowledge to enable students to achieve successful professional performance, which emphasizes the absence of a Palestinian system that organizes practical training and follows up its outputs and relevance to the need of the Palestinian labor market in general and Gaza Strip in specific. Therefore, this study argues that highlighting the obstacles facing vocational education in the first place will help to orient it in the basics strategies and plans for the school of the future. Investment in the development of the vocational education and training system will increase the number of students in the system and the percentage of graduates who are involved in the labor market. This will help in the development of the overall Palestinian economy, especially since most of secondary school students in the West Bank and Gaza Strip currently choose to go to (Academic) branches. Therefore, vocational and technical education has been declining, the proportion of students enrolled in it is low, and at best does not exceed 5% of the total number of secondary school students as it is mentioned earlier in this study. As a result of the imbalance in the technical education planning process and the lack of consideration of the needs of the local labor market, the phenomenon of structural unemployment in the Palestinian economy has been rampant. The graduates of the community colleges (technical education) mainly do not find jobs to absorb them due to the separation between education outputs and the needs of the local labor market.

Accordingly, there is a tremendous need to address the obstacles that prevent the orientation of vocational education in future schools' basic systems, taking in consideration the global experiences of some leading countries that chose the implantation of this education in their schools, and adopted it as a basis for schools of the future. In light of the lack of studies on this subject in the Gaza Strip, according to the researcher, the main question of this study is mainly depicted and formulated as follows: What are the obstacles facing the vocational education in the school of future from the perspective of educational supervisors in public schools in Gaza Strip?

The importance of the study stems from the need of the Palestinian society especially in Gaza Strip for this kind of education in accordance with the economic conditions. Tessaring and Wanna [29] referred to vocational education as being "the key of future" therefore this study investigates orienting it in the school of future strategies by anticipating the obstacles that may hinder that in the first place. Furthermore, there is a tremendous need for increasing vocational education in contemporary societies and the need to develop it and providing resources and possibilities for this type of education in schools of the future. This study

may be used by the Ministry of Higher Education (MOHE) to develop strategic plans for vocational education in Gaza Strip. In addition, it may help to support professional, efficient and flexible vocational education system in Palestine that is linked to the market needs, accessible to all, sustainable and capable of fulfilling its general obligations to the Palestinian society. The study will help in facing dropout rates from the educational stages, especially secondary ones and early stages. The study can suggest solutions for the general reluctance of students to enroll in vocational education.

6. Method

In order to achieve the objectives of the study, the researcher used the descriptive analytic method in which the researcher attempts to describe the phenomenon of the study, analyzing its data, studying the relationship between variables and the produced effects. The study population consisted of (193) educational supervisors working in public schools of the Ministry of Higher Education (MOHE) in Gaza Strip in the academic year 2016-2017. The sample of the study included (163) educational supervisors.

Table 1: Sample distribution according to gender

Gender	No	%
Male	112	68.7
Female	51	31.3
Total	163	100.0

(Table1) shows that 68.7% of the study sample is male, while 31.3% is female. The percentage of male educational supervisors is higher than that of the females, due to the nature of work and the standard criteria required by the profession of educational supervision, which is considered to be a challenge to female in genera

Table 2: Sample distribution according to work experience

Years of Experience	No	%
Less than 5 years	42	25.8
Less than 10 years	98	60.1
More than 10 years	23	14.1
Total	163	100.0

(Table 2) shows that 25.8% of the study sample has less than 5 years of experience. While 60.1% has years of experience ranging from 5 to less than 10 years, while 14.1% of the sample has years of experience of 10 years and more. (Table 3) shows that 65.0% of the study sample has a bachelor degree (BA), 23.3% has a master degree (MA), and 11.7% has a PhD.

Table 3: Sample distribution according to educational qualification

Scientific Qualification	No	%
Bachelor (BA)	106	65.0
Master (MA)	38	23.3
PhD.	19	11.7
Total	163	100.0

In this study different statistical methods were used such as: frequencies & percentages in order to describe the study

sample. The arithmetic mean, standard deviation and relative weight are also used. The researcher implemented Cronbach's Alpha test, as well as Split-half test, to determine the stability of the resolution of the questionnaire.

Furthermore, Pearson Correlation Coefficient was used to measure the degree of correlations since this test examines the relationship between different variables. It has been used to calculate the internal consistency and constructional honesty of the questionnaire. Independent Samples T-Test was also needed to determine whether there are statistically significant differences between two sets of the independent data. Finally, One Way Analysis of Variance (ANOVA) was used to determine whether there are statistically significant differences between three or more sets of data as well as Schiffe test to compare averages.

