



## RESEARCH ARTICLE

# Professional Learning Communities: The Foundation for Building a Knowledge Society in Universities

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## ABSTRACT

The study aimed to identify professional learning communities role in building a contemporary knowledge society in Palestinian universities. Descriptive approach was used. The researcher prepared a questionnaire of two parts: the first consisted of general information, the second consisted of a group of paragraphs that fell under three domains: first (the role of Palestinian universities in preparing the individual to acquire knowledge) consisting of (15) paragraphs, second (the role of professional learning communities in building a knowledge society in Palestinian universities) consisting of (15) paragraphs, and third (the role of Palestinian universities in developing a knowledge society) consisting of (15) paragraphs. The study community consisted of Palestine Technical University - Khadouri (Ramallah Branch) employees for the year 2024-2025, as their number reached (141) male and female employees, a stratified sample was selected consisting of (76) male and female employees, approximately (65%) of the study community. The results of the study showed that professional learning communities role in building a contemporary knowledge society in Palestinian universities was high in all fields, as building a knowledge society came in first place, followed by preparing the individual to acquire knowledge, and finally developing a knowledge society. It also showed that there were statistically significant differences attributed to the gender variable in favor of males, while it showed the absence of statistical differences attributed to the variables of academic qualification, nature of work, and years of experience. The researcher recommended In light of the results reached by the study, the necessity of working to eliminate information illiteracy, and developing and raising the skills of individuals in dealing with information and communications technology. the necessity of enhancing the culture of professional learning communities in Palestinian universities and striving to reach it, the necessity of raising awareness among females in Palestinian society about the importance of professional learning communities and their role in building a knowledge society, the necessity of working on developing a model for building a knowledge society in Palestinian universities and determining ways to reach it, and the necessity of developing scientific and practical plans in advance to contribute to the dissemination of knowledge and its use in universities.

## INTRODUCTION

The conditions in universities today are facing criticism due to their lack of suitability for the current stage and the challenges in various fields (Admiraal et. al, 2021), as these conditions reinforce the culture of individual isolation work, do not provide opportunities for continuous education (Kálmán et. al, 2020), and do not adopt the principle of collective responsibility and work to spread its culture with the aim of achieving learning for all (Hartshorne et. al, 2020). From here, the concept of "professional learning communities" emerged, which is based on the fact that the learning process in the learning community is based on partnership (Atlas, 2023), cooperative work, sharing of power

and bearing responsibility among all pillars of the educational system, its individuals and elements (Smith & Gillespie, 2023).

That is, learning is not only for the learner, but the process of learning and administrative professional development must include all human elements (Bragg et. al, 2021), including students, teachers and administrators (Basilotta-Gómez-Pablos et. al, 2022). Therefore, it was imperative for contemporary universities to adopt and work on building this type of society if they wanted to keep pace with the new developments in the current digital (Kezar et. al, 2024), technological and information world to maintain their survival and continuity, and achieve an advanced position among other universities (Louca & Papademetri-Kachrimani, 2024).

## **Theoretical framework of the study**

### **First: Professional learning communities**

#### **The concept of professional learning communities**

Professional learning communities are groups of individuals from the same profession that are formed according to multiple frameworks and different levels (Johannesson, 2022), united by a common interest in making their performance more efficient and effective (Gore & Rosser, 2022), and working cooperatively through multiple containers that allow them to exchange experiences, acquire best practices, and address the difficulties and challenges facing their work (Liu & Yin, 2023).

Student education is the focus of learning communities (Bergmark, 2023) through the engagement of its members in an ongoing systematic process in repeated cycles of investigative and procedural research to determine their expectations for all students' learning (Nehez, 2024), how to assess the extent of their learning, and develop the necessary inputs to help students who face learning difficulties (Christensen, 2024), which helps direct the educational institution's capabilities to its primary goal, which is to improve student learning ((Smith & Gillespie, 2023).

