

Palestine Technical University Contribution In Spreading Technical Education Culture In The Palestinian Society

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Abstract

The study aimed to investigate Palestine technical university contribution in spreading technical education Culture in the Palestinian society, and examined the role of variables gender, place of residence, degree, collage, and academic level. The descriptive approach used. a questionnaire consisting of (36) used. The population consesed of all students of the PTUK/ Ramallah Branch in the second semester of the academic year 2022-2023, the number of (1761) students, and was selected a class sample made up of (450) students, The results showed that the contribution of Palestine technical university in spreading technical education Culture in the Palestinian society was high. It also showed that there were no statistically significant differences due to specialization and degree, while there were statistically significant differences Due to gender in favor of females, due to place of residence in favor city students, and academic level in favor of second year and third year students.

Keywords: Palestine Technical University, Education, Technical Education, Palestinian Society, University Students.

Introduction

The world witnessing a terrible technological revolution, which makes it imperative for developed and developing countries not to stand idly by in front of the rapid and successive pace in which knowledge and technology are developing (Yusuf et al. 2020), but rather they must set their sights on education as a strategic choice as it is a means of building strong nations that can face difficulties, as it is no longer important Education is the subject of discussion or controversy in any part of the world (Adenuga & Ogunduyile, 2020).. If we look at all the countries that have achieved qualitative progress, education has been the cause of this progress, through its contribution to building a strong technological and information system that helped its members acquire skills and the ability to produce, keeping up with the times and owning the new in any field, which had a great impact on achieving development and increasing awareness and knowledge (Senty, 2021).

Teaching professionalism in higher education institutions has become an increasingly pressing issue worldwide, as they are required to adapt to changes in the scale and nature of higher education based on the challenges of increasingly global competition (Shaw, 2018), As our present era is characterized by rapid development and change, as the knowledge explosion and contemporary technical developments are among the most important features of development in our present era (Anderson, 2012).

This acceleration had a great impact, which was clearly reflected in the educational fields, and this impact was evident through the scientific, cultural and technical progress that occurred in them, which had a positive impact on society in all its scientific and research institutions and various work institutions. The first years of this decade witnessed the will of increasingly with regard to development issues to achieve the Millennium Development Goals (Perez-Foguet et al. 2018), there was an urgent need for a comprehensive development, modernization

and renewal process in all teaching methods and learning methods, with the aim of raising and preparing effective human cadres that keep pace with this rapid development in knowledge, informatics and technology, and productive, participating and contributing cadres in advancing the progress and advancement of their knowledge, knowledge and work in order to contribute effectively. In building the various institutions of society, including educational institutions, and working to achieve its mission efficiently and effectively (Al-Mutlaq et al. 2017).

And since education is not a self-contained goal independent of society, but rather it is considered as the executive tool upon which society relies in shaping its identity and preserving the elements of its life, the education experts in this sense are the makers of society's philosophy, and the owners of the last word in formulating its goals (Perte, 2011). Therefore, education in our time has expanded and branched out as a result of the change in the means of communication, as its fields have expanded, and it is distinguished by specialization, focus on one field, and exploration in it, with the aim of creating better job opportunities for the outputs of the educational system (Haviland & Robbins, 2021).

In our present time, the system of technical education has emerged and has been of great importance, and a major role in achieving economic development and the advancement of society to transform it from a society dependent on other nations, to a productive society that achieves internal self-sufficiency (Wulandari, 2022). The success of technical education in contributing to economic development depends on what it achieves. Scientific achievements, and skills achieved by graduates that help in the development of productive institutions in society, and what technical education achieves in terms of continuous updating in its programs and specializations in line with global scientific and technical developments, to cultivate local technology that helps society enter the world of technology and the globalization of

communications and information (Khaya, 2020)