The researcher developed a questionnaire based on the theoretical literature and previous studies. The questionnaire consisted of (32) items divided into four main areas: (educational administration, teachers, students and community). The questionnaire was presented in its preliminary form to a group of (10) arbitrators of researchers in education and statisticians. The referees' opinions regarding deletion and modification of the questionnaire were taken into consideration in the light of the submitted proposals. The internal consistency of the questionnaires was verified by calculating the correlation coefficients between each item in the questionnaire and the total value of the field itself. In order to verify the validity of the questionnaire, correlation coefficients were computed between the degree of each of the resolution of the domains and the total score of the questionnaire as in (Table 4).

Table 4: Correlation coefficient

Field	Pearson coefficient	(sig)
Educational Administration	.848	*0.000
Teachers	.874	*0.000
Students	.876	*0.000
Community	.864	*0.000

* The correlation is statistically significant at (0.05 ≥ α) level.

It is clear from (Table 4) that all correlation coefficients in all areas of the questionnaire are statistically significant at (0.05 ≥ α). The stability of the study questionnaire was verified in two ways. The Cronbach's Alpha method was used to measure the stability of the questionnaire. The results shown in (Table 5) show that the value of Cronbach's alpha coefficient is high between (0.701, 0.759), while all the items of the questionnaire reached a total of (0.829) which is relatively high.

Table 5: Cronbach's Alpha coefficient

Field	Questionnaire items	Cronbach's Alpha
Educational Administration	9	0.701
Teachers	6	0.739
Students	7	0.707
Community	10	0.759
All fields	32	0.829

The correlation coefficients were divided into two parts. The correlation coefficient between the odd and dual questions values were calculated. The coefficient of Spearman Brown correlation was then corrected and the results shown in (Table 6) were obtained. The results show that the adjusted correlation coefficient Spearman Brown is high and therefore statistically significant.

Table 6: Split-half test to measure the stability of the questionnaire

Field	Coefficient	Modified Correlation coefficient
Educational Administration	0.580	0.735*
Teachers	0.575	0.744
Students	0.643	*0.783
Community	0.584	0.738
All fields	0.785	0.879

*The Gateman equation was used since the number of odd questions did not equal the number of dual questions

The current study aims at identifying obstacles facing vocational education in the school of the future in accordance with the views of vocational educational supervisors in the Gaza Strip. It also aims to detect the significance of the differences of the obstacles towards the vocational education in the school of the future, which are attributed to the study variables (gender, academic qualification, years of service). The study recommends future proposals to overcome obstacles facing implementing vocational education in the school of the future. Therefore, the main questions which stem from the main question of the study will be stated as follows:

- 1) What are the obstacles facing vocational education in the school of future according to the views of vocational educational supervisors in the Gaza Strip?
- 2) Are there statistically significant differences at the level of significance (0.05 ≥ α) for the obstacles facing the orientation of vocational education in the school of future according to the views of the vocational educational supervisors in public schools in Gaza Strip according to the study variables (gender, years of service, educational qualification)?
- 3) What are the suggested recommendations to overcome these obstacles?

The formulated hypotheses of the study are then stated as follows:

- 1) There are statistically significant differences between the averages of the estimates of respondents in all fields of questionnaire at the level of significance (0.05 ≥ α) for the obstacles of vocational education in the school of future in Gaza Strip according to gender (male, female).
- 2) There are statistically significant differences between the averages of the estimates of the respondents in all fields of questionnaire at the level of significance (0.05 ≥ α) for the obstacles of vocational education in the school of future in Gaza Strip according to the variable of the educational qualification (BA, MA, PhD).
- 3) There are statistically significant differences between the average of the estimates of the respondents in all fields of questionnaire at the level of significance (0.05 ≥ α) for the obstacles of vocational education in the schools of future

in Gaza Strip according to years of service (less than 5 years, 5 years to less than 10 years, 10 years and more).

7. Results and Discussion

The current study has three main questions. The study tested these questions as follows:

Question 1: What are the obstacles facing vocational education in the school of future according to the views of vocational educational supervisors in Gaza Strip?

To answer this question, the mean, standard deviation, relative weight, and order were used.