There are five characteristics or dimensions that characterize professional learning communities

#### **Participatory and supportive leadership**

This is represented by the collective and facilitative participation of the university president who provides leadership (Zhang et. al, 2022), power and authority by involving employees in the decision-making process (Lee et. al, 2023).

#### **Shared vision, values and beliefs**

The shared vision that is clearly developed from the unwavering commitment of employees to educating students (Ni et. al, 2023).

#### **Collaborative learning and application of learning**

Collaborative learning among employees and application of acquired learning solutions to meet the needs of students (Bergmark, 2024).

#### **Supportive conditions**

In terms of the physical and human conditions that support the operations of the educational institution (Gonçalves et. al, 2022) through an atmosphere of collegiality and collective teaching (Smith & Gillespie, 2023).

#### **Shared practice**

Through visits, review and discussion of the teacher's behavior inside lecture halls by colleagues (Johannesson, 2022), as a form of feedback and assistance in activities to improve the individual and society (Kilag et. al, 2023).

## **Characteristics of Professional Learning Communities**

### **Learning communities are characterized by the following characteristics**

It is considered one of the distinctive educational strategies that contribute to supporting the education sector at its various levels of study ((Smith & Gillespie, 2023).

It is classified as one of the modern teaching methods that help teachers communicate ideas and information to students in a simple and easy way (Ni, L., Bausch, G., & Benjamin, R. (2023).

It helps students apply the idea of group study, which leads to increased cooperation between them (Sargazi et. al, 2024).

It applies the concept of a micro-community, which brings students together in order to apply many professional skills, such as: conducting chemical reactions (Johan nesson, P. (2022).

It supports students in implementing a set of tasks that the teacher has previously specified for them, so that each professional community becomes able to develop hypotheses and find solutions for them (Smith & Gillespie, 2023).

It contributes to implementing the idea of collective decision-making, which is based on the idea of consultation between members of the professional community (Sargazi et. al, 2024).

### **Objectives of Professional Learning Communities**

#### **Professional learning communities aim to achieve the following objectives**

Clarify the role of professionalism in education and its contribution to promoting shared educational values (Aboamir, 2024).

Provide appropriate conditions for creativity and support the leadership role of students (Olmo-Extremiera et. al, 2024).

Develop solutions to issues facing students and provide unconventional solutions, i.e. move away from using previously used solutions (Johannesson, 2022).

Address academic failure among students who lack the appropriate skills for individual study or are unable to understand the study materials (Liu & Yin, 2023).

It seeks to be one of the means of supporting the educational environment, which is actually applied in many educational institutions around the world (Olmo-Extremiera et. al, 2024).

### **Steps to establish professional learning communities**

It is necessary to follow certain steps if educational institutions want to build a professional learning community, and these steps are:

Holding a meeting between members of the administrative and educational bodies in the educational institution in order to prepare for the establishment of professional communities for education (Inkelas et. al, 2023).

Setting the basic points of the professional community within the established founding plan (Johannesson, 2022).

Training teachers and qualifying them to deal with this type of supportive educational means (Gore & Rosser, 2022).

Selecting a group of students to integrate them into the professional community to ensure the success of implementing the idea (Ni et. al, 2023).

Determining the educational content that is applied through the professional community (Bergmark, 2023).

Starting to hold study sessions within the professional community by allocating time for them within the lectures (Etkina & Planinsic, 2024).

Evaluating the results achieved after teaching the course contents based on the professional community (Olmo-Extremiera et. al, 2024).

Enhancing the role of dialogue with students in order to know the extent of their agreement with the idea of the professional community for education (Offstein et. al, 2024).

## Second Knowledge Society

### The concept of knowledge society

The concept of knowledge society has received great international attention in light of the major transformations that the world has witnessed in the scientific, technological and political fields (Peng et. al, 2023), as conferences, seminars and study groups have been organized that dealt with the issue of forming a knowledge society (Carayannis & Morawska-Jancelewicz, 2022), and drawing a future picture of a society based on knowledge and awareness (Ashour, 2024). The Barcelona Conference in 1995 considered partnership and cooperation as the basic step for working to spread knowledge and cooperation (Paavola et. al, 2023), as cooperation and partnership lead to expanding the horizons of knowledge and building its society (Davis-Floyd et. al, 2023).

