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The Extent to which High School Principals Support Meaningful Learning from the Point of View of Principals and Teachers at Bethlehem Governorate and Negev Sector

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Dedication

I would like to dedicate my work to:

- My mother for the endless love whose spirit always inspired me towards success.

- My father for his support.

- My family who was the inspiration behind the thesis.

- Special thanks to my youngest daughter Yasmeen.

- My supervisor Dr. Muhamad Shuaibat for his guidance and support throughout my study, especially for his confidence in me

Khaled Ahmad al-Hassanat

Declaration:

This is to certify that this thesis is for Al-Quds University to achieve the master's degree and it is a result of my special research except what the researcher pointed to what occurred. This paper was not offered to any other Universities to achieve any other degree.

Signature:

Name: Khaled Ahmad Atyeh al-Hassanat

Date: 23/04/2018

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To all of them, I offer my deep respect and gratitude.

The researcher

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Abstract:

This study was conducted to determine the extent to which high school principals in Bethlehem governorate and Negev sector in supporting meaningful learning from teachers and principals' point of view.

The study was conducted during the second semester of the academic year 2016-2017, using the descriptive approach. The population consisted of all the principals of high schools in Bethlehem governorate (53) and in Negev Sector (41), and all of the secondary schools in both areas, which were (94). The sample consisted of (8) principals and (240) teacher from both areas. The researcher used two tools: The questionnaire for teacher which consisted of (38) items distributed over (3) domains, and the interview for principals with (4) open questions.

The results showed that the role of principals in supporting meaningful learning from the teacher's point of view was high with a mean of (3.73). The result also revealed that there were no statistically significant differences in due to gender and academic qualifications. However, there were statistically significant differences due to years of experience in favor of less than 5 and location in favor of Negev sector. The results also showed that the principals are aware of the importance of their role in supporting meaningful learning. There was an agreement on planning for the school year, set up the budget of the school to meet the needs of the meaningful learning program.

In light of the results, the researcher recommended that teachers should replace the traditional assessment to more meaningful assessment, apply technology applications at their work, and encourage the students to use the higher order thinking skills in their daily life. The principal should involve the meaningful learning spirit in building the school vision, and encourage cooperation between teachers rather than competition. The Palestinian Ministry of education should raise the awareness of the local communities about the importance of the meaningful learning at schools, to have more cooperation between the local communities and the schools, Adopting the Negev experience in implementing the meaningful learning theory, in order to apply it at the schools of Palestinian Ministry of education.

Chapter One:

Introduction:

1.1 Study Background:

People can benefit from technology used in business, health, care, and manufacturing. This technology could be applied in education even before the spread of the internet. Teachers used to convey this knowledge through lecturing, discussions, and readings. While many teachers, principals and district administrators, use new forms of project-based curricula and performance based on assessment-where students get information from many sources. The role of their teachers is as a coach and manager.

Barron and D-Hammond (2008) pointed out that nowadays many scholars report about the need for powerful leadership where learning focuses on the demands of life to prepare the students for twenty-first-century skills. Teachers help in avoiding the traditional academic approaches and the narrow tasks that are not going to develop students' ability for critical thinking and writing. Stalheim (1998) added that life in schools focuses on learning. Teachers and principals learn continually as we teach and carry out our activities. They fight to improve learning environment and to facilitate learning for the students According to Ausubel (1963), educators have to reach the heart of the education process through deliberate attempts to influence cognitive structure to maximize meaningful learning. Sometimes, teachers find it difficult to achieve it without organizing the curriculum to provide for the traumatic introduction of new facts and concepts.

The father of meaningful learning is David Paul Ausubel. He developed an interesting theory. Ausubel believed that what influences learning is what the learners already know. Ausubel believed that deductive reasoning is the key

to understanding concepts, principles, and ideas. Therefore, his theory relies on prior. New knowledge is added to the events and objects that we already possess. There is a need for the new knowledge to interact with the learner's knowledge structure as opposed to the rote memorization. Ausubel's learning theory was advanced by Gagne (1975) one of the behaviorist theorists. Gagne brought the best of behaviorism and cognitive. Gagne believes that learning results in behavior changes that are observable.

Novak (2002) explained that Ausubel's theory covers the whole learning process from the planning to the assessment and the application. Meaningful learning helps the learner choose conscientiously to integrate the new knowledge that learner already possesses. Scientists who studied human learning agreed that the meaning constructed by human beings at birth is faulty or limited. This faulty and limited meaning can distort new meaning construction.

Howland et al. (2012) pointed out that students mostly experienced standardized tests or memorized information. Schools have become testing factories. When students finish the high school they only know how to take tests, students seldom invest their knowledge in attempting to understand the knowledge being tested because the test is done individually. Through the testing process there will be no need for cooperative learning, students will not develop conceptual understandings, learning to take tests does not result in meaningful learning. Through meaningful learning, students have to be willfully engaged in meaningful tasks as well as engage in active, constructive, intuitional, authentic and cooperative activities. The role of schools is to teach students how to recognize and solve problems. In order to achieve this goal, principals have to recognize and implement the curriculum around the meaningful learning activates.

According to Novak (2011), meaningful learning involves thinking and feeling. Rote learning studies recall information. Students are motivated only when they get the right answer. Whereas in meaningful learning students are rewarded intrinsically and there is usually a higher level of positive affect resulting. In rote learning, teachers tend to simplify the new knowledge and separate it from the real world. While in meaningful learning, teachers teach the new material with context.

1.2 Statement of the problem:

Principals have an important role in supporting meaningful learning, which has a pronounced positive effect in general. Education in the 21st century greatly needs such an approach in learning. Currently, the principal's role in supporting meaningful learning is still ineffective. The researcher works as a high school teacher and felt the importance of the principal's role in supporting meaningful learning in both Bethlehem and Bedouin high schools.

The problem of the study is based on around the main question: To what extent do high school principals in the Bethlehem governorate and Negev Sector support meaningful learning from teachers and principal's point of view?

1.3 This study aims to:

Examine teacher and principal perspectives to discover the extent to which high school principals in the Bethlehem governorate and Bedouin Sector support meaningful learning. To acknowledge if there are statistical differences in supporting meaningful learning by high school principals in Bethlehem governorate and Bedouin Sector from the teacher or principal perspective.

1.4 Questions of the Study:

The Main Question: to what extent do high school principals in the Bethlehem governorate and the Negev Sector support meaningful learning from teachers and principals point of view?

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

Is there a difference in the extent to which high school principals in Bethlehem governorate and the Negev sector support meaningful learning from teachers and principals point of view due to gender, location, years of experience, academic qualification?

1.5 Study Hypothesis:

1. There are no statistically significant differences at ($\alpha \leq 0.05$) in the means of the study of the extent to which high school principals in the Bethlehem governorate and Negev Sector support meaningful learning from teachers and principals point of view due to gender.
2. There are no statistically significant differences at ($\alpha \leq 0.05$) in the means of the study of the extent high school principals in Bethlehem governorate and Negev Sector support meaningful learning from teachers and principals point of view due to location.
3. There are no statistically significant differences at ($\alpha \leq 0.05$) in the means of the study of the extent high school principals in Bethlehem governorate and Negev Sector support meaningful learning from teachers and principals point of view due to years of experience.
4. There are no statistically significant differences at ($\alpha \leq 0.05$) in the means of the study to what extent do high school principals in Bethlehem governorate and Negev Sector in support meaningful learning from teachers and principals point of view due to academic qualification.

1.6 The significance of the Study:

The importance of the study appears in focusing on a new approach in education, which is Meaningful Learning. According to the researcher's knowledge, this research is the first to tackle this subject. This study is one of a few studies that make a comparison in fields of education between the Palestinian system and the Negev system.

1.7 Limitations of the study:

The current study has the following limitations:

1. This population study consisted of the High schools in Bethlehem Governorate and Bedouin sector in the south of Palestine.
2. The study was carried out in the academic year (2016-2017) at the second semester.
3. The study was limited by the concepts and definitions mentioned in it.

1.8 Definition of Terms:

Meaningful Learning: defined by (Ausabel, 2000) "refers to a learning way where the new knowledge to be acquired is in relation with acquire the relation or with previous knowledge" (p 64).

Procedural definition: Meaningful Learning: In order to achieve understanding, any new content should be meaningful, and the learner has to relate it to prior knowledge in a meaningful way by using authentic learning and his own experience.

Bethlehem Governorate: Bethlehem Governorate is one of the largest West-Bank eleven governorates. It occupies 607.8 km2 of mass land and is bordered with Jerusalem Governorate in the North and Hebron Governorate from the South. The Western borders of Bethlehem Governorate are the

1949- Armistice Line (AKA: Green Line) that was demarcated by designated United Nation (UN) resolutions. The Governorate is distinguished by its topographic variability where the altitude ranges from the mountainous hills of Beit Jala that stand at 930 meters above Mean Sea Level (MSL) to as low as 412 meters below MSL along the shores of the Dead Sea that represent the Eastern border of the Governorate (page 2)

Bedouin Sector: Rudnitzky and Abu Rass (2012). "According to data from the Central Bureau of Statistics, in 2009 the Bedouin (Muslim) people of the Negev numbered 192,800 represent 27.4% of the total residents of the Negev (around 02,600). In 2009, the Bedouin citizens of the Negev constitute 15.6% of the total Arab population of Arab citizens Israel (1,239,230 not as well as the 296,370 Arab residents of East Jerusalem).

Chapter Two:

Historical Background and Related Studies that raise this topic:

2.1 Historical Background (The importance of Meaningful learning):

Meaningful learning embodies “a distinctive kind of learning process.” The learner employs a set to incorporate within his cognitive structure, nonverbal in fashion, in no arbitrary, potential meaningful materials. Meaningful learning does not mean learning of meaningful material. Meaningful material cannot be meaningful learned because it is only potentially meaningful. Meaningful learning should have components that determine the aspect of learning material or be potential meaningfully Ausuble (1963).

It is difficult to demonstrate that meaningful learning has occurred; the only feasible way is an independent problem-solving to check whether the learners comprehend meaningfully the idea they are able to verbalize. Problem solving demands other abilities and qualities to achieve such as, reasoning power, flexibility, perseverance, sensitivity, improvisation and tactical smartness. Ausuel (1968).

Ausuel (1968) pointed out that we can distinguish three distinct phases during meaningful reception learning and retention. First, before potentially meaning material can be learned, it must be perceived; the second phase is the learning- retention process that is observed by a relevant and appropriate inclusive conceptual system. The third phase is the reproduction of the retained information.

Meaningful learning requires both that learners manifest a meaningful learning set and that the learner should potentially absorb the material they are learning. When the learner establishes a meaningful learning relationship between new and established knowledge, then what the learner requires to

involve both the nature of the learning task and the nature of particular learners' structure of knowledge, which is a more complicated matter than a meaningful learning set. Meaningful learning is an emergent outcome of the interaction between the ideas to be learned in the instructional material and relevant subsuming ideas in the learner's cognitive structure Ausubel (1963).

Ausubel (1963) add that Motivational factors (enhancing effort, attention and immediate readiness for learning) have a positive effect on ensuing meaningful learning, besides the cognitive variable that influences availability during the retention interval. In addition, the above factors influence the cognitive interactional process in the particular aforementioned ways through the cognitive variables that determine precision, stability, clarity and discriminability, which emerges new meanings during learning.

Vallori (2014) illustrated the most vital principles in applying meaningful learning. Those are open: work assists all learners to learn, then motivation; they help increase classroom environment and make learners be involved in their tasks. In addition, they must be related to the environment of learners. They are also creative, which reinforces imagination and intelligence. Moreover, they are built on concept mapping, which helps to link and connect concepts. Finally, they are based on educational programs and must be adjusted in considerable to learners with special necessities.

According to Karpicke (2012), through meaningful learning, people have the ability to reconstruct knowledge rather than reproducing it exactly. People do not store the same copies of experiences that reproduce verbatim in retrieval because knowledge is reproduced on the basic of present context and available retrieval cues. Understanding the process involved in retrieving and reconstructing knowledge is essential in order to understand learning. Because the act of retrieval itself is a powerful tool for enhancing long term

learning. When people reconstruct knowledge, people's expression depends on a retrieval cues available in a given content. In addition, every time people retrieve knowledge, the knowledge is changed, so retrieving knowledge will improve their ability to regain knowledge again in the future. Retrieval is important for understanding learning because all types of knowledge requires retrieval and depends on of retrieval cues. Therefore, retrieval is the key to promote learning through improving the match between a cue and particular desired knowledge. Retrieval-based learning helps improve students' performance. There are many activities that active retrieval could be potentially incorporated into and retrieval could be integrated in such activities in many different ways.

Novak and Gowing (1984) added "that meaningful learning needs an effective tool to visualize it by using a concept map to better understanding and an assessing concept map as a graphical tool for representing knowledge structure in the form of a graph. The nodes of graph represent concepts. The edge that runs between concepts represent relationships. Concept and relationships between them formulate propositions". (p.5) concept maps require constantly integrated newly acquired concepts and relationships into existing concept maps. It is important that in meaningful learning the concept map can be modified to accommodate the change.

Principals can use the concept map as a tool to improve teaching, concept map- based on assignments has different formats, which has an impact on the outcomes. What makes incorporation of concept map into teaching is feasible: if you use the concept map tools and learning curves, a concept map can be constructed in many different ways Wie and Yue (2017).

How could principals use the theory of meaningful learning effectively? It is important that principals believe in meaningful learning theory as a tool for

developing their schools by understanding how knowledge is produced and reconstructed, be certain of the significance of retrieval in implementing meaningful learning and besides, be aware of the concept map. This basic understanding can help principals develop their effectiveness in implementing meaningful learning. In this study, I will draw a picture about the role of the principal in fulfilling meaningful learning in schools, the importance of technology in adopting meaningful learning and the importance of alternative assessment in evaluating students in meaningful learning process.

2.2 Meaningful learning definition:

Harpaz (2013) defined meaningful learning as “It is the rebuilding or the reorganization of knowledge that adds to the meaning of experience, and that increases the capacity to direct the course of subsequent experience.

On the other hand, it is a procedure in which the learner offers new meaning to his mental concepts, contents, ideas, insights, positions, attitudes that were learnt in the earlier and opens paths for learning more complex contents in the future.