Table 7 : The arithmetical, relative and order average for each area of the questionnaire

Field	Mean	Standard deviation	Relative weight
Educational Administration	4.05	0.15	80.91
Teachers	4.13	0.29	82.68
Students	4.16	0.28	83.21
Community	4.19	0.27	83.88
All fields	4.13	0.19	82.68

(Table 7) shows that the arithmetic average of all the questionnaire items reaches 4.13 and thus the relative weight is 82.68%. This means that there is a great deal of agreement on the items of the questionnaire in general. The researcher attributed this to the general perception of the real existence of obstacles in vocational education integration in the school of future. It is also clear from (Table 7) that the first field, "Educational Administration" has ranked as the fourth, with a relative weight of 80.91%, which means that there is a high degree of approval of this field in general. The researcher argues this to the existence of awareness of the obstacles associated with educational administration and the aspects associated with educational policies and the vision for the future role of integrating vocational aspects in the basic education. While the second field "teachers" has ranked as the third, with a relative weight of 82.68%, which means that there is a high degree of agreement on the area of the field in general. The researcher attributed this to the vital role of teachers in the success of the process of implementing and integrating vocational education especially in the schools of future. This can be highly be achieved if these teachers received sufficient and qualified training in different vocational aspects. Furthermore, supporting vocational schools with qualified teachers and specialists in various professional aspects will lead to the success of orienting vocational education in future schools in Gaza Strip. This has been confirmed by some previous studies such as [22]. The third field "students" was ranked as the second with a relative weight of 83.21%. This means that there is a high

level of agreement on this field. The researcher attributed this to the fundamental aspect related to the students who are the basis of vocational education process and the main target group for this type of education. This was highlighted and confirmed by some previous studies such as [2], [9]. However, the study differed from [25] since their study focused on females as the study target only. Finally, the fourth field "community" was ranked as the first with a relative weight of 83.88%. This means that there is a high level of agreement on the field. The researcher attributed this to the fact that the community plays a large role in the prevailing trends towards priorities in education. Perhaps this view of vocational education in communities is often associated with negative prospective rather than a positive one, and was characterized by strong reservation. The current study data differed from similar studies because of the different nature of the study variables.

Question 2: Are there statistically significant differences at the level of significance ($0.05 \geq \alpha$) for the obstacles facing the orientation of vocational education in the schools of future according to the views of the vocational educational supervisors in public schools in Gaza Strip according to the study variables (gender, years of service, educational qualification)?

To answer this question, the researcher tested forward the following three hypotheses:

Hypothesis 1: There are statistically significant differences between the averages of the responses of the respondents in all fields of questionnaire at the level of significance ($0.05 \geq \alpha$) for the obstacles of vocational education in the schools of future in Gaza Strip according to gender (male, female).

To test this hypothesis, T-test was used for two independent samples. (Table 8) shows the probability value (Sig) corresponding to T-test for two independent samples was greater than ($0.05 \geq \alpha$) for the fields of "educational administration" and "community". It can be concluded that there are no statistically significant differences between the average estimates of the study sample according to on gender. For the rest of the fields, the probability value (Sig) was less than ($0.05 \geq \alpha$) level. It is possible to conclude that there are statistically significant differences between the average of the sample in these areas according to gender in the favors of males. To argue, this is due to the awareness of male educational supervisors of the nature of impediments in their associations with the applied vocational aspect since the share of male constitute the largest group target of vocational education applicants.

Table 8: T-test for two independent samples according to gender

Field	Gender	No	Mean	Standard deviation	t	Sig.
Educational administration	Male	112	4.05	0.18	1.205	0.230
	Female	51	4.03	0.09		
Teachers	Male	112	4.17	0.32	3.030	*0.003
	Female	51	4.05	0.18		
Teachers	Male	112	4.20	0.31	3.030	*0.003
	Female	51	4.07	0.15		
Community	Male	112	4.21	0.30	1.343	0.182
	Female	51	4.16	0.20		
All fields	Male	112	4.16	0.22	3.069	*0.003
	Female	51	4.08	0.10		

* The difference between the two averages is statistically significant at the level of $(0.05 \geq \alpha)$.

Hypothesis 2: There are statistically significant differences between the averages of the responses of the respondents in all fields of questionnaire at the level of significance $(0.05 \geq \alpha)$ for the obstacles of vocational education in the schools of future in Gaza Strip according to years of service (less than 5 years, 5 years to less than 10 years, More than 10 years).