### Knowledge Society Trends

#### The term knowledge society is relatively new and includes two trends

The first: It refers to a group of people who share intellectual, religious, scientific or political interests (Saenko, 2023), forming a bloc in small knowledge societies (Wang et. al, 2022), in which they collect the knowledge, information and achievements they have reached (Abbate et. al, 2024).

The second: It is broader and deeper, as it constitutes a basic axis for many specialized future proposals and studies (Singh et. al, 2024).

### Roles of the knowledge society

The knowledge society is the society that makes good use of knowledge (Ashour, 2024), in managing its affairs and in making sound and rational decisions (Moscardini et. al, 2022). It is the society that produces information to know the backgrounds and dimensions of things of various kinds (Aliasghar et. al, 2023). It is the society that is based primarily on spreading knowledge (Morawska-Jancelewicz, 2022), producing it and employing it efficiently in areas of community activity in order to advance the human condition in order to achieve basic development (Chaudhary et. al, 2023). Therefore, the society has several roles, including (Mahmoud et.al, 2024):

Generating knowledge through the interaction between facts and knowledge on the one hand and the human mind on the other hand, and the extent of his ability to think and create in it.

### Disseminating knowledge

#### Localizing knowledge and harnessing it to solve problems

#### Localizing science

### Dimensions of the knowledge society

There are also those who view the knowledge society as a social organization that includes methods and forms of formal and informal preparation (Maunula et. al, 2023), for the personality of individuals in that society, which helps in transferring organized knowledge across different generations (Castro Torres et. al, 2022), which contributes to ensuring the continuity of life in all its social and political aspects with its civilizational (Touren et. al, 2023), cultural and ideological components. Higher education institutions play a pivotal role in the knowledge society as the first responsible for producing, disseminating and employing knowledge (Chaudhary et. al, 2023).

This is done through the formation of a trained and qualified workforce capable of achieving creativity in the workplace or through scientific research, as this society includes different and similar dimensions (Vonitsanos et. al, 2024 May), including:

**Economic dimension:** Information in a knowledge society is the main commodity or service and the main source of added value (Kurniawan et. al, 2023), job creation and economic rationalization (Unger, 2022). A society that can produce information and use it in its economy is a society that can compete and impose itself strongly (Alaimo, 2024).

**Technological dimension:** A knowledge society requires the spread of information technology (Abulibdeh et. al, 2024) and its dominance and applications in various areas of life (Troisi et. al, 2024).

**Social dimension:** We mean that a knowledge society means the dominance of a certain degree of information culture in society (Suprpto et. al, 2024), increasing the level of awareness of information technology (Menter, 2024), the importance of information and its role in people's daily life (Scaramuzzino& Lee, 2024).

**Cultural dimension:** A knowledge society gives considerable importance to information and knowledge and cares about people's creative abilities (Suprpto et. al, 2024), providing the possibility of freedom of thought and creativity, and justice in distributing science, knowledge and services among the different classes in society (Chandhasaa&Pattanapanithipongb, 2024). A knowledge society is not limited to the production and circulation of information (Kurniawan et. al, 2023), but rather requires an evaluation culture that respects those who produce this information and exploit it in the right field (Iwuanyanwu et. al, 2024).

**Political Dimension:** The knowledge society is concerned with involving the masses in decision-making in a rational and wise manner (Kurniawan et. al, 2023) based on the use of information and involving the masses in decision-making and effective political participation (Zollinger, 2024). From these dimensions we understand that this society is based on the following pillars (Alizadeh & Sharifi, 2023): innovation, research and development, quality education (Yu et. al, 2023), infrastructure based on information and communication technology, and good governance (Znagui, 2024).