For this purpose, the technical education institutions operating in the Palestinian territories seek to graduate trained competencies that the current and future Palestinian labor market needs, to contribute to building a Palestinian national economy as a basic and important requirement for building the Palestinian state. Therefore, the Palestinian technical education parties seek to align the system and its outputs with the needs and requirements of the market the job (Helal, 2011), The advancement of our society depends on the availability of an educational director armed with the sciences of the time, who is able to meet the needs of the local market by itself and shift from the crisis of import and consumption to the stage of production and export, which necessitates focusing on "quality, not quantity", and adopting development to improve the quality of education and involving technical education students in its specialized branches with employers. for a change (Ghufran & Sharaf, 2008)

The educational and training programs related to technical education are linked to the general vision of the state with regard to investment in human capital, or the knowledge economy. Technical education is dealt with as an integrated system by planners and those responsible for general educational policies and training and employment policies. A study of international experiences has shown the importance of dealing with the development of The outputs of technical education through the development of the educational and training process to include the development of curricula and teaching methods and linking this to the development of teachers and trainers, and harnessing the media to change the cultures and values necessary for that (Riyadh Economic Forum, 2011)

Gaps in the Literature

Previous studies did not examine the opinion of the students of Palestine Technical University about the role of the first governmental technical university in Palestine, in spreading the culture of technical education in the Palestinian society, and encouraging parents and students to enter the field of technical education instead of traditional education.

The originality of the present study

The Palestinian society's interest in technical education began since the beginning of the nineties of the last century, as one of the studies confirmed that due to the diversity and change of the world of work constantly to meet new challenges that can present many opportunities, this diversity was the cause of the most important transformations that societies witnessed during recent decades. Namely, the expansion of the field of education in all its stages, and the orientation towards technical education due to its belief in the great role that this type of education plays in building modern societies, and technical education such as university education is part of higher education, and it must be focused on in order to achieve its objectives in the infrastructure of the Palestinian state, as Technical education can be an element of general education and its components, or a form of continuous training and permanent education, but it faces some societal problems that may stand in the way of its development and upgrading on its own, and these problems are represented in the inferior view of this type of education as well as students' reluctance to Orient his path in life.

Aim of the study

The purpose of the study is Examine Palestine technical university contribution in spreading technical education Culture in the Palestinian society, to acknowledge if there are statistical differences due to gender, place of residence, degree, Collage, and academic level

Research Question

The Main Question: what is Palestine technical university contribution in spreading technical education Culture in the Palestinian society?

Based on the main question the following sub-question formed:

Is there a difference in Palestine technical university contribution in spreading technical education Culture in the Palestinian society due to gender, place of residence, degree, Collage, and academic level?

Study Hypothesis:

1. There are no statistically significant differences at ($\alpha \leq 0.05$) of Palestine technical university contribution in spreading technical education Culture in the Palestinian society due to gender.
2. There are no statistically significant differences at ($\alpha \leq 0.05$) of Palestine technical university contribution in spreading technical education Culture in the Palestinian society due to place of residence.
3. There are no statistically significant differences at ($\alpha \leq 0.05$) of Palestine technical university contribution in spreading technical education Culture in the Palestinian society due to degree.
4. There are no statistically significant differences at ($\alpha \leq 0.05$) of Palestine technical university contribution in spreading technical education Culture in the Palestinian society due to Collage.
5. There are no statistically significant differences at ($\alpha \leq 0.05$) of Palestine technical university contribution in spreading technical education Culture in the Palestinian society due to academic level.

The significance of the Study:

The importance of the study appears in focusing on important and necessary type of education, which is technical education. Moreover, focusing on the extremely important role of technical education in achieving the competitive advantage of societies by providing

them with practical and scientific competencies on which their economy is based on.

Definition of Terms:

Technical education: is a planned programme of courses and learning that begins with exploration of career options, supports basic academic and life skills, and enables achievement of high academic standards leadership (Odo et al. 2017)

Undergraduate students: they are students at a college or university who has not yet received a bachelor's degree (Weatherton & Schussler, 2021).

Methods (Design of the Study):

The current study adopted the descriptive analytical approach. After collecting the data, the researchers used the analytical-statistical method to answer the question of the study and interpreted the results.

Population and sample of the study:

Population of the study:

The population of the study consisted of all students at Palestine technical university. The total Number was (1761).

Sample of the Study:

From this population a (450) sample of students from a random cluster were chosen to respond to the questionnaire.