To answer this hypothesis, one-way ANOVA test was used. From the results shown in (Table 9), the following results can be inferred. It was found that the probability value (Sig) corresponding to the test of one-way ANOVA is greater than the significance level $(0.05 \geq \alpha)$ for the field of "educational administration" and thus it can be concluded that there are no statistically significant differences between the average estimates of the study sample on this field according to years

of experience. For the rest of the fields it was found that the probability value (Sig) is less than the level of significance $(0.05 \geq \alpha)$ and thus it can be concluded that there are statistically significant differences between the average estimates of the study sample on these areas according to the variable of years of experience. The researcher attributed this to the fact that the rest of the fields are related to the practical reality of vocational education, which is linked to teachers, students and the local community and connected to the needs of the community. The supervisors who have entrusted themselves and worked in the educational field are aware of the sides associated with these obstacles. The current study contradicts Asbeh [22] since it argues that there are no significant differences due to years of service.

Table 9: One-way ANOVA according to years of experience

Field	Source of variable	Sum of squares	df	Means of squares	F	Sig.
Educational administration	Between	0.005	2	0.002	0.103	0.902
	Within	3.866	160	0.024		
	Total	3.871	162			
Teachers	Between	1.518	2	0.759	10.336	*0.000
	Within	11.752	160	0.073		
	Total	13.270	162			
Students	Between	1.152	2	0.576	7.909	*0.001
	Within	11.655	160	0.073		
	Total	12.807	162			
Community	Between	1.351	2	0.676	9.986	*0.000
	Within	10.823	160	0.068		
	Total	12.174	162			
All fields	Between	0.615	2	0.307	9.311	*0.000
	Within	5.282	160	0.033		
	Total	5.897	162			

* The difference between the averages is statistically significant at the level of $(0.05 \geq \alpha)$.

(Table 10) shows the results of the Scheffe test to compare the average of estimates regarding years of experience. The results show that there are statistically significant differences between the average estimates of years of experience in the favor for those with 10 years of experience and more. This reinforces the former researcher's view that the years of service illustrate the real experience associated with the needs of students, teachers and educational administration.

Table 10: Dimension comparisons according to the variable years of experience

Years of experience	Mean	Differences between variable averages		
Less than 5 years	4.03	1		
Less than 10 years	4.16	-0.128	1	
10 years and more	4.2	-0.171	-0.043	1

Hypothesis 3: There are statistically significant differences between the averages of the responses of the respondents in all fields of questionnaire at the level of significance $(0.05 \geq \alpha)$ for the obstacles of vocational education in the school of

future in Gaza Strip according to the variable of the educational qualification (BA., MA., PhD.).

The results which are shown in (Table11) states that the probability value (Sig) corresponding to one-way ANOVA test is less than $(0.05 \geq \alpha)$ for all fields. Thus, it can be concluded that there are statistically significant differences between the average of the study sample according to

educational qualification. The educational qualification plays a major role in determining the needs and as well the obstacles towards the professional orientation towards the professional aspect in vocational education. The study is consistent with the study of Asbeh [22] regarding this result.

Table 11: Results of the "Single Contrast" test - Scientific qualification

Field	Source of variable	Sum of squares	df	Means of squares	F	Sig.
Educational administration	Between	0.329	2	0.165	7.433	*0.001
	Within	3.542	160	0.022		
	Total	3.871	162			
Teachers	Between	0.705	2	0.352	4.486	*0.013
	Within	12.565	160	0.079		
	Total	13.270	162			
Students	Between	0.711	2	0.356	4.703	*0.010
	Within	12.096	160	0.076		
	Total	12.807	162			
Community	Between	0.881	2	0.441	6.242	*0.002
	Within	11.293	160	0.071		
	Total	12.174	162			
All fields	Between	0.573	2	0.286	8.609	*0.000
	Within	5.324	160	0.033		
	Total	5.897	162			

* The difference between the average estimates is statistically significant at the level of $(0.05 \geq \alpha)$.

(Table12) shows the results of Scheffe test to compare the average of the categories of scientific qualification. The results show that there are statistically significant differences between the average of the academic qualification for those with a PhD degree, and then for those with a bachelor (BA) degree. The study attributed this to the degree of scientific knowledge and the educational experience necessary to realize the fundamental aspects associated with vocational education and its relevance to the elements of the educational process. However, the current study differed from Asbeh [22] which argued that there are statistically significant differences between the average estimates of the academic qualification for those of bachelor (BA) degree.