## GAPS IN THE LITERATURE

Professional learning communities represent the real hope for reforming universities and improving educational productivity in them, especially since they are a reform approach that is characterized by low cost compared to other approaches. Given that the actual practice in some countries indicates that the majority of universities have not yet taken steps to transform into professional learning communities, the prevailing ideas and values in them still revolve around the traditional model, despite the current era's emphasis on the importance of learning for all individuals in universities, which leads to the creation of professional communities of learners who teach each other, which in turn helps build a contemporary knowledge society that leads to comprehensive development and reform in universities.

### Aim of the study

Identifying the degree to which professional learning communities contribute to building a contemporary knowledge society in Palestinian universities from the perspective of the selected study sample, also Identifying the significance of differences in the average responses of the study sample members regarding the degree to which professional learning communities contribute to building a contemporary knowledge society in Palestinian universities according to the study variables. And determining ways to activate the role of professional learning communities in building a contemporary knowledge society in Palestinian universities, in light of the study results.

### The originality of the present study

The purpose of the study is to identify the role of professional learning communities in building a contemporary knowledge society in Palestinian universities, to acknowledge if there are statistical differences due to gender, Educational qualification, Nature of work, years of experience.

### Research Question

The Main Question: what is the role of professional learning communities in building a contemporary knowledge society in Palestinian universities?

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

Are there statistically significant differences at the significance level ( $\alpha \leq 0.05$ ) between the average estimates of the study sample for professional learning communities role in building a contemporary knowledge society in Palestinian universities attributed to the variables (gender, academic qualification, nature of work, years of experience)?

### Study Hypothesis

There are no statistically significant differences at ( $\alpha \leq 0.05$ ) for professional learning community's role in building a contemporary knowledge society in Palestinian universities due to gender.

There are no statistically significant differences at ( $\alpha \leq 0.05$ ) for professional learning community's role in building a contemporary knowledge society in Palestinian universities due to Educational qualification.

There are no statistically significant differences at ( $\alpha \leq 0.05$ ) for professional learning community's role in building a contemporary knowledge society in Palestinian universities due to Nature of work.

There are no statistically significant differences at ( $\alpha \leq 0.05$ ) for professional learning community's role in building a contemporary knowledge society in Palestinian universities due to years of experience.

### **The significance of the Study**

The importance of the study is by highlights the importance of professional learning community's role of in building a contemporary knowledge society, which requires a radical and in-depth reconsideration of the mission of Palestinian universities. It also highlights the importance of the study in this particular period, in which Palestine faces many crises that confront its quest to build and generate knowledge, as this requires an atmosphere of freedom, democracy and participation. It also provides a safe ground that takes into account the specificity of the Palestinian political, environmental and economic situation, which stands as a real challenge in the face of this quest. In light of this, the study attempts to determine the foundations, components and stages of building a knowledge society, and to provide a theoretical and planned framework through which it can launch and work to build a knowledge society in Palestine,

### **Definition of Terms**

**Professional Learning Community:** It is defined as a community that is based on an ongoing process in which individuals work collaboratively in repeated, periodic meetings of collective inquiry and action research in order to achieve better outcomes for the students they teach (Liu & Yin, 2023). It is also defined as a community based on the assumption that the quality of educational institutions is measured by the quality of those working in them, and therefore improvement requires investing in educators rather than belittling or circumventing them (Christensen, 2024).

**The Knowledge Society:** It is defined as the electronic knowledge society that produces and disseminates knowledge among members of society in all different areas of life (Peng et. al, 2023), and includes a large group of work teams of students, employees, and others with the aim of advancing and developing society (Ashour, 2024). It is also defined as the society in which knowledge and information flow easily and smoothly and without obstacles and difficulties, so that it can be accessed quickly, by multiple means within a short time and without hassle and high costs, and is available to everyone without class or discrimination (Paavola et. al, 2023).

**Palestine Technical University - Khadouri:** the "first and only governmental university in the West Bank affiliated with the Ministry of Education and Higher Education. It was established in 1930 as an agricultural school to serve the Palestinian community and then developed into a college offering diploma programs in many specializations. It was transformed into a university college/it is Palestine Technical College - Khadouri under the Palestinian National Authority to offer technical programs at different levels diploma and bachelor's (<https://ptuk.edu.ps/ar/>).