Table (1) Statistical description of the research sample according to demographic variables

Demographic Variables		Frequency
Gender	Male	205
	Female	245
	Total	450
Place of residence	Camp	86
	Village	245
	City	119
	Total	450
degree	Deploma	25
	Pachalore	65
	Total	78
Collage	Media	262
	Arts	20
	Sports	450
	Business Management	150
	Computer science	300
	Total	450
Academic Level	First	100
	second	105
	third	164
	fourth	81
	Total	450

Instruments of the study:

The researcher developed Questionnaire to examine the contribution of Palestine technical university in spreading technical education

Culture in the Palestinian society, it consists of two sections. The first section included personal information about the respondents. The second section included (36) items, to investigate

Palestine technical university contribution in spreading of technical education culture in the Palestinian society, The researcher developed the questionnaire with 3-point Likert scales ranging from strongly agree - strongly disagree. The questionnaires distributed to (450) students.

Validity of Instruments:

To ensure that the content of the questionnaire was valid, it handed to a jury of professional doctors in the field at Palestine technical university, The Panel of judges asked to evaluate the opportunities of the instrument to the whole purpose of the study. They accepted the items and the parts of the questionnaire, but they asked the researchers to follow some modifications. The researchers took these recommendations into amount before issuing the final draft of the tool, and then the instrument distributed to the subject of the study.

Reliability of Instruments:

Cronbach's Alpha Value for the questionnaire was (83.6%) which is appropriate for the purposes of the study.

Procedures of the study:

The study carried out in the following manner:

1. The relevant literature reviewed to establish the theoretical background of the study.
2. The population identified and the samples selected on which the instruments applied.
3. The questions of the study put up, depending on previous studies.
4. The reliability and validity of the instruments approved.
5. The researcher distributed the instruments on students.
6. The instrument distributed and gathered in the Second semester of the scholastic year 2022-2023.
7. The data was gathered and analyzed by using SPSS program.
8. The researcher explained the information to reveal whether the outcomes agree or disagree with previous studies.

Variables of the study:

1. **Independent variables:** Gender (Female/Male), Place of residence (City/Village/Camp), Degree (diploma/Diploma), Collage (Media/ Arts/ Business Management/ Sport/ computer science), Academic level (First year/Second year/Third year/Fourth year).
2. **Dependent variables:** Palestine technical university contribution in spreading of technical education culture in the Palestinian society.

Data Analysis:

In order to analyze the data, the researchers used statistical Package for social science (SPSS), descriptive statistics (means, frequencies, percentage, and Std. Deviation) and inferential statistics. (Independent T-test, one-way ANOVA, LSD and Cronbach Alpha).

Results and discussion:

To determine Palestine technical university contribution in spreading technical education Culture in the Palestinian society, and in order to interpret the results, the following arithmetic means and percentages were adopted:

An arithmetic means of (1.8–2.59) or (36–51.9%) indicates a low score.

The mean (2.60 – 3.39) or (52 – 67.9 %) indicates a Moderate score.

An arithmetic means of (3.40 –4.19) or (68 – 83.9%) indicates a high degree.

Results related to the first question:

What is Palestine technical university contribution in spreading of technical education culture in the Palestinian society?

To answer this question, the researcher calculated the arithmetic means and standard deviations of the study sample's estimates of Palestine technical university contribution in spreading technical education culture in the Palestinian society development for each paragraph of the tool and for the total score. Table (2) shows that.

Table (2): means, Std. Dev. and degrees of the items of the questionnaire.