Vallori (2014) defined the meaningful learning according to Ausubel, "the most important single factor that influences learning is what the learner knew." Therefore, meaningful learning, which implies longer retention than memorizing, occurs when humans relate new concepts to pre-exist familiar concepts. Then, changes are produced in our cognitive structure, concepts are modified and new links are created. It is a useful tool because it enables real learning, it generates greater retention and it facilitates transferences to other real situations.

Wei and Yue (2017,5) defined meaningful learning (as identified by Ausubel in Ausubel, 1963) as the most important learning principle)as a process

signified by integrating new concepts and propositions with existing relevant ideas in some substantive ways, within one’s cognitive structure.

"Meaningful learning," by definition, involves the acquisition of new meanings. New meanings, conversely, are the end products of meaningful learning. That is, the emergence of new meanings in the learner reflects the prior operation and completion of a meaningful learning process. Ausubel (2000).

2.3 The role of principals in supporting meaningful learning:

Abaya (2016) emphasized that, managing competing tension and dilemmas need a successful leader. A successful leader should be able to run commuting as well as teaching and learning programs. Principals should be able to play the role of facilitators, share goals and trust. Levine (2011). Agreed that, this role enables principals to get of things a lot more easily when they have confidence in their teachers and students they help reinforce experience. Sharkey et al (2016) sees that, Principals and teachers' great challenge is how to shorten the gap between teachers and students and between students and curriculum. Teachers reported that their **work** increased student's motivation and engagement. It fostered teacher-student relationship and valued the curriculum recourse.

Ng. et al. (2016) stated that, a successful leadership skills should be comprised of conflict resolution, role modeling, team building, vision building (develop a common and shared vision), should include various stakeholders in the process of decision making, develop the professional development tool for leaders and involve parents and community in the process of school improvements. Miller et al. (2016) explained that researches look for kinds of professional development that develops leaders who can improve teaching and learning and for ways of how to involve

teachers in leadership development to implement positive change in their schools. Eger and Egerova' (2015) showed that, developing a successful educational reform requires effective leaders and managers. Principals can gain skills and knowledge from the experts in educational projects. Educational centers provide principals and deputy head teachers with training programs in labor law, and educational process and school financing. Training is to gain professional competencies. These courses are compulsory provided by the ministries of education.

Camburn et al. (2016) pointed out that professional development for principals should be coherence, which provide principals with authentic collaborative learning and problem-based experience that affects principals' attitudes toward a successful school management. Levine (2011) Added that, any change in schools should be done with more experienced teachers who are going to change their approaches to their work. Miller et al. (2016) see that if we want to improve school, we need to support and to develop leadership effective: a leader assumes that school is successful when the relationship between school leadership and student successful is makeable. Principals should break with the post norms and start building trust and be collaborate with their staff ,so as to avoid being defensive and tried to the past to ease and support professional development in their schools. Levine (2011).

Ng. et al. (2015) described that principals have to elevate students' achievements, and to be effective instructional leaders, therefore new appointed principals should be provided with formal and informal support while they are applying what they have learnt in the workshops. According to Eager and Egerova (2015) organizational success depends on the project management, which has grown rapidly worldwide. Principals are paying a lot of attention to projects based on approach, so the principals' role has widened, that is why it is important to develop relevant skills and knowledge.

Principals should be aware of technical knowledge and lead team projects successfully; the result of training is to learn how to plan and manage school projects. Principals have to learn how to be effective and manage risks, to minimize the risk of failing, to achieve the project goals, and this factor may be the key that contributes to a project failure.

Fisher et al. (2010) explained principals who receive professional development on line have expressed a positive reaction to the information that the received related to the reaction and learning that face-to-face training provides. Newly appointed principals (NAPs) need continuous professional development to face the impact of globalization on school development. NAPs are more confident when experienced principles work with NAPs as mentor or roles model. NAPs are requested to include programs, to answer challenging questions regarding legal matters of school education and a lawyer is expected to be the speaker. NAPs need firm leadership capability to reinforce themselves to face internal and external challenges. Ng et al. (2016) added that, it is expected from principals to elevate students' achievements, and to be effective instructional leaders. Therefore NAP should be provided with formal and informal support while applying what they have learnt in the workshops.

Frye (1988) pointed out school administration should be involved in the universities preparation programs. When teachers face problems during their initial year, the teachers are more likely to leave teaching. The involvement of principals in such program can reduce the problem of leaving teaching of the beginning teachers. Schwartz (1962) added that student- teacher programs play an essential role in developing the programs towards a highly motivated teacher who can run meaningful classes and build positive relations with the school staff effectively. The principals can affect the student-teacher programs positively because this kind of principals' attitude makes friendly

impression on the student's teacher program. Principals must recognize that their involvement in student- teacher programs is vital. Principals must build teamwork among the class teacher, student teacher and the supervisor teacher.

2.4 The role of principals in supporting the alternative assessment:

Allison et al. (2015) stated that in developed countries, schools are expected to provide learners with ways that lead to an active lifestyle by emerging their ways of understanding through evolving their experiences to make education more meaningful, relevant and engaging. Egalite et al. (2015) Explained that Policymakers run the risk of rating student's development by raising standardized tests that focus on the cognitive outcome. Researchers are paying attention towards the importance of non-cognitive skills for students' outcome, but tend to ignore what ingredients are needed for students' success. Schools have a rich bank of cognitive measurement compared to shortage selection in assessing students for non-cognitive measurement.

Egalite et al. (2015) added that in early childhood programs, the social-emotional development is promoted. The institutions of higher education recognize the importance of the non-cognitive skills. Some universities evaluate their students on resilience and teamwork as well as the knowledge integrity, communication, and organizational skills. Allison et al. (2015) showed that Project-based learning increase popularity in pedagogy. It builds knowledge from a variety of curriculum subjects, but if it is applied, it will lead to deeper learning, which creates opportunities for personal learning and avoid meaningless outputs, which means avoiding lack of learning motivation and communities of learning. Residential project work was important in contributing to (among other things) autonomy, a reassuring climate, an autonomous enthusiasm, a perceived competence and a task approach oriented towards a goal.

Lee and Lo (2007) stated that accelerated school project improves educational quality through the school reform model. It depends on three principles. The first is that all school community shares the vision for the school, in order to achieve a powerful learning by setting their goals together. Secondly, all participants share the responsibilities for the outcomes because they are empowered to take part in the decision-making process. Thirdly, the school community should realize, making use of the knowledge, talent, and resources of every member of the school community. This change has to cover the entire school.

Baran et al. (2017) agreed that when teachers adopt mobile learning, it enhances teachers with mobile tools, knowledge, and skills to carry out mobile in their classes. Therefore, the need for criteria for evaluating educational mobile applications is essential to evaluate the effectiveness of mobile learning environments. Teachers have to adopt rubrics and tools related to authenticity, social interactivity, portability and personalization to fulfill assessment meaningfully. Fisher et al. (2010) suggested that in order to make professional development accessible, it is important that teachers embrace computerized programs to build effective and improve students' outcomes.

Non-cognitive skills (behaviors, attitudes, and strategies) are responsive to educational intervention Egalite et al. (2015). Teachers need to get training to evaluate students in pedagogical affordances to make decisions about using them in the future and on electing educational applications. Baran et al. (2017).

2.5 The role of principals in adopting the use of technology:

Shelly et al. (2004) explained that it is important to understand the difference between today's digital generation and the previous ones. The previous

generations of students were passive communicators, used to do single tasks, work-oriented, text-based first, and reality-based on learning. While in today's digital generation, the students are hyper communicators, multitaskers, digital and graphics first. The need for today's generation to be understood by their teachers and parents is essential because today's students think, absorb and apply information differently. Carrington and Robinson (2009) added that students are surrounded by digital technologies, which affects their daily existence, these students are considered digital literate because they are able to develop digital textual landscape. Students convey reading and writing by using letters, images, and numbers electronically, which can attribute a rich and effective communication.

Ng and Szeto (2016) pointed out that in spite of the various challenges and multiple internally and externally imposed pressures, principals are expected to manage schools effectively, the need to equip and to develop skills are expected at every stage. The role of the principal has a dramatic change, in meeting the student's needs, expectations of teachers, parents and the community. Rigbi and Przybylski (2010) added that principals have to carry out tasks in managing, administrating, leading, counseling and even being a messenger.

According to Levine (2016) in order to meet these challenges, principals should implement changes in their schools. Experienced teachers need to change their approaches to teaching. Principals should imply a clear information and communication policy and meaningful professional development activities, strengthen a self-efficacy, subjective norm and attitude towards implementing digital learning materials Vermeulen et.al . (2015).

Shamir and Blau (2016) emphasized that It is important to have a digital wisdom: When teachers make a wise professional use of technology, a higher quality of teaching and learning, and improve digital competences of students, should be praised.Shelly.al. (2006) stated that people use technology for the good and the bad purposes, the schools must put standards to determine what is good and bad. Teachers' observation is important to prevent students from accessing unsuitable materials on the internet. Teachers should effectively watch constantly the activities and direct the students whenever the students accede unappropriated material. Then the teacher must restrict the site by the filtering software. Moran et al. (2010) added that not only does technology make learning more efficient or effective but also helps for problem solving. In addition, it improves academic success and increases equity of success of digital resources.

Sun et al. (2013) see that, through learning using a mobile phone, a user will interact and value the use of the mobile application for educational purpose. Ou-yang and Wu (2016) added that Mobile learning provides students with an opportunity to learn anytime. There is a growing interest from schools to use mobile technologies for educational purpose to improve students' learning performance; Teachers can add attraction features to mobile learning system to raise motivation for learning in lower proficiency students. Li and Yang, (2016) explained that through mobile phones, video resources (as an educational tool) students' satisfaction for learning will run smoothly. Students forget lessons rapidly; therefore, by using mobile devises students can review the material in their spare time. Learning styles and interests of students affect, the student's achievements have an impact on mobile learning performance.

Sun et al. (2013) mentioned in his study that teachers should provide basic instructions on how to use, log in, navigate, and download the applications.

Some of the mobile initiatives allow students have access to their online courses from their mobile devices to complete certain tasks such as creating announcements, posting to discussion boards, checking grades, reading course content, assignments, and assessments. These tasks facilitate the adoption of technologies. Li and Yang, (2016) explained that teachers should adjust the attitudes towards mobile learning by preparing learning materials in connection with their difficulties. The material should be relevant in designing mobile learning. Shamir- Inbal and Blau (2016) added that wide ranges of cognitive and social skills are needed in the effective use of digital technologies. Mobile devices have also become the main platform for online gaming. Video games are used to enhance English-language learning and education settings through mobile and fix platforms. Bolliger et al. (2015).

Wang et al. (2004) pointed that teachers' role in mobile learning will be the one of a mediator, a supporter, a facilitator and a guide during classes. This role helps teachers to monitor each student learning for guidance through a variety of activities. When a teacher is lecturing, the students will be busy taking notes. Through using educational technologies, teachers can transmit contents and annotations to students ,so they do not have to take notes, Teachers can observe each student learning, which helps him understand the progress of the student during the activities. Teachers can display questions on an electronic whiteboard and students can answer by voting which can offer immediate statistical results.

According to Bolliger et al. (2015) people used Digital games as an entertainment option, but playing and learning are connected theoretical. It has shown that the digital games can increase students' involvement. Games would allow students to experiment with knowledge and provide an opportunity to interact with classmates, enjoyment, and motivation. Rigbi and Brzybylski (2009) added that today's games are filled with a wide array of

narratives, challenge choice, and interpersonal interaction. Digital environments can address many meaningful skills to ensure that our learners feel valued and relevant in the pursuit of meaningful learning goals. Video games have become a mainstream leisure activity for many people around the world, as a proof, there is a remarkable growth in the number of students who participate in adopting online games.

Gordan and Lowrey (2016) pointed out that many schools are using new IPads in their process of teaching because it combines several features such as lightweight and large multi-touch flat screen, which enables students to perform a variety of activities including reading, writing and drawing with finger steps. Shamir-Inbal and Shamir and Blau (2016) explained that Tablets are considered creative; they emphasize creative expansion of students' ideas, besides they increase student's participation and promote collaborative learning. Khan (2005) added that these tools are helpful in E-Learning. E-learning: they can be viewed as an innovative approach for delivering well-designed, learner-centered, interactive, facilitated learning environment to anyone, any place, anytime by utilizing the attributes and resources of various digital technologies along with other forms of learning materials suited for open, flexible, and distributed learning environment (p 3).

When we understand the flexible, open and distributed learning environment that helps us create meaningful E-learning. Open learning means learning in your time and place, flexible means when, where and how the learning takes place. In meaningful learning, a careful content analysis is needed for effective learning. Experts must carry out the process of evaluating what is appropriate for teaching online, such as intensive behavioral modification, and complex physical skills. Teachers must report every success and failure of online learning. The designers can decide which content suits the face-to-face learning or suits the online learning.

According to Rigbi and Brzybylski (2009) is that one of the most important factors in mobile learning is attention, which refers to concentration. Students, who have high concentration in learning generally, have a positive attitude are motivated by achievements, high self-esteem and high self-efficacy. Ng and Szeto (2015) added that split-attention effects, which occur while using mobile learning, could be reduced by stimulating learners with mobile learning interests.

2.6 Previous studies:

There were several studies conducted to deal with the concept and theory of the study domains; meaningful learning, alternative assessment and use of technology. Many foreign researchers tackled the concept of the meaningful learning in English. But, the researcher could not find any previous studies that dealt with the concept of the meaningful learning in Arabic. There were many researches that tackled the use of technology and the alternative assessment in both languages. The studies were presented according to the chronological order as the following:

2.6.1 Meaningful Learning:

Daniel T. Bressington et al. (2018): This study aimed to test the appropriateness and feasibility of assessing Novak's concept mapping as an educational strategy to strengthen the theory-practice link, encourage meaningful learning and enhance learning self-efficacy in nursing students. Design: This pilot study utilized a mixed-methods quasi-experimental design. Setting: The study was conducted in a University school of Nursing in Hong Kong. Participants: A total of 40 third-year pre-registration Asian mental health nursing students completed the study; 12 in the concept mapping (CM) group and 28 in the usual teaching methods (UTM) group. Methods: The impact of concept mapping was evaluated thorough analysis of quantitative

changes in students' learning self-efficacy, analysis of the structure and contents of the concept maps (CM group), a quantitative measure of students' opinions about their reflective learning activities and content analysis of qualitative data from reflective written accounts (CM group). The results provide preliminary evidence that the concept mapping approach can be useful to help mental health nursing students visualize their learning progress and encourage the integration of theoretical knowledge with clinical knowledge. Combining concept mapping data with quantitative measures and qualitative reflective journal data appears to be a useful way of assessing and understanding the effectiveness of concept mapping. Future studies should utilise a larger sample size and consider using the approach as a targeted intervention immediately before and during clinical learning placements.