## **METHODS (DESIGN OF THE STUDY)**

The current study adopted the descriptive analytical approach. After collecting the data, the researcher 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 Palestine technical university Ramallah branch employees, the total Number was (141).

### Sample of the Study

From this population at (76) sample of employee 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	30
	Female	46
	Total	76
Educational qualification	Diploma and less	23
	Bachelor	17
	Master	26
	PhD	10
	Total	76
Nature of work	Academic	43
	Administrative	33
	Total	76
years of experience	Less than 5 years	8
	5 – 10 years	10
	More than 10 years	58
	Total	76

### Instruments of the study

The researcher developed Questionnaire to measure professional learning communities role in building a contemporary knowledge society in Palestinian universities, using educational literature and previous studies. The questionnaire consisted of two parts, the first part consisted of general information, and the second part consisted of a group of paragraphs that fell under three areas: the first area (the role of Palestinian universities in preparing the individual to acquire knowledge) consisting of (15) paragraphs, the second area (the role of professional learning communities in building a knowledge society in Palestinian universities) consisting of (15) paragraphs, and the third area (the role of Palestinian universities in developing a knowledge society) consisting of (15) paragraphs. The paragraphs were formulated so that they would be responded to according to the five-point Likert scale, which consists of five degrees. The response was given as a very high degree (5), a high degree (4), a medium degree (3), a small degree (2), and a very small degree (1).

### Validity of Instruments

The researcher verified the validity of the study tool by presenting it to a group of specialized arbitrators from Palestinian higher education institutions, where some paragraphs were deleted and others were modified. As for reliability, it was calculated using the Cronbach Alpha equation, where the reliability coefficient of the tool reached (0.95), which is an acceptable value for research purposes. The questionnaire in its final form consisted of (45) items distributed over three areas, measuring the role of professional learning communities in building a contemporary knowledge society in Palestinian universities.

### Reliability of Instruments

Cronbach's Alpha Value for the questionnaire was (95%) which is appropriate for the purposes of the study.

### Procedures of the study

The study carried out in the following manner:

The relevant literature reviewed to establish the theoretical background of the study.

The population identified and the samples selected on which the instruments applied.

The questions of the study put up, depending on previous studies.

The reliability and validity of the instruments approved.

The researcher distributed the instruments on employees.

The instrument distributed and gathered in the Second semester of the academic year 2024-2025.

The data was gathered and analyzed by using SPSS program.

The researcher explained the information to reveal whether the outcomes agree or disagree with previous studies.

### **Variables of the study**

Independent variables: Gender (Female/Male), Educational qualification (Diploma and less/ Bachelor/Master/PhD) , Nature of work (Academic/Administrative), years of experience (Less than 5 years/5 – 10 years/ More than 10 years).

### **Dependent variables**

Professional learning community's role in building a contemporary knowledge society in Palestinian universities.

### **Data Analysis**

In order to analyze the data, the researcher 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 the professional learning communities role in building a contemporary knowledge society in Palestinian universities, 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 professional learning community's role in building a contemporary knowledge society in Palestinian universities?

To answer this question, the researcher calculated the arithmetic means and standard deviations of the study sample's estimates for each domain of the tool and for the total score. Tables (2, 3, 4, 5) shows that