#	Item	Mean	Std. Dev.	Degree
15	The university promotes technical education in the Palestinian society.	4.19	1.18	High
17	The education system at the university supports your decision to choose technical education.	4.18	1.22	High
30	Technical education curricula focus on developing the skills needed for employment.	4.18	1.18	High
32	The administration at the university plays a fruitful role in encouraging technical education.	4.18	1.22	High
25	In your opinion, the quality of technical education curricula at the university is appropriate.	4.12	1.25	High
2	The goals of technical education achieved through the university's practices.	4.12	1.05	High
8	Lecturers have the skills to teach you well.	4.10	1.35	High
7	Technical education develops skills required for the labor market.	3.99	1.24	High
3	There is a balance between theory and practice in technical education.	3.96	1.16	High
16	Suitable laboratories are available at the university.	3.91	1.21	High
23	Sufficient materials are available for practical application in laboratories.	3.89	1.35	High
31	A first aid box is available in the laboratories.	3.86	1.21	High
14	Computer and internet are available at the university.	3.85	1.23	High
29	Student visits to community institutions are good for the teaching and learning process.	3.82	1.23	High
1	The university assists its students in employment.	3.78	1.17	High
12	Field tours arranged for students.	3.78	0.99	High
27	Technical education in society linked to the needs of the labor market.	3.76	0.99	High
6	Technical education helps reduce underemployment.	3.69	1.26	High
13	Technical education is the production of skilled labor.	3.68	1.2	High
28	Technical education develops a love of work in students' work ethic.	3.68	1.2	High
19	Technical education develops expertise in students.	3.66	1.11	High
24	The university provides modern technical programs approved by the competent authorities.	3.65	1.27	High
34	The university provides a highly qualified teaching staff.	3.63	1.11	High
10	The university provides laboratories that cover the practical side well.	3.63	1.08	High
26	The university provides modern curricula that keep pace with developments in the field.	3.62	1.31	High
4	The university provides adequate teaching and learning facilities.	3.55	1.2	High

21	The appropriate competence is available for a university graduate quickly integrate into the work.	3.39	1.1	Moderate
36	The graduate has practical skills that are suitable for potential jobs.	3.35	1.1	Moderate
18	Job opportunities are available for the graduate compared to graduates of other universities.	3.33	1.33	Moderate
33	The graduate has the practical ability to start his own project.	3.29	1.33	Moderate
20	The university offers continuous training programs to qualify its graduates for the labor market.	3.24	1.28	Moderate
35	The university studies the labor market and determines its specialization needs.	3.18	1.28	Moderate
22	The university adjusts its plans to keep pace with the needs of the labor market.	3.10	1.33	Moderate
11	The university concludes agreements with employers to accommodate its graduates.	3.03	1.18	Moderate
9	The university concludes agreements with the Federation of Industries to exchange experiences.	3.03	1.16	Moderate
5	The university provides a database of its graduates to link them to the labor market.	3.00	1.19	Moderate
Total		3.68	0.22	High

Results in table (2) show that Palestine technical university contribution in spreading technical education Culture in the Palestinian society was High, with a mean of (3.68) over/out of (5).

Results related to the second question:

Is there a difference in Palestine technical university contribution in spreading technical education culture in the Palestinian society due to gender, place of residence, Degree, Collage, and academic level?

To answer this question, the researchers investigated the following hypothesis:

Results related to the first Hypothesis:

There are no statistically significant differences at ($\alpha \leq 0.05$) of Palestine technical university contribution in spreading technical education Culture in the Palestinian society due to gender. To test this hypothesis, the researcher used independent t-test as table (3) shows: The results of independent t-test for the differences in participant's responses related to Palestine technical university contribution in spreading technical education Culture in the Palestinian society due to gender.

Table (3): Results of the independent t-test for gender variable.

gender	Mean	Std. Dev.	Std. Error Mean	Sig.
male	2.75	0.37	-3.092	0.00
female	2.91	0.44		

The results in table (3) show that the level of significance for the differences in participant's responses related to Palestine technical university contribution in spreading technical education Culture in the Palestinian society due

to gender is (0.00) this means that there are statistically significant differences at ($\alpha < 0.05$), in favor of female students, Thus, the hypothesis is rejected.

Results related to the second

Hypothesis:

There are no statistically significant differences at ($\alpha \leq 0.05$) of Palestine technical university contribution in spreading technical education Culture in the Palestinian society due to place of residence.

To test this hypothesis, the researcher used one-way ANOVA- test, table (4) shows: The results of one-way ANOVA- test for the differences in participant's responses related to Palestine technical university contribution in spreading technical education Culture in the Palestinian society due to place of residence.