Tomi Kärki et al. (2018): The authors consider the use of mobile learning environment Action Track in teacher education. Pre-service class teachers' (N = 277) experiences of the mobile learning environment were measured with a 7-point Likert-scale questionnaire based on seven attributes of meaningful learning. Students' ratings for different attributes were analysed quantitatively. The authors conclude that, based on this analysis, it is possible to create meaningful learning experiences using ActionTrack. All the measured attributes of meaningful learning obtained positive values. In the mobile learning events of this study, three attributes arose as the essential features: mobile learning in the outdoors was primarily considered collaborative, active and contextual.

Ng et al. (2016): conducted a paper in Hong Kong aimed at reporting on an exploratory qualitative study regarding the perception of 32 newly appointed principals from secondary schools. Findings demonstrated that the newly appointed principals were expected to be equipped with the administrative skills of human resources management, such as empowering middle leaders

and handing underperforming staff; they were expected to own the practical technique of financial management and the skills of dealing with legal matters.

Runhaar and Sanders (2016): conducted a paper in Netherlands that presented two studies. They are aimed to explain knowledge sharing by teachers' occupational self-efficacy and human resources. Management Human Recourses Management (HRM) in the first study, they examined the impact of HRM from a 'content perspective', and focused on a bundle of Human resources. Management practices, multilevel analysis of survey data from (410) teachers, from (30) teams showed that high-commitment in Human Resources management strengthened the relationship between occupational self-efficacy and knowledge sharing, Data from (282) teachers, from (47) teams also showed the same. Although the findings are encouraging and enabled them to formulate some practical implications, the study limitations also gave rise to suggestions for further research. It sampled (410) teachers in (30) teams managers and teachers and encouraged them to fill the online questionnaire.

Sharkey et al. (2016): conducted a qualitative case 9-month study in Bogota', which includes a school-university professional development inquiry about the way teachers develop, implement and interpret community-based pedagogies. Study shows perspectives of four teachers at one public school in Bogota. They used a qualitative case of study design, a two-page questionnaire and two semi-structured interviews. In both interviews, developed rich curriculum projects that integrated CBPs and were able to provide thick descriptions of the student and teacher learning with insights gained were shown. All four teachers reported increased interests, engagement, and participation by the students. Another noteworthy benefit was stronger relationship with students and families.

Stringer and Hourani (2016): conducted a study in Abu Dhabi aimed at enhancing the capacity of principals to lead and implement change. This paper focuses on roles and responsibilities of principals and challenges faced as well as their implementation. Semi-structured interviews with 16 principals formed the main sources of data collection and analysis. The approach is qualitative, (16) principals were used to collect data. Principals demonstrate an awareness of the part they play in bringing about change and implementing reforms by accepting their new roles and responsibilities and endeavoring to implement them in practice. Findings from this study revealed that some aspects of the newly stated roles and responsibilities were being enacted in practice while others continue to fall in the anticipated category owing to challenges encountered.

Galloway, K. R., & Bretz, S. L. (2015): Research on laboratory learning points to the need to better understand what and how students learn in the undergraduate chemistry laboratory. The Meaningful Learning in the Laboratory Instrument (MLLI) was administered to general and organic chemistry students from 15 colleges and universities across the United States in order to measure the students' cognitive and affective expectations and experiences within the context of performing experiments in their chemistry laboratory courses. Data were analyzed using exploratory factor analysis and cluster analysis. The factor analysis revealed unique mental frameworks for how students think about their laboratory experiences. Exploration of the cluster analysis output indicated a four cluster solution for general chemistry students and a three cluster solution for organic chemistry students. The clusters were further analyzed by examining item pre versus post scatterplots to characterize their unique cognitive and affective expectations and experiences for learning. Both courses had a cluster of students with high cognitive and affective expectations that were fulfilled by their laboratory

experiences, as well as a cluster of students who had high cognitive expectations but low affective expectations. This cluster's cognitive expectations went unfulfilled, while their negative affective expectations were fulfilled, and their disparate cognitive and affective perceptions created a hindrance for the necessary integration of cognitive, affective, and psychomotor domains for meaningful learning.

Mifsud (2015): conducted in Maltese a study aimed at exploring a particular aspect of this reform, that of 'networking'-networking that educational leaders have at both school and college levels and the 'effect' of those(non) opportunities on both the leaders and the network itself. The study is semi-structured and built around interviews in depth with the principal, participants' observation of the COH meeting and documentary analysis. The findings reveal a very detached bond within and across levels, with this detachment unfolding simultaneously within both micro and macro strata. This article theoretically points out a gap in literature regarding the shortcoming of networks and network dynamics.

Szczesiul and Huizenga (2014): conducted a study in United States based on qualitative data collected over a 6-month period. This article examines how teachers' experiences of principal leadership practice influence using their capacity to engage in meaningful collegial interactions during structured collaborations. Their findings reshape the limitations of leadership that relies primarily on structural changes to foster collaboration. They also contribute further to leadership research by presenting teachers' perspectives on why a particular principal leadership practices affect teachers' collaboration. They interviewed teachers and observe their team processes in two schools located in the Northeastern United States (751), students in grades (6-8) who were predominately white and middle to upper-middle-class. The four teams, two from each school make meaningful collegial interactions happen in the

context of structure collaboration. According to their findings, informal leadership practices that target social processes and create a cultural context for collaboration are particularly important at the high school level, where instructional programming and practice tend to be ambiguous and are left to the discretion of individual teachers. Indeed, their findings reinforce the power that a shared vision, purpose, and goals have create a context of interdependence and collective responsibility within teams.

Menard, E. (2013): Creativity can be experienced in many roles of musicianship: performing, improvising, and composing. Yet, activities that encourage creative thought in our music classrooms can be a challenge to implement. A strong music education curriculum for middle school general music is important; as this may be the last time we reach students who do not participate in band, orchestra, or choir. This article provides information on the development of a middle school general music curriculum model where creative thinking in music through music composition activities is the focus of instruction. Students with limited experience in music were given opportunities to explore and express musical ideas in their compositions. Music fundamentals were introduced following the composition experience. The composition experiences provided fertile ground for creative thinking in music, and students in the program were highly engaged in the music-learning process. The Webster Model of Creative Thinking in Music is examined to discover the keys to success in this model.

Levine (2011): conducted a study in United States aimed at investigating at how different approaches to developing collaborative professional communities' influence experienced teachers and their ability to change. This article identifies differences between 'teacher professional learning communities' based on two case studies of two professional communities interviewed and observational data from two sites. In order to observe

intense, ongoing collaboration and for exploring how such collaboration influences classroom practice. Both sites were high schools undertaking similar reforms. This article suggests that there are differences between nurturing more collaboration within the teacher professional communities that exist in all schools. A longer term effort of teacher and leaders to develop collaborative teacher professional communities may create resources that help experienced teachers to change.

Bush, Tony (2008): Educational management was still a relatively new field of study and practice in the UK at the time of the Education Reform Act (ERA) 1988. The field focused on `management' and not leadership. This emphasis very much reflected the business world and its use in education illustrated the `policy borrowing' characteristic of an emerging field. This article revisits the concepts of leadership and management, examines the impact of the ERA on management practice in schools and colleges, and discusses the notion of managerialism. The chronology of leadership and management during the past 20 years is explored, including the role of New Labour and the opening of the National College for School Leadership. The paper concludes with a review of the contemporary emphasis on leadership for learning.

Deakins, Eric (2007): ACTION RESEARCH WAS USED to study the effectiveness of Learning Organisation and Adaptive Enterprise theories for promoting organisation-wide learning and creating a more effective early childhood education organisation. This article describes the leadership steps taken to achieve shared vision via meaningful dialogue between board, management and staff that encouraged mental models to be revealed and modified as conflicts in deeply held beliefs became reconciled. Consideration of feedback relationships provided valuable systemic insights and a choice of organisation futures. Over time, the new mindset resulted in new

infrastructure, policies, training and reward practices that enabled the organisation to compete very successfully against other service providers through a differentiation strategy of quality and responsiveness. Significant and enduring improvement in the self-esteem of empowered individuals was also noted. The results of this research should be of interest to any leader who needs to radically transform attitudes and beliefs, promote organization-wide learning, and effectively implement widespread, enduring change.

2.6.2 Alternative Assessment:

Ahmed Al-Thawabiya and Khalid Al-Saudi (2016): The aim of this study was to identify the obstacles hindering the implementation of realistic evaluation strategies and tools from the point of view of Islamic education teachers in Tafileh Governorate according to their gender, qualifications and years of experience. The school community consisted of (140) teachers and teachers, Responded to them (49). To achieve the goal of the study, a questionnaire was developed consisting of (26) Items divided into four dimensions. As has been confirmed the tool is reliable and stable. The study showed that the obstacles related to the conditions of application came first, followed by obstacles. Obstacles related to the school curriculum, and the obstacles related to students ranked last, there are significant differences between the mean of the real-time constraints, due to the period of study in the fields of (α statistically significant at 0.05) and no significant differences were found due to the rest of the variables or interactions between them. In light of these results.

Ashraf Attia Fouad Mustafa (2016): this study aims at identifying the status of practicing Alternative Assessment by the Islamic education teachers of the elementary schools in Gaza. To achieve the above objective, the researcher used the descriptive analytical approach to conduct this study. The researcher

also designed the tools of the study, which are a questionnaire and a focal group to collect the necessary data. The researcher also selected all the teachers of Islamic education in the elementary stages in the directorate of education in the middle governorate whose number was (24 male teachers) and (91 female teachers) as the study sample.

Camburn et al. (2016): conducted a study in United States aimed at examining the potential benefits, limitations, and challenges involved in using experiments to evaluate professional development for principles. The study was based on urban schools district with 48 principals. It describes the intended curriculum developing attendance records, and interview data. There is a growing belief that professional development for principals that has coherent, research-based content and that provides principals with authentic, problem-based, collaborative learning experiences can be effective in improving principals' practice, It is also assumed that the program would likely have no effect on principals' emphasis on instructional leadership of planning. The DPD may have had a short-term impact on the amount of time principals spent planning and setting goals.

Akram Adel Al-Basheer and Areej Isam Barham (2012): The study aimed at investigating the degree of Mathematics and Arabic teachers' using of the alternative assessment strategies and its tools in Jordan. To achieve the objectives of the study; a questionnaire was built and it was distributed over (86) teachers, and semi- structured interviews were conducted with (20) teachers from the two specializations. Results of the study revealed that the degree of teachers' using for the pencil and paper strategy was high, while it was intermediate for the use of performance –based assessment strategy, the observation strategy, and the communication strategy, and it was low for the reflection assessment strategy and in the use of the alternative assessment tools. Results also revealed that there were no statistically significant

differences in the degree of teachers' using for the alternative assessment strategies related to the effect of teachers' specialization. Whereas, there was statistically significant differences related to the effect of number of years of experience and to the effect of the training courses. Recommendations were offered in the light of the study.

Akram Adel Al-Basheer and Areej Isam Barham (2012): the study aimed at investigating the degree of Mathematics and Arabic teachers' using of the alternative assessment strategies and its tools in Jordan. To achieve the objectives of the study; a questionnaire was built and it was distributed over 86 teachers, and semi- structured interviews were conducted with 20 teachers from the two specializations. Results of the study revealed that the degree of teachers' using for the pencil and paper strategy was high, while it was intermediate for the use of performance –based assessment strategy, the observation strategy, and the communication strategy, and it was low for the reflection assessment strategy and in the use of the alternative assessment tools. Results also revealed that there were no statistically significant differences in the degree of teachers' using for the alternative assessment strategies related to the effect of teachers' specialization. Whereas, there was statistically significant differences related to the effect of number of years of experience and to the effect of the training courses. Recommendations were offered in the light of the study.

Mohammed Shehadeh Zaqout (2011): The objective of this study is to determine recent trends in the evaluation. It also aims to identify the reality the Arabic language teacher's use, in the preparatory stage in UNRWA schools in the Gaza Strip, of alternative evaluation, and determine whether different teachers use the methods of evaluation depending on the gender variable, To achieve these goals the researcher followed the descriptive approach, using two tools, namely: the questionnaire and note card. The study

sample included (60) teachers from the east and the West of the Gaza Strip. It included also sample of (24) managers and supervisors. The researcher noted the reality of the use of Arabic language teachers, in UNRWA schools in Gaza City, of the alternative methods of evaluation. A questionnaire was distributed among managers and supervisors for the same purpose. The study recommended a number of recommendations including:

- review of the current evaluation practices that rely on traditional tests; it is no longer acceptable for the teachers to continue to understand that the evaluation is a synonym for the exams; and the role of the school continues to be limited in the scope of preparing the students for the tests rather than the understanding.

- Develop of curricula, in particular the subjects of the Educational Measurement and evaluation studied by the students - future teachers. In Education Faculties to include methods of alternative evaluation.

2.6.3 Use of Technology:

Al Azzam (2017): this study aimed to measure the use of smart phones in education: field study from educational technology students' point of view in Jordanian private universities. To achieve the objectives of the study, a questionnaire was developed in (20) items. The study was used descriptive approach, by distributing the questionnaire to all the study samples of technology students in Jordanian private universities during the whole 2017/2016 academic year. The study reached several conclusions, including: the use of smart phones in education of educational technology was, on average, and it showed there’s no statistically difference significant at ($\alpha \leq 0.05$) in the use of smart phones in education: field study from educational technology students' point of view in Jordanian private universities. Attributable to the three variables of the study: Year, University and

educational level. The study recommended holding special courses for both students and teachers to use all the available tools in education.