Table 12: Scheffe test according to the variable of scientific qualification

Scientific qualification	Mean	Differences between variable averages		
Bachelor (BA)	4.15	1		
Master (MA)	4.03	0.121	1	
PhD	4.22	-0.068	-0.188	1

8. Conclusion

Vocational education can be the prospective of the school of future in Gaza Strip. Integrating vocational education in the school of future is a highly recommended demand to cope with the economic changes in Gaza Strip under the conditions of occupation and aggression. However, the orientation and integration of such education in the early stages of education to be part of the strategic plan of the

school of future is facing lots of obstacles and challenges. The current study categorized these obstacles into four different fields ranging from the educational administration, teachers working in vocational schools, students receiving their vocational education in these vocational schools and finally the community that shapes the environment for this education.

The study found that the total degree of problems facing vocational education orientation in the school of the future was very high with 82% according the views of educational supervisors. In the light of this, the arithmetic average of all the questionnaire items reaches 4.13 and thus the relative weight is 82.68%. This means that there is a great deal of agreement on the items of the questionnaire in general. The researcher attributed this to the general perception of the existence of these obstacles and challenges in vocational education integration in the school of future. Furthermore, vocational supervisors are in a direct contact with the components of the educational process inside the vocational schools starting from teachers, students and stakeholders in the community members as well as they are obliged to apply the educational administrations roles and policies. Consequently, the study formulated different hypotheses to test the correlation between the different study variables (gender, years of experience and academic qualifications). The study concluded that there are no statistically significant differences between the average estimates of the study sample according to gender where both male and female targets in this study agree upon the obstacles and challenges in orienting vocational education in the school of future. This

is a direct impact of the realization of both gender to the degree of importance of this kind of education and the need to overcome its obstacles. Furthermore, the study also concluded that there are no statistically significant differences between the average estimates of the study sample according to years of experience. The results of the Scheffe test showed that there are statistically significant differences between the average years of experience in favor for those with 10 years of experience and more. The results of Scheffe test to compare the average of the categories of scientific qualification also indicated that there are statistically significant differences between the average of the academic qualification for those with a PhD. degree, and then for those with a bachelor (BA) degree.

9. Recommendations

In the light of the reviewed literature and statistical results, recommendations to improve the prospective of vocational education are stated in different studies. In the light of the previous discussion and conclusion, and after reviewing other previous literature recommendations, the current study recommends the following:

- Integrating vocational education to be a prospective vision of the strategic plan in our future school in Gaza Strip is an urgent need in the light of the harsh economic conditions. This is the main aim of this study of creating a clear horizon for this type of education at early stages.
- Raising the awareness of the community with all its institutions and the educational community about the importance of vocational education and vocational training in general, as a tool for development for combating poverty and enhancing rehabilitation.
- Encouraging the Ministry of Higher Education (MOHE) to adopt a clear policy to reduce the current tendency towards theoretical majors and to encourage the trend towards open education according to current indicators in education and according to the indicators of the labor market.
- Modifying and developing vocational education and training curricula to meet the immediate needs of students and graduates of professional and technical institutions, which reflect the real labor market needs for different skills.
- Allocating an appropriate budget for the development of vocational education institutions and schools, training programs as well as curriculums.
- Cooperating strategic plan should be formulated and implemented between the Ministry of Higher Education (MOHE), the Ministry of Labor and the Ministry of Social Affairs, in cooperation with other concerned parties, to develop a systematic policy, mechanism and procedures to encourage and sustain students to move towards vocational and technical education and training.
- Expanding the horizons of vocational and technical education and available training programs through involving more vocational units in secondary schools, as well as through establishing comprehensive secondary schools that include professional disciplines. Furthermore, scientific and literary disciplines should be integrated in all governorates according to disciplines and clusters of

studied priorities with a highly focus on disciplines and the demand of the current labor market to reduce costly investments in infrastructure.

- Setting up new and specific criteria for the acceptance and recognition of graduates' qualifications which can be issued by operating institutions in the educational process.
- Integrating the essence and values of vocational work in the school curricula and in the daily life of public school especially in the early stages of the basic education (elementary and intermediate). This should include complementary skills such as rules and mechanisms of job creation, and mainly how to start their own future life projects.
- Imposing vocational and technical education institutions and their schools to organize training and rehabilitation courses to improve the efficiency of workers' performance in the labor market institutions. The training can also provide technical advice and assistance to encourage these institutions to participate in some productive activities, and to prepare and develop productive projects.
- Creating learning partnerships of networks of enterprises, schools, colleges and universities to develop regional innovation centers and to increase the supply of acquired skills and competencies for organizations and individuals.

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