Table (4): the results of ANOVA- test for the differences in the participant's responses related to Palestine technical university contribution in spreading technical education Culture in the Palestinian society due to place of residence.

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	3.341	2	1.670	9.621	0.00
Within Groups	51.561	297	.1740		
Total	54.902	299			

The results in this table (4) show that the level of significance for the differences in the participant's responses related to Palestine technical university contribution in spreading technical education Culture in the Palestinian society due to place of residence is (0.00) this

means that there are statistically significance differences at ($\alpha < 0.05$). Thus, the hypothesis rejected.

To clarify to whom the differences refer to, the researcher used the LSD (the less significant deference's test) as shown in table (5).

Table (5): the results of LSD test for the participant's responses related to Palestine technical university contribution in spreading technical education Culture in the Palestinian society due to place of residence.

(I) Experience	(J) Experience	Mean Difference (I-J)	Sig.
Camp	City	.26580*0	0.000
Village	City	.30914*0	0.000

The result in table (5) shows that the statistically significance differences were between the responses of camp students and city students and in favor of city students, as well as between village students and city students and in favor of city students

Results related to the third Hypothesis:

There are no statistically significant differences at ($\alpha \leq 0.05$) of Palestine technical university

contribution in spreading technical education Culture in the Palestinian society due to degree. To test this hypothesis, the researcher used independent t-test as table (6) shows: The results of independent t-test for the differences in participant's responses related to Palestine technical university contribution in spreading technical education Culture in the Palestinian society due to degree.

Table (6): Results of the independent t-test for degree variable.

degree	Mean	Std. Dev.	Std. Error Mean	Sig.
Deploma	2.7948	.43925	0.256	0.79
Pachalore	2.8175	.40318		

The results in table (6) show that the level of significance for the differences in participant's responses related to Palestine technical university contribution in spreading technical education Culture in the Palestinian society due to degree is (0.79) this means that there are no statistically significant differences at ($\alpha < 0.05$). Thus, the hypothesis is accepted.

Results related to the fourth hypothesis:

There are no statistically significant differences at ($\alpha \leq 0.05$) of Palestine technical university

contribution in spreading technical education Culture in the Palestinian society due to Collage.

To test this hypothesis, the researchers used one-way ANOVA- test, table (7) shows: The results of one-way ANOVA- test for the differences in participant's responses related to Palestine technical university contribution in spreading technical education Culture in the Palestinian society due to Collage.

Table (7): the results of ANOVA- test for the differences in the participant's responses related to Palestine technical university contribution in spreading technical education Culture in the Palestinian society due to Collage.

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	.4900	1	.4900	2.685	0.10
Within Groups	54.412	298	.1830		
Total	54.902	299			

The results in this table (7) show that the level of significance for the differences in the participant's responses related to related to Palestine technical university contribution in spreading technical education Culture in the Palestinian society due to Collage is (0.10) this means that there are no statistically significance differences at ($\alpha < 0.05$). Thus, the hypothesis accepted.

Results related to the fifth hypothesis:

There are no statistically significant differences at ($\alpha \leq 0.05$) of Palestine technical university

contribution in spreading technical education Culture in the Palestinian society due to academic level.

To test this hypothesis, the researchers used one-way ANOVA- test, table (8) shows: The results of one-way ANOVA- test for the differences in participant's responses related to Palestine technical university contribution in spreading technical education Culture in the Palestinian society due to academic level.

Table (8): the results of ANOVA- test for the differences in the participant's responses related to Palestine technical university contribution in spreading technical education Culture in the Palestinian society due to academic level.

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	6.121	3	2.040	12.380	0.00
Within Groups	48.781	296	.1650		
Total	54.902	299			

The Results in table (8) show that the level of significance for the differences in responses related to related to Palestine technical university contribution in spreading technical education Culture in the Palestinian society due to academic level (0.00) this means that there

are statistically significance differences at ($\alpha < 0.05$). Thus, the hypothesis rejected.

To clarify to whom the differences refer to, the researcher used the LSD (the less significant deference's test) as shown in table (5).