Picard, et al. (2014): conducted a study in France aimed at investigating whether iPads, which allow children to write and draw within their fingers without the need of a pen, are relevant devices for drawing activities at elementary school. The study was made on (46) elementary schoolchildren with pen on paper (standard condition) and fingertip on screen (iPad condition). Results revealed a significant effect of drawing condition on graphic scores, with lower scores in the iPad condition than in the standard condition. The finding that finger drawings were slightly poorer than pen drawings can be ascribed to the shift from distal to more proximal control of the drawing movements. Forty-six children from kindergarten and grade (2) were checked: these two different age groups used an iPad at school prior to the study. They found a slight but significant decrease in graphic scores in the iPad (finger drawing) condition, compared with standard (paper/pen drawing) condition. They also reported a positive impact of technology on drawing quality. There are a number of fundamental differences between drawing with a pen on a page and drawing with a fingertip on a flat screen, starting with the muscles that sub serve the actions.

Murad (2014): The aim of the study is to identify the extent to which a sample of teachers in Al Shoubak district can utilize technical skills, basic applications and software required to use information and communication technology (ICT) for educational purposes, in addition the study intends to identifying the obstacles that limit their use of technology. In order to answer the questions of the study, the researcher designed a literature review questionnaire which consisted of (40) questions as a tool for data collection. The tool was applied on a sample of (101) male and female teachers. Percentages, frequencies, medians and standard deviation were used for data

analysis. The study also used T-test and Two Way ANOVA in order to identify the average differences among the study groups. The results of the study show that the majority of the sample members sufficiently used the basic applications and software of information of communication technology but their use for educational purposes was low. The results also show the existence of some obstacles. While some of them are related to the non-availability of equipment or insufficient infrastructure, some are related to poor training on utilizing (ICT) in teaching.

Chen, et al. (2013): conducted a study in United States that examined how an extended technology acceptance model (TMA) could evaluate and predict the use of mobile application in learning, The hypothesized model as a strong fix "copy from paper" (8,N=77)=6.84, p = 0.5, perceived resources, perceived ease of use, determinants of users acceptance of mobile application technology. It invited 23 instructions,12 instructors agreed to participate and introduced mobile learning in (20) classes that they were teaching in the summer semester. Seven were 16-week long classes and(13) were (8-week) long classes. Online survey questionnaire. A CSV file and then uploaded into SAS for clearing and analysis. The SAS CALIS procedure was conducted model building using a path analysis design.

Chai, C. S. et al. (2011): Within the field of educational technology, Technological Pedagogical Content Knowledge (TPACK) has been theorized as a seven-factor construct to describe teacher's integration of information and communication technology (ICT) in their teaching. However, this framework has yet to be successfully validated through survey instruments. This paper examines the construct validity of a TPACK survey that was contextualized for the pedagogical approaches employed in a 12-week ICT course designed with reference to the TPACK framework for Singaporean primary school pre-service teachers. Using this framework, the researchers

were able to uncover five of the seven TPACK constructs which were a better model fit as compared with several extant studies of TPACK surveys. Using these results, pre and post-course structural equation models were constructed to explain the relationships amongst the different constructs of teachers' TPACK perceptions. It was found that pedagogical knowledge had a direct impact on TPACK at the beginning of the course. As teachers made connections between their technological knowledge and pedagogical knowledge to form technological pedagogical knowledge during the course, the direct relation between pedagogical knowledge and TPACK became insignificant whereas the relations between pedagogical knowledge and technological pedagogical knowledge, and technological pedagogical knowledge and TPACK were strengthened.

Keengwe, J., Onchwari, G. & Wachira, P. (2008): The article attempts to provide a review of literature pertaining to computer technology use in education. The authors discuss the benefits of learning with technology tools when integrated into teaching. The argument that introducing computer technology into schools will neither improve nor change the quality of classroom instruction unless teachers and educational leaders are able to evaluate and integrate the use of that technology into the curriculum (Geisert & Futrell, 2000) is provided by a synthesis of a review of literature across three specific areas: (a) benefits of computer technologies; (b) meaningful learning, and (c) computers and instruction.

Alaa Sadik (2008): The aim of this study was to assist Egyptian teachers in developing teaching and learning through the application of a particular digital technology. Students were encouraged to work through the process of producing their own digital stories using MS Photo Story, while being introduced to desktop production and editing tools. They also presented, published and shared their own stories with other students in the class.

Quantitative and qualitative instruments, including digital story evaluation rubric, integration of technology observation instruments and interviews for evaluating the effectiveness of digital storytelling into learning were implemented to examine the extent to which students were engaged in authentic learning tasks using digital storytelling. The findings from the analysis of students-produced stories revealed that overall, students did well in their projects and their stories met many of the pedagogical and technical attributes of digital stories. The findings from classroom observations and interviews revealed that despite problems observed and reported by teachers, they believed that the digital storytelling projects could increase students' understanding of curricular content and they were willing to transform their pedagogy and curriculum to include digital storytelling.

Anne Nevgiv and Erika Löfström (2006): This paper reports the results of a study on strategic planning and implementation of information and communication technology (ICT) in teaching and describes the level of quality awareness in web-based teaching at the University of Helsinki. Questionnaire survey data obtained from deans and institutional leaders, ICT support staff, teachers and students ($n = 333$) at the University indicate that strategic planning has proceeded well, and all the faculties of the University have developed virtual university strategies in order to continue existing ICT initiatives, to further increase the use of ICT in teaching and to assure student information literacy. The available ICT training was found satisfactory to meet the actual training needs of the teachers, but their lack of time was judged to be the main obstacle to their participation in it. The teachers identified two basic functions of ICT in teaching: (1) distribution of course material via the web, and (2) the creation of interactive and collaborative learning opportunities. The male teachers and students consistently estimated that their ICT skills were stronger when compared with

the judgements made by female teachers and students. The teachers generally felt that the greatest problems arose from students' lack of time management skills and from deficiencies in the usability of the technology.

2.7 Comments on the previous studies:

The previous studies shared the researcher's vision that the principals should play meaningful role in applying meaningful learning in schools.

The previous studies provided the researcher with the data that is needed for the literature review that is vital to understand the meaningful learning theory. After siding light on the related studies, it is clear that all studies focused on the importance in building the questionnaire and the principles interview questions.

There were numerous studies on using technologies such as (shelli et al, 2006) and (Szeto, 2015) and (Li and yang, 2016) and (Alazzam, 2017). The studies that are related to alternative assessment such as (Alison et al, 2015) and (Baran et al, 2016) and (Althawabta and Al-Saoudy, 2016). The related studies were essential meaningful learning (Abaya, 2016) and (sharki et al, 2016) and (Miller et al, 2016) and (Wing et al, 2015).

The privies studies showed the importance of meaningful leadership in applying meaningful learning in schools. Unfortunately, there were no Arabic studies dealt with the meaningful learning, but there were many studies dealt with technology and the alternative assessment in schools as an attempt to replace the traditional ways of teaching. This study is unique as it is comparative study between two different communities (Bethlehem and Negev). Moreover, this study used both population of principals and teachers to gather information about the topic.

Chapter Three:

Methodology:

3.1 Introduction:

This chapter presents the methods and procedures that the researcher follows to gather data. It gives information about the population, sample and steps of building the instruments of the study, which include interview questions and a questionnaire. It describes also the validity and reliability of these instruments. Finally, it concludes a description of the research procedures the variables and statistical analysis used to analyze the data of the study.

3.2 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.

3.3 population and sample of the study:

3.3.1 Population of the study:

The population of the study consisted of all secondary school teachers and principals in both Bethlehem governorate and the Negev sector. The total Number of teachers was (2463) the total Number of principals was (94) and the total Number of the secondary schools was (94).

3.3.2 Sample of the Study:

From this population a (240) sample of teachers from a random cluster of twenty secondary schools were chosen to respond to the questionnaire. The researcher conducted an interview with (8) principals who were selected to collect the qualitative data.

3.4 instruments of the study:

The researcher used the following instruments to achieve the purpose of the study:

3.4.1 Questionnaire:

The researcher developed questionnaire to examine the teacher's attitudes toward the extent to which a principals in Bethlehem governorate and Arab schools in Negev support meaningful learning from teachers' point of view. The researcher developed the questionnaire, which consists of two sections with (38) items. The first section included personal information about the respondents. The second section included three domains, the first field was entitled "the role of principals in supporting the meaningful learning" that included (14) items, and the second field was entitled "the role of the principals in supporting technology in schools" with (12) items. The third field entitled "the role of principals in supporting alternative assessment "that included (12) items. Here are some of the studies that helped the researcher in developing the questionnaire: Moran et al (2010), Allison et al (2015), Wang et al (2004), Bolligar et al (2015).Vermeulen et al (2015), Baran et al (2016). The researcher developed the questionnaire with 5-point Likert scales ranging from strongly agree - strongly disagree. The questionnaires were distributed to 240 teachers.

3.4.2 Interview:

An interview was conducted to check the extent to which principals in Bethlehem governorate and Arab schools in Negev support meaningful learning from their point of view.

3.5 Validity of Instruments:

To ensure that the content of the questionnaire, and the interview were valid, these instruments were handed to a jury of professional doctors in the field at Al-Quds, Bethlehem, Beir Zait Universities and educators in Negev. The Panel of judges were asked to evaluate the opportunities of the instruments to the whole purpose of the study. They accepted the items and the parts of the questionnaire and the interview, but they asked the researcher to follow some modifications. The researcher took these recommendations into amount before issuing the final drafts of the tools, then booth instruments were distributed to the subject of the study.

3.6 Reliability of Instruments:

Cronbach's Alpha Value for the questionnaire was (94.6%) which is appropriate for the purposes of the study.

3.7 Procedures of the study:

The study carried out in the following manner:

1. The relevant literature was reviewed to establish the theoretical background of the study.
2. The population was identified and the samples were selected on which the instruments will be applied.
3. The questions of the study were put up, depending on previous studies.
4. The reliability and validity of the instruments were approved.
5. A letter of permission was obtained from the Ministry of education and higher education Directorate of Education/Bethlehem to facilitate the implementation of the research.
6. The researcher himself distributed the instruments on teachers in order to obtain valid and credible results.

7. The researcher conducted the interview with the principals.
8. The two instruments were distributed and gathered in the Second semester of the scholastic year 2016-2017.
9. The data was gathered and analyzed by using SPSS program.
10. The researcher explained the information to reveal whether the outcomes agree or disagree with previous studies.

3.8 Variables of the study:

1. **Independent variables:** Gender (Female/Male), Geographical area Bethlehem/Negev, Years of experience (less than 5, 5-10, more than 10), Qualification (Diploma, BA, Master and above).
2. **Dependent variables:** the extent to which principals in Bethlehem governorate and Arab schools in Negev support meaningful learning from their point of view and teachers.

3.9 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).

Chapter four:

Research findings:

This chapter provides a comprehensive understandable, intelligible: Broadly, Completely covering, presentation of the present study results and data analysis. The data included information derived from the principal's responses to the interview and from teacher's response of the questionnaire. The findings of the study were presented in this chapter according to the research questions. To answer the question, mean scores and Std. Dev. And other statistical tests were calculated. To determine the level of agreement, the researcher used the following **clues** by using this equation:

Interval width = maximum point – minimum point / number of levels

= 5 – 1 / 3

= 1.33

a. Less than 2.33 = low level of attitude (L).
b. From 2.34 to 3.66 = moderate level of attitude (M).
c. More than 3.67 = high level of attitude (H).

4.1 Results related to the first question:

To what extent do high school principals in Bethlehem governorate and Negev sector support meaningful learning from teachers' point of view?

Table (4.1): mean scores and Std. Dev. and degree of all domains.

#	Domain	N	mean	Std. Dev.	degree
1	The role of the principals in supporting the meaningful learning.	240	3.78	0.55	high
2	The role of the principals in supporting alternative assessment.	240	3.71	0.66	high
3	The role of principals in supporting the use of technology	240	3.70	0.64	high
	Total	**240**	**3.73**	**0.54**	**high**

As seen in the above table, the results show that principals support meaningful learning with high degree; the highest degree was for the first domain with a means is (3.78). The lowest degree was for the third domain (3.70).

Table (4.2): means, Std. Dev. and degrees of the items of the first domain.

#	Item	N	Mean	Std. Dev.	Degree
4	The principal shows a great respect to the teachers.	240	4	0.9	High
3	The principal encourages presenting new ideas in the meetings.	240	4	0.9	High
1	The principal encourages using different education methods suit the meaningful learning.	240	3.9	1	High
13	The principal encourages the teachers to cooperate in establishing new vision and planning the school goals.	240	3.8	0.8	High

#	Item	N	Mean	Std. Dev.	Degree
5	The principal encourages the cooperation between the administration and the teachers.	240	3.8	0.9	High
2	The principal supports the cooperation in taking the resolution in the school.	240	3.8	1	High
6	The principal encourages the professional development among teachers.	240	3.8	1	High
12	The principal prevails appreciation for suggesting ideas to develop the educational process.	240	3.8	0.9	High
8	The principal gives the feedback continuously.	240	3.7	0.9	High
11	The principal encourages the teachers to express their opinion in different educational issues.	240	3.7	0.9	High
7	The principal observes the teachers in the classes	240	3.7	0.8	High
9	The principal gives guidance for every new teacher.	240	3.7	1.1	High
14	The principal holds regular meetings to cope with the meaningful learning.	240	3.7	1.1	Moderate
10	The principal uses the methods of reward and punishment to implement teaching	240	3.6	0.9	Moderate
	Total	**240**	**3.78**	**0.56**	**high**

Results in this table show that the 4th Item [The principal shows a great respect to the teachers] and the 3ed Item [The principal encourages presenting new ideas in the meetings] were both came first with a mean of (4), the 1st

Item [The principal encourages using different education methods suit the meaningful learning] came in third its mean (3.9). The 10th Item [The principal uses the methods of reward and punishment to implement teaching] came last its mean (3.6), the 14th Item came before the last Item its mean (3.7).

Table (4.3): means, Std. Dev. and degrees of the items of the second domain.