**Table 2. Means, Std. Dev. and degrees of the items of the first domain.**



#	Item	Mean	Stdv.	Degree
1	Facilitating the participation of employees in seminars and conferences.	4.30	0.63	High
3	Opening specialized training courses for employees and students.	4.28	0.79	High
2	Providing job security for university employees.	4.24	0.75	High
4	Dealing with students with respect, appreciation and care for their inclinations.	4.20	0.86	High
6	Providing basic requirements for employees at the university.	4.20	0.77	High
5	Organizing and supporting scientific conferences.	4.16	0.85	High
13	Organizing field visits to work sites for students and employees.	4.08	0.80	High
12	Increasing the efficiency of employees and enriching their professional experiences.	4.04	0.74	High
15	Creating a spirit of fair competition among employees and students.	4.04	0.89	High
14	Increasing the productivity of employees and students at the university.	4.01	0.96	High
11	Providing references and scientific sources that are constantly renewed.	3.99	0.82	High
7	Facilitating the task of researchers and supporting them.	3.92	0.78	High
8	Encouraging students to freely choose their educational and training work.	3.91	0.75	High
9	Diversifying the use of education systems and methods.	3.86	0.90	High
10	Providing scientific grants and incentive rewards.	3.76	0.94	High
	Overall average of the individual's preparation for acquiring knowledge	4.07	0.55	High

Results in this table show that the sample members' assessments of the field of preparing the individual to acquire knowledge were high, on all items, as the arithmetic averages ranged between (4.30) and (3.76), while the assessment of the field as a whole was high with an arithmetic average of (4.07).

**Table 3. means, Std. Dev. and degrees of the items of the second domain**

#	Item	Mean	Stdv.	Degree
15	Leading the information revolution.	4.26	0.66	High
11	Establishing specialized research centers.	4.22	0.62	High
5	Developing scientific thinking skills among students and employees.	4.18	0.65	High
10	Conducting research related to life problems.	4.18	0.76	High
9	Providing education, training and development opportunities for all.	4.17	0.66	High
3	Professional development of individuals in various specializations.	4.13	0.72	High
4	Training specialized technical cadres in the field of research.	4.12	0.61	High
14	Increasing financial allocations to support scientific research.	4.12	0.69	High
6	Adopt a comprehensive quality system in higher education.	4.11	0.64	High
12	Generating, developing, storing and distributing knowledge.	4.07	0.72	High
8	Expanding students' perceptions of challenges and problems.	4.04	0.66	High
1	Guiding and directing students and employees towards knowledge.	4.03	0.82	High
13	Supporting opportunities for scientific creativity in all fields.	4.03	0.75	High
2	Providing data and information in various forms.	3.99	0.76	High
7	Supporting scientific publishing in various fields.	3.95	0.75	High
	Overall average for the knowledge society building field	4.10	0.47	High

Results in this table show that the study sample individuals' assessments of the second domain, building a knowledge society, were high, on all items, with the arithmetic mean ranging between (4.26) and (3.95), while the general assessment of the domain as a whole was high with an arithmetic mean of (4.10).

**Table 4. Means, Std. Dev. and degrees of the items of the Third domain**

#	Item	Mean	Stdv.	Degree
5	Establishing the principles of justice, equality and democracy.	4.25	0.73	High
14	Employing all potentials according to the variables and requirements of the developed society.	4.25	0.87	High
6	Investing in available scientific technologies to spread knowledge.	4.20	0.69	High
1	Preserving the identity of society.	4.17	0.87	High
7	Caring for, encouraging and nurturing the talented.	4.17	0.90	High
4	Preserving the foundations and constants of society.	4.16	0.78	High
15	Finding solutions to the social, economic and cultural problems of society.	4.14	0.80	High
3	Providing society with specialized and qualified cadres.	4.07	0.82	High
2	Preserving and developing the national and patriotic culture.	4.03	0.80	High
10	Leading social, economic and political reform movements in society.	3.99	0.89	High
8	Meeting the labor market with renewed knowledge requirements.	3.97	0.82	High
11	Providing development services to society in various fields.	3.89	0.92	High
12	Cooperating with informal institutions and developing them.	3.86	1.02	High
9	Expanding communication channels with social institutions.	3.79	0.91	High
13	Vocational training for community members in various institutions.	3.68	1.11	High
	Overall average for the knowledge society development field	4.02	0.61	High

Results in this table show that the study sample individuals' assessments of the third field, knowledge society development, were high, on all items, with the arithmetic mean ranging between (4.25) and (3.68), while the general assessment of the field as a whole was high with an arithmetic mean of (4.02).