Table (5): the results of LSD test for the participant's responses related to Palestine technical university contribution in spreading technical education Culture in the Palestinian society due to academic level.

(I) Experience	(J) Experience	Mean Difference (I-J)	Sig.
first year	Second year	-.27418*	0.000
first year	Furth year	-.40553*	0.000

The result in table (5) shows that the statistically significance differences were between the responses of the first- and second-year level students in favor of the second-year students, as well as between the first-year students and the fourth-year students and in favor of the fourth-year students.

Conclusion

The study results showed that Palestine technical university contribution in spreading technical education Culture in the Palestinian society was High, with a mean of (3.68) over/out of (5). The result also revealed that there were no statistically significant differences due to degree, and collage. However, there were statistically significant differences due to gender in favor of female students, and due to place of residence in favor of city students, and due to academic level in favor of the fourth-year students.

Dissection of the results of the study

1. The researcher attributed The High Palestine technical university contribution in spreading technical education Culture in the Palestinian society to the following: The awareness of the management of Palestine Technical University of the importance of the technical education course and its role in contributing to the service and development of the local community, and its realization of this importance prompted it to work to spread the culture of technical education among the community. By coordinating with its various institutions and providing technical education programs that serve and meet its needs, however, there is a need to increase the technical nature of the university's courses and specializations, which will increase the community's awareness of this type of education and the extent of the benefit it can provide.
2. The researcher attributed that there are statistically significant differences with Palestine technical university contribution in spreading technical education Culture in the Palestinian society due to gender in favor of female students, to the following: Male students mostly focus their thoughts on education and work after that, while female students tend to think about home, family and stability. Therefore, male students' interest in pursuing work matters may be higher than that of female students.
3. The researcher attributed that there are statistically significant differences with Palestine technical university contribution in spreading technical education Culture in the Palestinian society due to place of residence in favor of city students to the following: the students from the city are more open to the community and the labor market than the camp students and the village students, because most of the awareness and education campaigns are directed towards the city more, and it is also possible that the camp and village students turn towards manual labor before they complete the higher education stages, so the Their interest in learning about the different education systems in society does not rank at the same level as that of urban students
4. The researcher attributed that there are no statistically significant differences with Palestine technical university contribution in spreading technical education Culture in the Palestinian society due to degree to the following: University students of all academic degrees believe that the extent of the university's contribution to spreading the culture of technical education is acceptable, as the degree, whether it is a bachelor's degree or a diploma, does not affect their perception of the extent of the university's contribution to encouraging technical education in society.
5. The researcher attributed that there are no statistically significant differences with Palestine technical university contribution in spreading technical education Culture in the Palestinian society due to collage to the following: This result may be attributed to the fact that all students who enroll in the university and in their various disciplines believe that the university contributes significantly to the dissemination and development of the culture of technical education in society, due to their actual involvement in its study programs and their knowledge of its activities that aim to achieve this goal.
6. The researcher attributed that there are no statistically significant differences with the Palestine technical university contribution in spreading technical education Culture in the Palestinian society due to academic level in favor of the fourth-year students to the following: The university students of the second and fourth year are more aware of the extent of the university's contribution to spreading the culture of technical education, as their actual involvement in the study and their familiarity with the activities carried out by the university gives them preference in judging this more than the first year students due to the fact that

they are new to the university, its environment and its activities.

Limitations of the study:

The current study has the following limitations:

1. This population study consisted of Palestine technical university Ramallah branch students.
2. The study carried out in the academic year (2022-2023) at the second semester.
3. The study was limited by the concepts and definitions mentioned in it.

Recommendations:

In light of the results, the researcher recommended the following:

1. The necessity of approving the national plan for technical education in Palestine, and identifying the bodies in charge of this technical education system and the bodies authorized to follow up on its affairs, including those related to the professional development of its workers.
2. Work to link the exchange of experiences between the university and its branches in order to keep its staff at a good level of performance, which positively affects the level of its educational outputs.
3. Interest in marketing the university's services and specializations to the local community organizations in order to enable these organizations to benefit from their expertise.
4. Establish cooperation and partnership protocols between Palestine Technical University and universities and higher education institutions with the aim of exchanging professional experiences between the various parties.