#	Item	N	Mean	Std. Dev.	Degree
10	The principal encourages the teachers to be aware of the differences of the student's characters while using the alternative assessment.	240	4	0.7	High
11	The principal encourages students to do their work in groups to increase cooperation among the students..	240	3.9	0.8	High
9	The principal encourages using the student portfolio as a kind of the alternative evaluation.	240	3.8	0.8	High
8	The principal encourages using the alternative evaluation as an effective way in the education process.	240	3.8	0.8	High
5	The principal encourages the alternative evaluation for its effectiveness in achieving the schools goals.	240	3.7	0.8	High
4	The principal encourages the teachers to be aware of the importance of giving feeding back when using the alternative evaluation.	240	3.7	0.9	High

#	Item	N	Mean	Std. Dev.	Degree
12	The principal encourages teachers to adopt the scientific methods when using the school research as a way of the alternative evaluation process.	240	3.7	0.9	High
3	The principal encourages taking part in workshops about the strategies of using the alternative evaluation.	240	3.7	1	Moderate
6	The principal encouraging using the alternative to evaluate the achievements of the students.	240	3.7	0.9	Moderate
7	The principal provides financial support to the alternative assessment.	240	3.6	0.9	Moderate
2	The principal provides the needed information when using the strategies of the alternative assessment as a required for the meaningful learning	240	3.5	0.9	Moderate
1	The principal explains the difference between the alternative and the traditional evaluation.	240	3.5	1	Moderate
	Total	**240**	**3.71**	**0.66**	**High**

Results in table show that the 10th Item [The principal encourages the teachers to be aware of the differences of the student's characters while using the alternative assessment] came first with a mean of (4), the 11th Item [The principal encourages students to do their work in groups to increase cooperation among the students] came second with a mean of (3.9), the 9th Item [The principal encourages using the student portfolio as a kind of the alternative evaluation] came third with a mean of (3.8). The 1st Item [The principal explains the difference between the alternative and the traditional evaluation] came last with a mean of (3.5), the 2nd Item [The principal

provides the needed information when using the strategies of the alternative assessment as a required for the meaningful learning] came before the last Item with a mean of (3.5).

Table (4.4): means, Std. Dev. and degrees of the items of the Third domain.

#	Item	N	Mean	Std. Dev.	Degree
1	The principal encourages using the electronic learning in the class.	240	4	1	High
4	The principal strengthen using the electronic learning to increase the students' motivation through the meaningful learning.	240	4	1	High
8	The principal encourages the electronic learning because it increases the effectiveness of learning towards the meaningful learning.	240	3.9	0.8	High
2	The principal recommends using the electronic learning because it facilitates the leaning process.	240	3.9	0.8	High
5	The principal encourages the teachers to improve their electronic skills.	240	3.9	1	High
3	The principal encourages getting the feedback when using the electronic learning.	240	3.9	0.8	High
7	The principal brings the necessary tools and equipment to make the electronic learning easy.	240	3.9	0.8	High
6	The principal encourages taking part in workshops about the meaningful learning held by specialists in this field.	240	3.7	1.1	High

#	Item	N	Mean	Std. Dev.	Degree
10	The principal encourages the teachers to improve their high order thinking skills.	240	3.5	1.2	Moderate
9	The principal encourages using the electronic games because they help in achieving the school goals through the meaningful learning program.	240	3.3	1.1	Moderate
12	The principal encourages distance learning classes	240	3.3	1.2	Moderate
11	The principal encourages the teachers to use the smart phones to evaluate the students.	240	3.3	1.2	Moderate
	Total	**240**	**3.70**	**0.64**	**High**

Results in this table show that the 1st Item [The principal encourages using the electronic learning in the class] and the 4th Item [The principal strengthen using the electronic learning to increase the students' motivation through the meaningful learning] were both came first with a mean of (4). The 8th Item [The principal encourages the electronic learning because it increases the effectiveness of learning towards the meaningful learning] came third with a mean of (3.9). The 11th Item [The principal encourages the teachers to use the smart phones to evaluate the students] and the 12th Item [The principal encourages distance learning classes] came last with a mean of (3.3).

4.2 Results related to the second question:

Are there statistically significant differences between the means of the participant's responses duo to gender, location, years of experience, and academic qualification?

To answer this question, the researcher investigated the following hypothesis, which was based on:

4.2.1 Results related to the first Hypothesis:

There are no statistically significant differences at ($\alpha \leq 0.05$) in the means of participant's responses related to principal's support to meaningful learning due to gender.

To test this hypothesis, the researcher used independent t-test as table (4.5) shows: The results of independent t-test for the differences in participant's responses related to principal's support to meaningful learning due to gender.

Table (4.5): Results of the independent t-test for gender variable.

Domains	gender	N	Mean	Std. Dev.	Std. Error Mean	t	df	Sig.
The role of principals in supporting meaningful learning	male	117	3.81	0.59	0.05	0.71	238	0.48
	female	123	3.76	0.52	0.05			
The role of principals in supporting the alternative assessment	male	117	3.65	0.71	0.07	-1.25	238	0.21
	female	123	3.76	0.61	0.05			
The role of principals in supporting the use of technology	male	117	3.74	0.63	0.06	0.89	238	0.37
	female	123	3.67	0.65	0.06			
Total	**male**	**117**	**3.74**	**0.57**	**0.05**	**0.15**	**238**	**0.89**
	female	**123**	**3.73**	**0.51**	**0.05**			

The results in table (4.5) show that the level of significance for the differences in participant's responses related to principal's support to meaningful learning due to gender is (0.98) this means that there is no statistically significant differences at ($a<0.05$).thus the hypothesis is accepted.

4.2.2 Results related to the second Hypothesis:

There are no statistically significant differences at ($\alpha \leq 0.05$) in the means of participant's responses related to principal's support to meaningful learning due to location.

To test this hypothesis, the researcher used independent t-test as table (4.6) shows: The results of independent t-test for the differences in participant's responses related to principal's support to meaningful learning due to location.

Table (4.6): Results of the independent t-test for location variable.

Domains	Geographical area	N	Mean	Std. Dev.	Std. Error Mean	t	df	Sig.
The role of principals in supporting meaningful learning	Bethlehem	120	3.53	0.42	0.04	-7.62	238	0.00
	Negev	120	4.03	0.57	0.05			
The role of principals in supporting the alternative assessment	Bethlehem	120	3.31	0.58	0.05	-11.67	238	0.00
	Negev	120	4.11	0.48	0.04			
The role of principals in supporting the use of technology	Bethlehem	120	3.38	0.49	0.05	-8.86	238	0.00
	Negev	120	4.02	0.62	0.06			
Total	**Bethlehem**	**120**	**3.41**	**0.39**	**0.04**	**-11.31**	**238**	**0.00**
	Negev	**120**	**4.05**	**0.47**	**0.04**			

The results in table (4.6) show that the level of significance for the differences in participant's responses related to principal's support to meaningful learning due to location is (0.00). This means that there is statistically significant differences at ($a<0.05$). Which results in rejection of the Hypothesis.

By considering the means for both geographical areas, it shows that The Negev has the highest mean (4.2), therefore the statistical differences in favor of the Negev geographical area.

4.2.3 Results related to the third Hypothesis:

There are no statistically significant differences at ($\alpha \leq 0.05$) in the means of participant's responses related to principal's support to meaningful learning due to years of experience.

To test this hypothesis, the researcher used one way ANOVA- test, table (4.7) shows: the distribution of the participant's responses related to principal's support to meaningful learning due to years of experience.

Table (4.7): means, Std. Dev. And degrees of the items for years of experience variable.

domain	Years of Experience	N	Mean	Std. Dev.	Degree
The role of principals in supporting meaningful learning	Less than 5 years	95	3.89	0.56	High
	Form 5 – 10 years	56	3.67	0.60	High
	More than 10 years	89	3.73	0.51	High
The role of principals in supporting the alternative assessment	Less than 5 years	95	3.98	0.52	High
	Form 5 – 10 years	56	3.68	0.65	High
	More than 10 years	89	3.44	0.69	Moderate
The role of principals in supporting the use of technology	Less than 5 years	95	3.85	3.9	High
	Form 5 – 10 years	56	3.67	0.71	High
	More than 10 years	89	3.56	0.64	Moderate
Total	**Less than 5 years**	**95**	**3.78**	**0.46**	**High**
	Form 5 – 10 years	**56**	**3.67**	**0.59**	**High**
	More than 10 years	**89**	**3.58**	**0.53**	**Moderate**
			3.73	**0.54**	**High**

The results in this table (4.7) show that there is a clear difference between the means of the three levels for the years of experience. Therefore the researcher used the One Way ANOVA test as shown in table (4.8).

Table (4.8): the results of ANOVA- test for the differences in the participant's responses related to principal's support to meaningful learning due to years of experience.

domain		Sum of Squares	df	Mean Square	F	Sig.
The role of principals in supporting meaningful learning	Between Groups	2.13	2	1.07	3.51	0.03
	Within Groups	72.15	237	0.30		
	Total	74.28	239			
The role of principals in supporting the alternative assessment	Between Groups	13.23	2	6.61	17.12	0.00
	Within Groups	91.58	237	0.39		
	Total	104.81	239			
The role of principals in supporting the use of technology	Between Groups	4.04	2	2.02	5.03	0.01
	Within Groups	95.03	237	0.40		
	Total	99.07	239			
Total	**Between Groups**	**5.05**	**2**	**2.53**	**9.31**	**0.00**
	Within Groups	**64.27**	**237**	**0.27**		
	Total	**69.32**	**239**			

The results in this table (4.8) show that the level of significance for the differences in the participant's responses related to principal's support to meaningful learning due to years of experience is (0.00) this means that there

is statistically significance differences at (a<0.05). And thus the hypothesis is refused

To clarify to whom the differences refer to, the researcher used the LSD (the less significant deference's test) as shown in table (4.9).

Table (4.9): the results of LSD test for the participant's responses related to principal's support to meaningful learning due to years of experience.

(I) Experience	(J) Experience	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
Less Than 5	5-10	.22343*	.09295	.017	.0403	.4066
	More than 10	.16469*	.08139	.044	.0043	.3250
5-10	Less Than 5	-.22343*	.09295	.017	-.4066	-.0403
	More than 10	-.05874	.09411	.533	-.2441	.1267
More than 10	Less Than 5	-.16469*	.08139	.044	-.3250	-.0043
	5-10	.05874	.09411	.533	-.1267	.2441

The result in table (4.9) shows that the statistically significance differences were between less than 5 and 5-10 levels and refers to less than 5 level. And between less than 5 and more that 10 levels and refers to less than 5 level

4.2.4 Results related to the fourth hypothesis:

There are no statistically significant differences at ($\alpha \leq 0.05$) in the means of participant's responses related to principal's support to meaningful learning due to academic qualification.

To test this hypothesis, the researcher used one way ANOVA- test, table (4.10) shows: the distribution of the participant's responses related to principal's support to meaningful learning due to academic qualification.

Table (4.10): **means, Std. Dev. and degrees of the items for academic qualification variable.**

domain	Qualification	N	Mean	Std. Dev.	Degree
The role of principals in supporting meaningful learning	diploma	17	3.79	0.58	High
	BA	175	3.79	0.55	High
	Master and above	48	3.71	0.57	High
The role of principals in supporting the alternative assessment	diploma	17	3.92	0.51	High
	BA	175	3.78	0.59	High
	Master and above	48	3.38	3.62	Moderate
The role of principals in supporting the use of technology	diploma	17	3.86	0.49	High
	BA	175	3.71	0.66	High
	Master and above	48	3.82	0.65	High
Total	**diploma**	**17**	**3.85**	**0.48**	**High**
	BA	**175**	**3.76**	**0.53**	**High**
	Master and above	**48**	**3.58**	**0.57**	**Moderate**

The results in table (4.10) show that there is a clear difference between the means of the three levels for academic Qualification. Therefore, the researcher used the One Way ANOVA test as shown in table (4.11).

Table (4.11): the results of ANOVA- test for the differences in the participant's responses related to principal's support to meaningful learning due to academic qualification.

domain		Sum of Squares	df	Mean Square	F	Sig.
The role of principals in supporting meaningful learning	Between Groups	0.270	2	0.14	0.43	0.65
	Within Groups	74.01	237	0.31		
	Total	74.28	239			
The role of principals in supporting the alternative assessment	Between Groups	6.67	2	3.33	8.05	0.00
	Within Groups	98.14	237	0.41		
	Total	104.81	239			
The role of principals in supporting the use of technology	Between Groups	0.72	2	0.36	.87	0.42
	Within Groups	98.35	237	0.42		
	Total	99.07	239			
Total	**Between Groups**	**1.50**	**2**	**0.75**	**2.63**	**0.07**
	Within Groups	**67.81**	**237**	**0.29**		
	Total	**69.32**	**239**			

The Results in table (4.11) show that the level of significance for the differences in responses related to principal's support to meaningful learning due to academic qualification (0.07) this means that there is no statistically significance differences at ($a<0.05$). Thus the hypothesis is accepted.

4.3 Results related to the third question:

To what extent do high school principals in Bethlehem governorate and Negev sector support meaningful learning from their point of view?

The researcher conducted an interview with the principles to answer the following Questions, which were based on the third question:

4.3.1 What is your role as principals in supporting Meaningful Learning?

Principals believe that meaningful learning is essential in the learning process especially in the present time as we use technology such as computers and mobile devices. Principals should equip the school with the necessary tools and devices to facilitate the learning process to meet with the needs of effective Meaningful Learning. Principals should encourage teachers to participate in workshops to adopt the strategies of meaningful learning in teaching.

Principals added that they should clarify Meaningful Learning to the teachers and to the students to be aware of the importance of implementing meaningful learning in schools. Principals noticed that they have to consider including the meaningful learning requirements while planning the vision of the school. Principals stated that they should prompt creativity and learning initiatives, observe lessons of the teachers to discuss the strong and weakness points.

The role of the principal is very important and it includes prompting the teaching staff to create a collaborative environment between students and teachers in the learning process by incorporating technology in education. Principals added that they should hold meetings to develop the learning process and its output.