From the data shown in the previous tables, the areas of professional learning communities role in building a contemporary knowledge society in Palestinian universities can be arranged as shown in the following table:

**Table 5. Ranking the fields of the role of professional learning communities in building a contemporary knowledge society in Palestinian universities according to the study sample's estimates**

#	Domain	Mean	Stdv.	Degree
1	Building a knowledge society	4.10	0.47	High
2	Preparing the individual to acquire knowledge	4.07	0.55	High
3	Developing a knowledge society	4.02	0.61	High
	Total	4.06	0.44	High

As seen in the above table, the results show that the role of professional learning communities was high in all fields, as building a knowledge society came in first place, followed by preparing the individual to acquire knowledge, and finally developing a knowledge society.

### Results related to the second question

Is there a difference in Artificial intelligence role in improving academic education due to gender, Educational qualification, Nature of work, years of experience?

**To answer this question, the researcher investigated the following hypothesis:**

### Results related to the first Hypothesis

There are no statistically significant differences at ( $\alpha \leq 0.05$ ) for professional learning community's role in building a contemporary knowledge society in Palestinian universities due to gender.

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 professional learning community's role in building a contemporary knowledge society in Palestinian universities due to gender.

**Table 6. Results of the independent t-test for gender variable**

gender	Mean	Std. Dev.	T- State	Sig.
male	4.20	.340	4.34	.040
female	3.94	.500		

The results in previous table show that the level of significance for the differences in participant's responses related to professional learning community's role in building a contemporary knowledge society in Palestinian universities due to gender is (0.04) this means that there are statistically significant differences at ( $\alpha < 0.05$ ), in favor of male employees, Thus, the hypothesis is rejected.

### Results related to the second Hypothesis

There are no statistically significant differences at ( $\alpha \leq 0.05$ ) for professional learning community's role in building a contemporary knowledge society in Palestinian universities due to Educational qualification.

To test this hypothesis, the researcher used one-way ANOVA- test, table (7) shows: The results of one-way ANOVA- test for the differences in participant's responses related to professional learning community's role in building a contemporary knowledge society in Palestinian universities due to Educational qualification.

**Table 7. The results of ANOVA- test for Educational qualification variable**

Educational qualification	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	1.184	3	0.395	1.33	0.27
Within Groups	21.409	72	0.297		
Total	22.593	75			

The results in previous table show that the level of significance for the differences in participant's responses related to professional learning community's role in building a contemporary knowledge society in Palestinian universities due to Educational qualification is (0.27) this means that there are no statistically significance differences at ( $\alpha < 0.05$ ). Thus, the hypothesis accepted.

### Results related to the third Hypothesis

There are no statistically significant differences at ( $\alpha \leq 0.05$ ) for professional learning community's role in building a contemporary knowledge society in Palestinian universities due to Nature of work.

To test this hypothesis, the researcher used independent t-test as table (8) shows: The results of independent t-test for the differences in participant's responses related to professional learning community's role in building a contemporary knowledge society in Palestinian universities due to Nature of work.

**Table 8. Results of the independent t-test for Nature of work variable.**

Nature of work	Mean	Std. Dev.	t-state	Sig.
Academic	4.04	.520	0.10	0.74
Administrative	4.09	.580		

The results in previous table show that the level of significance for the differences in participant's responses related to professional learning community's role in building a contemporary knowledge society in Palestinian universities due to Nature of work is (0.74) this means that there are no statistically significance differences at ( $\alpha < 0.05$ ). Thus, the hypothesis accepted.

### Results related to the fourth hypothesis

There are no statistically significant differences at ( $\alpha \leq 0.05$ ) for professional learning community's role in building a contemporary knowledge society in Palestinian universities due to years of experience.

To test this hypothesis, the researcher used one-way ANOVA- test, table (9) shows: The results of one-way ANOVA- test for the differences in participant's responses related to professional learning community's role in building a contemporary knowledge society in Palestinian universities due to years of experience.