References:

1. Abdullah Al Mutlaq et. Al (2017): Factors Affecting Academics' Involvement in Telcontinuing Professional Development (Cpd), *Journal of Education and Practice*, 8(10):142.
2. Adenuga, K., & Ogunduyile, O. (2020). Teaching Currency: Leveraging On Prospects And Challenges Of The 4th Industrial Revolution (Industry 4.0) In The Colleges Of Technology In United Kingdom. *Edulearn20 Proceedings*, 285-293.
3. Agustí Perez-Foguet Et Al (2018): Promoting Sustainable Human Development in Engineering: Assessment of Online Courses within Continuing Professional Development Strategies, *Journal of Cleaner Production*, 172:4286.
4. Haviland, S., & Robbins, S. (2021). Career and Technical Education as A Conduit For Skilled Technical Careers: A Targeted Research Review And Framework For Future Research. *Ets Research Report Series*, 2021(1), 1-42.
5. Janna Quitney Anderson (2012): Millennials Will Benefit and Suffer Due to Their Hyperconnected Lives, *Rew Research Center's Internet & American Life Project*, Washington, D.C, P20.
6. Khuda Bakhsh et al. (2015): Role of Technical Education in Producing Skilled Manpower in Punjab, *Gomal University Journal of Research [GUJR]*, 31(1):90-100.
7. Mohammed Elmardi Suleiman Khaya, O. (2020). A Review Study of Technical Education In The Democratic Republic Of Sudan.
8. Nick Petre (2011): Future Trends in Leadership Development, *Center for Creative Leadership, Greensboro, Nc, Usa*, P41.
9. Odeh Ghufuran And Salwa Sharaf (2008): Motives For Students' Enrollment In Technical Education Colleges In Palestine, A Paper Submitted To The First Scientific Conference In Palestine For Technical Education Entitled "Technical Education In Palestine: Prospects And Challenges", Held On April 21, 2008, At Hisham Hijjawi College At An-Najah National University Nablus, P. 12.
10. Odo J.U. Okafor W.C, Odo A.L, Ejikeugwu L.N, Ugwuoke C.N (2017): Technical Education – The Key To Sustainable Technological Development, *Universal*

- Journal Of Educational Research, 5(11): 1878-1884.
11. Randa Helal (2011): A Study Of The Quantitative And Qualitative Needs Of Trained Manpower Within The Basic Work Levels Of The Belgian Project - Vocational And Technical Education And Training Support In Palestine, Ministry Of Education And Higher Education, 1st Edition, P. 32.
 12. Riyadh Economic Forum (2011): Technical Education And Technical Training And Its Suitability For The Developmental Needs Of The Workforce, Submitted To The Fifth Session Of The Riyadh Economic Forum, Held From 17-19 December 2011, Saudi Arabia.
 13. Rob Shaw (2018): Professionalising Teaching in He: The Impact of an Institutional Fellowship Scheme in the Uk, Higher Education Research & Development, 37(1):145.
 14. Senty, T. L. (2021). Connecting Common Core State Standards to Career and Technical Education.
 15. Tomáš Kozík (2015): The Importance of Technical Education for the Development of Society, Acta Technologica Dubnicae, 5(3):48-72.
 16. Weatherton, M., & Schussler, E. E. (2021). Success for all? A call to re-examine how student success is defined in higher education. CBE—Life Sciences Education, 20(1), es3.
 17. Wulandari, I. Y., Mulyanti, B., Widiaty, I., Barliana, M. S., Ana, A., Nugraha, E., & Indroasyoko, N. (2022). How Has A Pedagogical Approach Influenced The Technical Education Curriculum? An Analysis Based On the Literature Review System. Journal of Engineering Science and Technology, 17(2), 1188-1199.
 18. Yusuf, B., Walters, L. M., & Sailin, S. N. (2020). Restructuring Educational Institutions for Growth in the Fourth Industrial Revolution (4ir): A Systematic Review. Int. J. Emerg. Technol. Learn., 15(3), 93-109.