It was clear that the principals in the Negev sector are aware of the requirement of meaningful learning. All the principals in The Negev Sector mentioned Key words that are related to meaningful learning such as tools, technology and alternative assessment. While only one principal mentioned the meaningful learning in his answer to the first question in the Bethlehem Governorate. All of Bethlehem Governorate principals talked about the importance of planning for the school year, as well as principals in the Negev Sector.

4.3.2 How do you describe the school's logistic strategies that aim at creating Meaningful Learning?

There is no doubt that using logistic resources is very important in the modern learning process such as computer laps and tablets. In addition, students can use these resources to fulfill their tasks and homework. Using technology through meaningful learning is essential. The school needs to provide teachers with workshops to train teachers to implement meaningful learning in their classes. (The ministry of education funds these courses in the school).

To set meetings with the local council and the parents council and set up a budget for the school to implement the Meaningful Learning program. To use the financial resources coming from the school and the financially supportive members of the local society according to a budget with specific items, in order to spend the money to develop the staff and increase students' academic achievement. Earmarking part of the school budget to at the beginning of the school year to provide the tools for this method of learning.

All The principals in the Negev Sector talked about the importance of equipping the schools with the necessary tools and encouraging teachers to participate in workshops that are provided from the Ministry of education in the Negev Sector. (3) Principals in the Bethlehem Governorate talked about the importance of organizing the budget and the financial support from the local council.

4.3.3 To what extent does Meaningful Learning contributes in improving students achievements?

The principals declared that Meaningful Learning program is based on the Alternative Assessment, which increases the achievement level of the student. In addition, it opens the door for the students to be more active in the learning process. 30% of the students' grade depends on the Alternative Assessment; the student can repeat his work until he gets the best grade. They added that the students use the higher order thinking skills through the learning process.

The principals mentioned that meaningful Learning contributes in increasing the achievement level of the students in the school. The principals stated that this lead to the opening of a commerce stream for the elementary stage added to the scientific and literary streams many years ago, and there is an attempt to open technology stream next year. It also increased the school results in the Matriculation exam. The community involvement is moderate and does not help in implementing the meaningful learning.

The principals in the Negev Sector talked about the importance usage of the alternative assessment in increasing the achievement of the students while all the principals in Bethlehem Governorate agreed it increased the school results in the Matriculation exam.

(2) of Bethlehem Governorate principals mentioned that they have commerce stream in their schools.

4.3.4 How does Meaningful Learning affect the school's learning environment?

The principals mentioned that Meaningful Learning affected the school's learning environment positively, in which the student becomes more effective and more responsible. Adopting the meaningful learning in schools helped students and teachers to be more aware of to improve the school environment. Meaningful learning helps to engage the students in the learning process and develop their sense of belonging to the school.

The students and teachers are more motivated, the relationship between students and teachers is improved, school violence is decreased because the students are more committed to establish positive atmosphere in the school. Therefore, the schools become cleaner and more beautiful. It increased the affective participation of the students in all educational activities. Meaningful Learning increased competition between the teachers to use the best methods and tools.

All the principals mentioned the importance of Meaningful Learning in developing better retaliation between student and teachers. (2) Principals in Bethlehem Governorate said the same. One principal in the Negev Sector mentioned that the school becomes cleaner. (2) Principals talked about developing student's sense of belonging to the school.

Chapter Five

Discussion of the Result:

The researcher discusses in this chapter the results of the study that are related to the questions. This chapter also included the recommendations.

5.1 The discussion of the first question:

The results of the first question (To what extent do high school principals in Bethlehem governorate and Negev sector support meaningful learning from teachers' point of view? All the domains came high with means of (3.73) due to the following reasons:

The domain of the role of the principle in adopting meaningful learning came first with high degree. With a mean of (3.78) due to the principal's awareness of their role the school. Principals are spending more time in planning and developing their school these days. Principals are more involved in the teaching process; they are the resident supervisors, instructors, and the role model for their teachers.

The domain of the role of the principal in supporting the alternative assessment came second with high degree; its means was (3.71) due to the effectiveness of the alternative assessment in evaluating students. Alternative assessment tasks strengthen the relation between the students and teacher. Alternative assessment tasks affected the school atmosphere positively through building the trust between students and teachers, close cooperation with the teachers and students felt that they receive the attention from the school.

The domain of the roll of the principal in supporting technology in schools came third with high degree with a mean of (3.70) because the modern ways

of education depends on the use of technology in school. The wide spread of smart phones and tablets enabled students to absorb knowledge more quickly than the previous generation. Teachers used technology to obtain the highest level of interaction of the students in classes and the use of technology in classes motivated the students to be more creative in doing the tasks.

5.2 The discussion of the second question:

The discussion of the hypothesis, which were based on the second question was carried out individually (Are there statistically significant differences between the means of the participant's responses duo to gender, location, years of experience, and academic qualification)

5.3 The discussion of the findings of the first hypothesis:

There are no statistically significant differences at ($\alpha \leq 0.05$) in the means of participant's responses related to principal's support to meaningful learning due to gender.

The results show that the level of significance for the differences in participant's responses related to principal's support to meaningful learning due to gender is (0.98). This means that there are no statistically significance differences at ($a < 0.05$). This can be interpreted to the following:

First, principals provided instructions for both male and female teachers without taking into account gender. Secondly, the Ministry of education in both Governorates provided counseling to all teachers. Thirdly, when universities train teachers, the teachers get the same training. Finally, Male and female teachers carry out their duties and responsibilities according to their experience and qualification.

5.4 The discussion of the findings of the second hypothesis:

There are no statistically significant differences at ($\alpha \leq 0.05$) in the means of participant's responses related to principal's support to meaningful learning due to location.

The results show that the level of significance for the differences in participant's responses related to principal's support to meaningful learning due to location is (0.00) this means that there are statistically significance differences at ($a<0.05$). By considering the means for both locations, it shows that the Negev has the highest mean (4.2); therefore the statistical differences are in favor of the Negev area. This can be explained as the following:

The ministry of education in Negev adopted the Meaningful Learning Theory four years ago. Therefore, the ministry of education informed the principals about the need to change the way they run their schools. Principals participated in workshops to be trained to apply the meaningful learning program. Many principals in Negev were aware of the needs to equip their schools with the necessary tools such as tablets, computers etc. The principals in the Negev realized the importance of this trend, which is going to move the level of their students from traditional learning to more advance by making learning more meaningful for the students. The universities in Negev shared the ministry's vision in adopting the meaningful learning theory and planned. In addition, the ministry of education gave the students 30% of their final grade for each subject. Students can get the 30% for the meaningful learning tasks. The principals provided guidance to teachers to use the alternative assessment as a tool to evaluate the students. The new teachers who teach in The Palestinian Ministry of Education provide meaningful learning individually.

The Palestinian Ministry of Education did not adopt the meaningful learning theory, the principals and teachers did not receive training to accomplish this change, besides, the schools lacked of the tools to attain the meaningful learning needs. Teachers evaluate the students by using the traditional way, which contradicts with the spirit of the meaningful learning theory.

5.5 The discussion of the findings of the third hypothesis:

There are no statistically significant differences at ($\alpha \leq 0.05$) in the means of participant's responses related to principal's support to meaningful learning due to years of experience

The results of the showed that there are statistical significant differences at ($\alpha \leq 0.05$) in the means of the study of the extent high school principals in Bethlehem governorate and Negev Sector support meaningful learning from their point of teachers based on years of experience in favor of (1-5). The researcher attributed this to the following:

The universities played an important role in training the new teachers to adopt meaningful learning as part of their daily work in schools. In addition, the new teachers practiced the components of the meaningful learning such as the alternative assessment, higher order thinking skills and using technology during their years of studies. The new teachers are familiar with the use of smart phones an technology, while, experienced teachers faced problems in adopting technology in their classes. The new teachers are more motivated to carry out the meaningful learning in schools because they can sense the students' progress since they use the same tools in real life with their students. The experienced teachers are often afraid of the change, which means that they have to attend more workshops to learn how to be more involved in meaningful learning program. The experienced teachers needed to adjust their plans to meet with the requirements of the meaningful learning

program, which is met most of the time with complaints and doubts about the effectiveness of this program.

5.6 The discussion of the findings of the fourth hypothesis:

There are no statistically significant differences at ($\alpha \leq 0.05$) in the means of participant's responses related to principal's support to meaningful learning due to academic qualification.

The results show that the level of significance for the academic qualification has no differences in attitudes of high school principals in Bethlehem governorate and Negev sector support meaningful learning from teacher's point of view due qualifications (0.07). This means that there is no statistically significance difference at ($a < 0.05$). The researcher ascribed this to the following:

Teachers share the same responsibilities and duties in schools while they are performing the same task. Therefore, the academic qualification they have does not make huge difference when teachers do the same work. All the teachers received the same instruction on how to implement the meaningful learning program. Many of the teachers earned their second degree in a different field from their first one, which did not help them much in improving their ways in adopting the meaningful learning program.

5.7 The discussion of the result of the third question:

The interview with the principals:

To what extent do high school principals in Bethlehem governorate and Negev sector support meaningful learning from their point of view?

5.7.1 The first interview question:

What is your role as principals in supporting Meaningful Learning?

The results from analyzing the first interview question with principals from the Negev Sector showed that Principals are aware of the importance of planning in the beginning of the school year. There is a clear understanding that teachers and principals have to set the vision of the school with the cooperation with all the members of the educational process.

Principals said, "They have to consider including the meaningful learning requirements while planning the vision of the school".

The researcher found that the principals from the Negev Sector encourage teachers to be aware of their professional development. The ministry of education in the Negev organizes workshops that are planned to meet the needs of the meaningful learning program, besides that all teachers have to attend these workshops as part of their daily work. Each teacher should attend 112 hours a year, as part of his or her professional development.

Principals said, "They should encourage teachers to participate in workshops to adopt the strategies of meaningful learning".

Principals in the Negev sector support meaningful learning through equipping their schools with computers and tablets so that students can use while they do their tasks such as projects for all the subjects. Using technology is part of supporting meaningful learning.

The role of the principal is very important and it includes prompting the teaching staff to create a collaborative environment between students and teachers in the learning process by incorporating technology in education.

Principals said, "They should equip the school with the necessary tools and devices to facilitate the learning process to meet with the needs of effective Meaningful Learning".

The results from analyzing the first interview question with principals from the Bethlehem governorate showed that Principals have unclear understanding of the meaningful learning requirements. There is no difference between running the schools from the traditional way and from running the Meaningful Learning perspective; principals are more interested in the outcomes instead of the process itself. Meaningful learning needs that all the people who are involved in the educational process work together to have fruitful outcomes of the meaningful learning.

Principals said, "They should prompt creativity and learning initiatives, observe lessons of the teachers to discuss the strong and weakness points".

5.7.2 The second interview question:

How do you describe the school logistic strategies that aim at creating Meaningful Learning?

The results from analyzing the second interview question with principals from the Negev Sector showed that Principals do not receive the same budget from the ministry of education; principals have to plan to get the maximum that they could. It depends on the classes that they plan to open next year and the number of students in each class. Many companies provide the schools with extra hours to help teachers assisting the weak students and to motivate the strong students toward Excellency. While in the Ministry of education in Palestine, an extra budget could be collected from the local community to help them achieve their vision.

The principals said, "The ministry of education funds these courses and the tools in the school".

Meanwhile principals in the Negev take the budget from the ministry of education to cover all the needs of the school. The local council makes sure the schools get the entire budget they agreed. The local council in Palestine does not participate in planning the budget with the Palestinian Ministry of education. Therefore, some principals try to enlarge the budget from the local council whose budget is also moderate.

The principals said, "To set meetings with the local council and the parents council and set up a budget for the school to implement the Meaningful Learning program".

5.7.3 The third interview question:

To what extent Meaningful Learning does contribute to improving students achievements?

The results of the third interview question with principals showed that the principals encourage teachers to implement the spirit of the meaningful learning in schools (the alternative assessment), the gap between the student and the curriculum gets smaller. Each student will decide the group that he or she likes to work with and to choose the topic that fuels him or her. Through the meaningful learning process, students can finish the task individually, but teachers motivate students to work in groups to achieve the goals of the meaningful learning program.

The principals said, "Meaningful Learning program is based on the Alternative Assessment, which increases the achievement level of the student

While in Bethlehem Governorate, the principals mentioned that the results in the Matriculation exams was increased at their schools. This could be attributed to the fact that the principals are aware of supporting some of the features of the meaningful learning in the school. Especially when they are planning to open other streams and subjects in the schools to meet with the interest of the students. The students' assessment depends on the traditional exams provided by the Palestinian Ministry of Education. In comparison with The Negev sector, The school grade is counted as part of the student assessment next to the Ministry of Education in the Negev traditional exam. Through the spirit of the meaningful learning, students have to sit for oral exam (for almost all the subject). The oral exam is one form of the alternative assessment.

The principals said, :It also increased the school results in the Matriculation exam".

There is a gap between the schools' vision and the community's vision. When principals plan for the school year, they do not build the plans together with the local community. In addition, the schools and the local community suffers from the lack of trust, which is important in cooperating with each other.

The principals said, "The community involvement is moderate and does not help in implementing the meaningful learning".

5.7.4 The fourth interview question:

How does Meaningful Learning affect the school's learning environment?

The results of the fourth interview question with principals shows that through the meaningful learning program, a feeling of trust is built among all the participants in the education system (the principal, the teachers and the students) because the teachers and the students avoided the traditional way of teaching and learning. Both of them start to share the new knowledge that they gained in the process of completing their projects. In addition, Students hated exams; therefore, Teachers used the alternative assessment to evaluate their students. The students can discuss their grade and have the chance to do it again to attain the highest grade. Students are aware of the fact that the teachers are interested in giving them a better grade if they work harder.

The principals said, "Meaningful Learning affected the school's learning environment positively".

Principals in Bethlehem Governorate mentioned the competition among teachers as it is something that principals have to encourage. However, there is no competition in implementing the meaningful learning program. Competition is replaced with cooperation through group work and field of interest for the teachers.

The principals said, "Meaningful Learning increased competition between the teachers to use the best methods and tools".