**Table 9. the results of ANOVA- test for years of experience variable**

years of experience	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	0.667	2	0.334	1.11	0.34
Within Groups	21.926	73	0.300		
Total	22.593	75			

The results in previous table show that the level of significance for the differences in participant's responses related to professional learning community's role in building a contemporary knowledge society in Palestinian universities due to years of experience is (0.34) this means that there are no statistically significance differences at ( $\alpha < 0.05$ ). Thus, the hypothesis accepted.

## CONCLUSION

The study results showed that professional learning community's role in building a contemporary knowledge society in Palestinian universities was high, with a mean of (4.06) over/out of (5). The result also revealed that there were no statistically significant differences due to Educational qualification, Nature of work, years of experience; however, it shows that there were statistically significant differences due to gender in favor of male employees.

### Dissection of the results of the study

The researcher attributed The High professional learning community's role in building a contemporary knowledge society in Palestinian universities to the following:

The development of information and communication technology, which gave rise to the knowledge society, announced the emergence of new terms in education, including the professional learning society. Knowledge has become the engine of development and one of the most important sources of national income, and investment in human resources is the foundation of the knowledge society. This matter shows the importance of the role of professional learning societies in developing individuals and preparing them to live in the knowledge society environment according to educational programs that aim to reduce the information gap to keep pace with the information age and the knowledge society, and to realize the importance of eliminating information illiteracy, and developing and raising the skills of individuals in dealing with information and communication technology.

The researcher attributed that there were statistically significant differences with professional learning community's role in building a contemporary knowledge society in Palestinian universities due to gender in favor of male employees to the following:

To the reality of Palestinian society, which opens the field more widely to males than females in the field of science and education, which leads to greater experience and greater awareness among males of the role of professional learning communities in building the contemporary knowledge society.

The researcher attributed that there were no statistically significant differences with professional learning community's role in building a contemporary knowledge society in Palestinian universities due to Educational qualification to the following:

The awareness of all members of the study sample, regardless of their academic qualifications, of the role of professional learning communities in building a contemporary knowledge society in Palestinian universities, given their involvement in the field of university work for many years and their awareness of the impact of the community that teaches each other in building, using, storing and benefiting from knowledge in all areas of the university's work, whether from an academic perspective or from an administrative perspective represented by scientific research, teaching and community service.

The researcher attributed that there were no statistically significant differences with professional learning community's role in building a contemporary knowledge society in Palestinian universities due to Nature of work to the following:

The awareness of the study sample members of the importance of the role of professional learning communities in building a contemporary knowledge society in Palestinian universities, due to their involvement in university work for many years and their observation of the changes that have occurred in the university environment and the urgent need to pay attention to learning communities with the aim of reaching the building of a knowledge society that works to help the university prove its existence among its peers in light of contemporary challenges.

The researcher attributed that there were no statistically significant differences with professional learning community's role in building a contemporary knowledge society in Palestinian universities due to years of experience to the following:

The study sample members' awareness of the importance of the role of professional learning communities in building a contemporary knowledge society, regardless of their years of experience, is due to the openness of university education to all areas of scientific, cognitive and technological progress, and the availability of knowledge and methods of accessing it for all groups in the university community and their use of it in building a knowledge society.

### **Limitations of the study**

The current study has the following limitations

This population study consisted of Palestine technical university

The study carried out in the academic year (2024-2025) at the second semester.

The study was limited by the concepts and definitions mentioned in it.

### **Recommendations**

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

The necessity of working to eliminate information illiteracy, and developing and raising the skills of individuals in dealing with information and communications technology.

The necessity of promoting the culture of professional learning communities in Palestinian universities and striving to reach it.

The necessity of raising awareness among females in Palestinian society about the importance of professional learning communities and their role in building a knowledge society.

The necessity of working on developing a model for building a knowledge society in Palestinian universities and identifying ways to reach it.

The necessity of developing scientific and practical plans in advance to contribute to the dissemination of knowledge and its use in universities.

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