5.8 Recommendations:

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

5.8.1 Regarding For Teachers:

1. Teachers (particularly Bethlehem governorate) should replace the traditional assessment to more meaningful assessment through using the Alternative assessment.
2. Teachers (particularly Bethlehem governorate) should apply technology applications as part of their daily work.
3. Teachers (particularly Bethlehem governorate) should encourage the students to use the higher order thinking skills in their daily life.

1.8.1 Regarding For Principals:

1. Principals should work more to enhance the meaningful learning program and providing the schools with workshops to train teachers to apply the meaningful learning program effectively.
2. The principal should work more to involve the meaningful learning spirit in building the school vision.
3. The principal should encourage the cooperation between teachers rather than competition.

1.8.1 Regarding For Decision-makers:

1. Urging the Palestinian ministry of education to be more concerned about adopting the meaningful learning theory by increasing the schools budgets, providing the needed tools and labs, as such been done at the Negev Sector.
2. The Palestinian Ministry of education should raise the awareness of the local communities about the importance of the meaningful learning at schools, to have more cooperation between the local communities and the schools.
3. Adopting the Negev experience in implementing the meaningful learning theory, in order to apply it at the schools of Palestinian Ministry of education.

References:

Abaya, J. (2016). School leadership challenges along kenya's borabu-sotik border. **Educational Management Administration & Leadership**, 44(5):757-774.

Alaa Sadik (2008): Digital storytelling: a meaningful technology-integrated approach for engaged student, Educational Technology Research and Development, 56(4):478-506

Allison, P., Gray, S., Sproule, J., Nash, C., Martindale, R., & Wang, J. (2015). Exploring contributions of project-based learning to health and wellbeing in secondary education. **Improving Schools**, 18(3):207-220.

Ausubel, D. P. (1963). **The acquisition and retention of knowledge: A cognitive view**. Springer Science & Business Media.

Ausubel, D. G. (2000). Cognitive structure and the facilitation of meaningful verbal Learning1. **Journal of Teacher Education**, 14(2):217-222.

Ausubel, D. P. (1968). **The psychology of meaningful verbal learning. Grune &Stration**, INC. New York.

Baran, E., Uygun, E., & Altan, T. (2017). Examining preservice teachers' criteria for evaluating educational mobile apps. **Journal of Educational Computing Research**, 54(8):1117-1141.

Barron, B., & Darling-Hammond, L. (2008). Teaching for Meaningful Learning: A Review of Research on Inquiry-Based and Cooperative Learning. Book Excerpt. **George Lucas Educational Foundation**.

Bolliger, D. U., Mills, D., White, J., & Kohyama, M. (2015). Japanese students' perceptions of digital game use for english-language learning in higher education. **Journal of Educational Computing Research**, 53(3):384-408.

Camburn, E. M., Goldring, E., Sebastian, J., May, H., & Huff, J. (2016). An examination of the benefits, limitations, and challenges of conducting randomized experiments with principals. E**ducational Administration Quarterly**, 52(2):187-220.

Carrington, V., & Robinson, M. (Eds.). (2009). **Digital literacies: Social learning and classroom practices**. sage.

Cashman, S., & Gunter, G. (2006). **Integrating technology and digital media in the classroom,**. Thomason Course Technology.

Chai, C. S., Koh, J. H. L., Tsai, C. C., & Tan, L. L. W. (2011). Modeling primary school pre-service teachers' Technological Pedagogical Content Knowledge (TPACK) for meaningful learning with information and communication technology (ICT). Computers & Education, 57(1), 1184-1193.

Seilhamer, R., Sugar, A., & Mao, J. (2013). User acceptance of mobile technology: A campus-wide implementation of blackboard's mobile™ learn application. **Journal of Educational Computing Research**, 49(3):327-343.

Daniel T. Bressington et al. (2018): Concept mapping to promote meaningful learning, help relate theory to practice and improve learning self-efficacy in Asian mental health nursing students: A mixed-methods pilot study, **Nurse Education Today**, 60:47–55.

Deakins, Eric. (2007). The role of meaningful dialogue in early childhood education leadership. **Australian Journal of Early Childhood**, 32(1):38-47.

Bush, T. (2008):. From management to leadership: semantic or meaningful change?. **Educational management administration & leadership**, 36(2):271-288.

Egalite, A. J., Mills, J. N., & Greene, J. P. (2016). The softer side of learning: Measuring students' non-cognitive skills. **Improving Schools**, 19(1):27-40.

Eger, L., & Egerová, D. (2016). Project risk management in educational organizations. **Educational Management Administration & Leadership**, 44(4):578-598.

El-Atrash, A. (2009). **Promoting sustainable urban growth strategies to curb sprawl in the urban area of Bethlehem governorate** (Doctoral dissertation, Birzeit University).

Fisher, J. B., Schumaker, J. B., Culbertson, J., & Deshler, D. D. (2010). Effects of a computerized professional development program on teacher and student outcomes. **Journal of Teacher Education**, 61(4):302-31

Frye, H. (1988). The principal's role in teacher preparation. **Journal of Teacher Education,** 39(6):54-58.

Gagné, R. M. (1975). Learning hierarchies and learning conditions. **Journal of Curriculum Studies**, 7(2):133-134.

Galloway, K. R., & Bretz, S. L. (2015). Measuring meaningful learning in the undergraduate chemistry laboratory: a national, cross-sectional study. J**ournal of Chemical Education**, 92(12):2006-2018.

Gordon, E., & Lowrey, K. A. (2017). The mentoring web – coming together to make a difference. **Improving Schools**, 20(2):178-190.

Harpaz, Y. (2013): **Teaching and learning in a community of thinking: The third model.** Springer Science & Business Media**.**

Howland, J. L., Jonassen, D. H., & Marra, R. M. (2012). **Meaningful learning with technology. Upper Saddle River,** NJ: Pearson.

Kärki, T., et al. (2018): Meaningful learning with mobile devices: pre-service class teachers' experiences of mobile learning in the outdoors. Technology, **Pedagogy and Education**, 27(2):251-263.

Karpicke, J. D. (2012). **Retrieval-based learning. Current Directions in Psychological Science**, 21(3):157-163.

Keengwe, J., Onchwari, G. & Wachira, P. (2008): The Use of Computer Tools to Support Meaningful Learning. AACE Journal, 16(1):77-92.

Khan, B. H. (Ed.). (2005). **Managing e-learning: Design, delivery, implementation, and evaluation**. IGI Global.

Lee, J. C., & Lo, L. N. (2007). The accelerated schools for quality education project: Experiences of school change in Hong Kong. **Improving Schools**, 10(2):180-198.

Levine, T. H. (2011). Experienced teachers and school reform: Exploring How Two Different Professional Communities Facilitated and Complicated Change. **Improving Schools**, 14(1):30-47.

Li, X., & Yang, X. (2016). Effects of learning styles and interest on concentration and achievement of students in mobile learning. **Journal of Educational Computing Research**, 54(7):922-945.

Menard, E. (2013). Creative thinking in music: Developing a model for meaningful learning in middle school general music. **Music Educators Journal**, 100(2):61-67.

Mifsud, D. (2015). The setting-up of multi-site school collaboratives: The benefits of this organizational reform in terms of networking opportunities and their effects. **Improving Schools**, 18(3):236-249.

Miller, R. J., Goddard, R. D., Kim, M., Jacob, R., Goddard, Y., & Schroeder, P. (2016). Can professional development improve school leadership?

Results from a randomized control trial assessing the impact of McREL's balanced leadership program on principals in rural Michigan schools. **Educational Administration Quarterly**, 52(4):531-566.

Moran, M., Hawkes, M., & Gayar, O. E. (2010). Tablet personal computer integration in higher education: Applying the unified theory of acceptance and use technology model to understand supporting factors. **Journal of Educational Computing Research**, 42(1):79-101.

Anne Nevgiv and Erika Löfström (2006): From strategic planning to meaningful learning: diverse perspectives on the development of web-based teaching and learning in higher education, BJET, 38(2):312-324.

Ng, S., & Szeto, S. E. (2016). **Preparing school leaders. Educational Management Administration & Leadership**, 44(4):540-557.

Novak J, (2011), A Theory Of Education: *Meaningful Learning* Underlies The Constructive Integration Of Thinking, Feeling, And Acting Leading To Empowerment For Commitment And Responsibility, **Meaningful Learning Review** – V1(2):1-14

Novak, J. D. (2002). Meaningful learning: The essential factor for conceptual change in limited or inappropriate propositional hierarchies leading to empowerment of learners**. Science Education**, 86(4):548-571.

Novak, J. D., & Gowin, D. B. (1984). Concept mapping for meaningful learning. **Learning how to learn**, p.p:15-54.

Ou-Yang, F. C., & Wu, W. V. (2017). Using mixed-modality vocabulary learning on mobile devices. **Journal of Educational Computing Research**, 54(8):1043-1069.

Picard, D., Martin, P., & Tsao, R. (2014a). iPads at school? A quantitative comparison of elementary schoolchildren's pen-on-paper versus finger-on-

screen drawing skills. **Journal of Educational Computing Research**, 50(2):203-212.

Przybylski, A. K., Rigby, C. S., & Ryan, R. M. (2010). A motivational model of video game engagement. **Review of General Psychology**, 14(2):154-166.

Rigby, C. S., & Przybylski, A. K. (2009). Virtual worlds and the learner hero. **Theory and Research in Education**, 7(2):214-223.

Rudnitzky, A., & Ras, T. A. (2012). **The Bedouin population in the Negev.** Abraham Fund Inititatives..

Runhaar, P. R., & Sanders, K. (2016). Promoting teachers' knowledge sharing. the fostering roles of occupational self-efficacy and human resources management. **Educational Management Administration & Leadership**, 44(5):794-813.

Sadik, A. (2008). Digital storytelling: A meaningful technology-integrated approach for engaged student learning. **Educational technology research and development**, 56(4):487-506.

Shamir-Inbal, T., & Blau, I. (2016). Developing digital wisdom by students and teachers. **Journal of Educational Computing Research**, 54(7):967-996.

Sharkey, J., Clavijo Olarte, A., & Ramírez, L. M. (2016). Developing a deeper understanding of community-based pedagogies with teachers. **Journal of Teacher Education**, 67(4):306-319.

Shelly, G. B., Cashman, T. J., Gunter, R. E., & Gunter, G. A. (2004). I**ntegrating Technology in the Classroom: Teachers Discovering Computers.** 4th Ed. Thomason Course Technology. China Social, Demographic, & Economic Factors. The Bedouin population in the Negev.

Stalheim-Smith, A. (1998). **Focusing on Active, Meaningful Learning**. IDEA Paper Number 34.

Stringer, P., & Hourani, R. B. (2016). **Transformation of roles and responsibilities of principals in times of change.Educational Management Administration & Leadership**, 44(2):224-246.

Sun, G., & Shen, J. (2013, July). Teamwork as a service: a cloud-based system for enhancing teamwork performance in mobile learning. In Advanced Learning Technologies (ICALT), 2013 IEEE **13th International Conference** on (pp. 376-378). IEEE.

Szczesiul, S., & Huizenga, J. (2014). The burden of leadership: Exploring the principal's role in teacher collaboration. **Improving Schools**, 17(2):176-191.

White, B. R., & Agarwal, P. K. (2011). The Principal Report: The State of School Leadership in Illinois. Illinois Education Research Council.

Vallori, A. B. (2014). Meaningful learning in practice. **Journal of Education and Human Development**, 3(4):10-15640.

Vermeulen, M., Van Acker, F., Kreijns, K., & van Buuren, H. (2015). Does transformational leadership encourage teachers' use of digital learning materials. **Educational Management Administration & Leadership**, 43(6):1006-1025.

Wang, H. Y., Liu, T. C., Chou, C. Y., Liang, J. K., Chan, T. W., & Yang, S. (2004). A framework of three learning activity levels for enhancing the usability and feasibility of wireless learning environments. ***Journal of Educational Computing Research***, *30*(4):331-351.

Wayne, M. R. (2011). **Visiting Classrooms: A Design Study to Support Principals' Instructional Leadership**. University of California, Berkeley.

Wei, W., & Yue, K. B. (2017). Concept mapping in computer science education. **Journal of Computing Sciences in Colleges**, 32(4):13-20.

Arabic References:

ثوابتة، أحمد والسعودي، خالد (2010): معوقات تطبيق استراتيجيات التقويم الواقعي وأدواته من وجهة نظر معلمي التربية الإسلامية في محافظة الطفيلة، 2016، **دراسات، العلوم التربوية،** 43(1):265-280.

مصطفى، أشرف عطية (2016): **واقع ممارسة معلمي التربية الاسلامية لأساليب التقويم البديل وسبل تطويرها في المرحلة الأساسية الدنيا بغزة**، رسالة ماجستير غير منشورة، الجامعة الإسلامية، غزة.

البشير، أكرم وبرهم، عصام (2012): استخدام استراتيجيات التقويم البديل وأدواته في تقويم تعلم الرياضيات واللغة العربية في الأردن، **مجلة العلوم التربوية والنفسية**، 13(1): 241-270.

الهرش، عايد وآخرون (2010): معوقات استخدام منظومة التعلم الإلكتروني من وجهة نظر معلمي المرحلة الثانوية في لواء الكورة، **المجلة الأردنية في العلوم التربوية**، 6(1):27-40.

سليمان، عودة ومراد، عودة (2013): واقع استخدام تكنولوجيا المعلومات والاتصال وعوائق استخدامها في التدريس لدى معلمي ومعلمات مدارس تربية لواء الشوبك، **البلقاء للبحوث والدارسات**، 17(1):107-138.

العزام، فريال ناجي (2017): **درجة استخدام الهواتف الذكية في العملية التعليمية (دراسة ميدانية من وجهة نظر طلبة تكنولوجيا التعليم في الجامعات الأردنية الخاصة)**، رسالة ماجستير غير منشورة، جامعة الشرق الاوسط.

Appendix 1

عمادة الدراسات العليا

جامعة القدس

كلية العلوم التربوية

السلام عليكم ورحمة الله وبركاته وبعد:

حضرة الدكتور/ة ..... المحترم/ـة

الدرجة العلمية: .....

مكان العمل: .....

يقوم الباحث بإعداد دراسة بعنوان "**مدى دعم مدراء المدارس الثانوية في محافظة بيت لحم ولواء النقب للتعليم ذو معنى من وجهة نظر المدراء والمعلمين**"، والتعليم ذو معنى كما عرّفه Antoni (2014,1) هو: "أن المعرفة السابقة هي من أكثر العوامل التي تؤثر بالتعليم، وعندما ترتبط المعلومات الجديدة بمعلومات سابقة أو مماثلة، يحث المتعلم على بناء روابط جديدة تؤدي إلى الفهم بطريقة هادفة ذات معنى كما نصت نظرية أوزبل في التعليم ذو معنى".

ويعِّد الباحث هذه الدراسة تمهيدا لإجراء رسالة ماجستير في الإدارة التربوية من كلية العلوم التربوية /جامعة القدس، لذا يضع بين أيديكم هذه الاستبانة من إعداده، والتي اشتملت على ثلاثة محاور هي: (دور المدير كقائد تربوي، ودور المدير في دعم التقييم البديل، ودور المدير في دعم التعليم الالكتروني (التعليم الرقمي)، ويرجو من حضرتكم تحكيم فقرات هذه الاستبانة من حيث:

1) ملاءمة كل فقرة من فقراتها للمجال الذي وضعت فيه.
2) صياغة كل فقرة لغويا ووضوحها بالنسبة للفئة المستهدفة.
3) إجراء أي تغيير على الفقرات من حيث (الحذف، أو الإضافة، أو التعديل).
4) إبداء أية ملاحظات أخرى بشكل عام.

وتفضلوا بقبول فائق الاحترام

الباحث/ خالد الحسنات

إشراف الدكتور/ محمد عوض شعيبات

عمادة الدراسات العليا
جامعة القدس
كلية العلوم التربوية

الفاضل / المدرس المحترم
الفاضلة / المدرّسة المحترمة

السلام عليكم ورحمة الله وبركاته وبعد:

يجري الباحث دراسة تهدف التعرف إلى مدى دعم مدراء المدارس الثانوية في محافظة بيت لحم ولواء النقب للتعليم ذو معنى من وجهة نظر المدراء والمعلمين، والتعليم ذو معنى كما عرّفه Antoni (2014,1) هو: "أن المعرفة السابقة هي من أكثر العوامل التي تؤثر بالتعليم، وعندما ترتبط المعلومات الجديدة بمعلومات سابقة أو مماثلة، يحث المتعلم على بناء روابط جديدة تؤدي إلى الفهم بطريقة هادفة ذات معنى كما نصت نظرية أوزبل في التعليم ذو معنى".

وتم إعداد هذه الدراسة استكمالاً لمتطلبات الحصول على درجة الماجستير في الإدارة التربوية من جامعة القدس، وقد تم بناء هذه الاستبانة ذات ثلاثة محاور، والتي تمثل دور المدير كقائد تربوي، ودور المدير في دعم التقييم البديل، ودور المدير في دعم التعليم الالكتروني (التعليم الرقمي)، ويرجو الباحث تكرمكم بتحديد درجة الموافقة إزاء كل فقرة وذلك بوضع إشارة (×) في الخانة التي تعبر عن رأيكم في درجة الموافقة على فقرات الاستبانة بدقة وموضوعية، علماً بأن نتائج الدراسة ستستخدم لأغراض البحث العلمي فقط.

شاكرين لكم حسن تعاونكم

الباحث
خالد الحسنات

القسم الأول:- معلومات أولية:

1. الجنس: ذكر ☐ أنثى ☐
2. المنطقة الجغرافية: محافظة بيت لحم ☐ لواء النقب ☐
3. سنوات الخبرة: 5 سنوات فأقل ☐ من(6-10) سنوات ☐ 11سنة فأكثر ☐
4. المؤهل العلمي: دبلوم ☐ بكالوريوس ☐ ماجستير فأعلى ☐

القسم الثاني: فقرات الاستبانة

المحور الأول:- دور مدير المدرسة في دعم التعليم ذو معنى يتمثل بما يلي:

م	العبارة	أوافق بشدة	أوافق	محايد	لا أوافق	لا أوافق بشدة
1	يشجع استخدام أساليب تعليمية مُختلفة تتناسب مع برنامج التعليم ذو معنى.					
2	يدعم المشاركة في اتخاذ القرارات داخل المدرسة.					
3	يشجع الإدلاء بآراء جديدة خلال الاجتماعات.					
4	يحترم المعلمين.					
5	يشجع التعاون بين الإدارة والمعلمين.					
6	يشجع على التطور المهني لدى المعلمين.					
7	يشاهد أساليب التدريس داخل الحصص.					
8	يقدم التغذية الراجعة بكل مستمر بعد المشاهدة.					
9	يقدم الإرشاد للمعلم الجديد.					
10	يستخدم الثواب والعقاب لتنفيذ عملية التعليم.					
11	يشجع المعلمين على التعبير عن آرائهم خلال المواقف التعليمية المختلفة.					
12	يظهر التقدير عند مبادرة المعلمين لتحسين العملية التعليمية داخل المدرسة.					
13	يشجع المعلمين على المشاركة في بناء رؤية وأهداف المدرسة.					
14	يقوم باجتماعات دورية لمواكبة برنامج التعليم ذو معنى.					

المحور الثاني: دور مدير المدرسة في دعم التقييم البديل يتمثل فيما يلي:

م	العبارة	أوافق بشدة	أوافق	محايد	لا أوافق	لا أوافق بشدة
1	يوضح الفرق بين التقييم البديل والتقييم التقليدي.					
2	يوفر المعلومات الكافية عن استخدام استراتيجيات التقييم البديل كأحد متطلبات التعليم ذو معنى.					
3	يشجع الاشتراك بدورات استكمال حول استراتيجيات التقييم البديل.					
4	يشجع المعلمين على أهمية التغذية الراجعة المستمرة عند استخدام التقييم البديل.					
5	يشجع التقييم البديل لسهولته في تحقيق أهداف المدرسة.					
6	يشجع استخدام التقويم البديل لتقييم أداء الطلاب.					
7	يقدم الدعم اللوجستي اللازم (المادي) لتسهيل عملية التقييم البديل.					
8	يحفز على استخدام التقييم البديل كأداة فعالة في عملية التعليم.					
9	يشجع نظام ملف الطالب كأحد أنواع التقييم البديل.					
10	يحض على مراعاة الفروقات الفردية بين الطلبة خلال عملية التقييم البديل.					
11	يشجع العمل ضمن مجموعات لتنمية قدرات الطلبة على رفع مستوى التعاون بينهم.					
12	يشجع على اتباع المنهج العلمي عند استخدام الأبحاث المدرسية كأداة في عملية التقييم البديل.					

المحور الثالث: دور مدير المدرسة بدعم التعليم التكنولوجي (التعليم الرقمي) يتمثل بما يلي:

م	العبارة	أوافق بشدة	أوافق	محايد	لا أوافق	لا أوافق بشدة
1	يُشجع التعليم الإلكتروني داخل الصف.					
2	يوصي بالتعليم الالكتروني لأنه يسهل عملية التعليم.					
3	يشجع الحصول على التغذية الراجعة عند استخدام التعليم الإلكتروني.					
4	يعزز التعليم الإلكتروني لأنه يزيد من دافعية الطلاب نحو التعليم ذو معنى.					
5	يشجع على تطوير المهارات الإلكترونية لدى المعلمين.					
6	يشجع على الاشتراك بدورات استكمال حول التعليم ذو معنى من قبل مختصين.					
7	يوفر الأدوات والأجهزة اللازمة لتسهيل التعليم الرقمي.					
8	يشجع التعليم الرقمي لأنه يزيد فعالية الدرس نحو التعليم ذو معنى.					
9	يعمل على استخدام الألعاب الرقمية لأنها تساهم في تحقيق أهداف المدرسة من خلال برنامج التعليم ذو معنى.					
10	يشجع المعلمين على تنمية مهارات التفكير العليا لدى الطلبة باستخدام الأجهزة الذكية.					
11	يشجع المعلمين على استخدام الأجهزة الذكية خلال عملية تقييم الطلبة.					
12	يشجع تمرير بعض الحصص التعليمية خلال التعليم عن بعد.					
13	يشجع تنمية مهارات الاتصال مع الطلبة من خلال مواقع التواصل الاجتماعي.					

أسئلة المقابلة للمدراء :

1. مـــــا هـــــو دوركـــــم فـــــي تنفيـــــذ برنـــــامج التعلـــــيم ذو معنـــــى؟

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2. ما هي الاستعدادات اللوجستية التي تقوم بها المدرسة في سبيل تنفيذ برنامج التعليم ذو معنى؟

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3. إلـى أي مـدى سـاهم برنـامج التعلـيم ذو معنـى فـي رفـع مسـتوى التحصـيل لـدى الطـلاب؟

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4. كيـــف انعكـــس التعلـــيم ذو معنـــى علـــى البيئـــة التعليميـــة فـــي المدرســـة؟

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Appendix 2

عمادة الدراسات العليا
جامعة القدس
كلية العلوم التربوية

الفاضل/ـة المُدرَّس/ـة المحترم/ـة
السلام عليكم ورحمة الله وبركاته وبعد:

يجري الباحث دراسة تهدف التعرّف إلى مدى دعم مدراء المدارس الثانوية في محافظة بيت لحم ولواء النقب للتعليم ذي معنى من وجهة نظر المدراء والمعلمين، والتعليم ذي معنى كما عرّفه Antonio (2014,1) هو: "أن المعرفة السابقة هي من أكثر العوامل التي تؤثر بالتعليم، وعندما ترتبط المعلومات الجديدة بمعلومات سابقة أو مماثلة، يحث المتعلم على بناء روابط جديدة تؤدي إلى الفهم بطريقة هادفة ذات معنى كما نصت نظرية أوزبل في التعليم ذي معنى".

وتم إعداد هذه الدراسة استكمالاً لمتطلبات الحصول على درجة الماجستير في الإدارة التربوية من جامعة القدس، وقد تم بناء هذه الاستبانة ذات ثلاثة محاور، والتي تمثل دور مدير المدرسة كقائد تربوي في دعم التعليم ذي معنى، ودور مدير المدرسة في دعم التقويم البديل، ودور مدير المدرسة بدعم التعليم الالكتروني، ويرجو الباحث تكرمكم بتحديد درجة الموافقة إزاء كل فقرة وذلك بوضع إشارة (×) في الخانة التي تعبر عن رأيكم في درجة الموافقة على فقرات الاستبانة بدقة وموضوعية، علماً بأن نتائج الدراسة ستستخدم لأغراض البحث العلمي فقط.

شاكرين لكم حسن تعاونكم

الباحث
خالد الحسنات

القسم الأول:- معلومات أولية:

5. النوع: ذكر ☐ أنثى ☐
6. المنطقة الجغرافية: محافظة بيت لحم ☐ لواء النقب ☐
7. سنوات الخبرة: أقل من 5 سنوات ☐ من 5 الى 10 سنوات ☐ 10 سنوات فأكثر ☐
8. المؤهل العلمي: دبلوم ☐ بكالوريوس ☐ ماجستير فأعلى ☐

القسم الثاني: فقرات الاستبانة

المحور الأول: دور مدير المدرسة في دعم التعليم ذي معنى يتمثل بما يلي:

م	العبارة	أوافق بشدة	أوافق	محايد	لا أوافق	لا أوافق بشدة
1	يشجع استخدام أساليب تعليمية مُختلفة تتناسب مع برنامج التعليم ذي معنى.					
2	يدعم المشاركة في اتخاذ القرارات داخل المدرسة.					
3	يشجع تقديم آراء جديدة خلال الاجتماعات.					
4	يظهر احترام واضح للمعلمين.					
5	يشجع التعاون بين الإدارة والمعلمين.					
6	يشجع المعلمين على التطور المهني.					
7	يشاهد أساليب التدريس داخل الحصص.					
8	يقدم التغذية الراجعة بكل مستمر بعد المشاهدة.					
9	يقدم الإرشاد للمعلم الجديد.					
10	يستخدم أسلوب الثواب والعقاب لتنفيذ عملية التعليم.					
11	يشجع المعلمين على التعبير عن آرائهم خلال المواقف التعليمية المختلفة.					
12	يظهر التقدير عند مبادرة المعلمين لتحسين العملية التعليمية داخل المدرسة.					
13	يشجع المعلمين على المشاركة في بناء رؤية وأهداف المدرسة.					
14	يعقد اجتماعات دورية لمواكبة برنامج التعليم ذي معنى.					

المحور الثاني: دور مدير المدرسة في دعم التقويم البديل يتمثل فيما يلي:

م	العبارة	أوافق بشدة	أوافق	محايد	لا أوافق	لا أوافق بشدة
1	يوضح الفرق بين التقويم البديل والتقويم التقليدي.					
2	يوفر المعلومات الكافية عند استخدام استراتيجيات التقويم البديل كأحد متطلبات التعليم ذي معنى.					
3	يشجع الاشتراك بدورات استكمال حول استراتيجيات التقويم البديل.					
4	يشجع المعلمين على أهمية استخدام التغذية الراجعة المستمرة عند استخدام التقويم البديل.					
5	يشجع التقويم البديل لسهولته في تحقيق أهداف المدرسة.					
6	يشجع استخدام التقويم البديل لتقييم أداء الطلاب.					
7	يقدم الدعم المادي لتسهيل عملية التقويم البديل.					
8	يحفز على استخدام التقويم البديل كأداة فعالة في عملية التعليم.					
9	يشجع نظام ملف الطالب كأحد أنواع التقويم البديل.					
10	يشجع على مراعاة الفروقات الفردية بين الطلبة خلال عملية التقويم البديل.					
11	يشجع العمل ضمن مجموعات لتنمية قدرات الطلبة على رفع مستوى التعاون بينهم.					
12	يشجع على اتباع المنهج العلمي عند استخدام الأبحاث المدرسية كأداة في عملية التقويم البديل.					

المحور الثالث: دور مدير المدرسة في دعم توظيف التكنولوجيا يتمثل بما يلي:

#	العبارة	أوافق بشدة	أوافق	محايد	لا أوافق	لا أوافق بشدة
1	يُشجع التعليم الإلكتروني داخل الصف.					
2	يوصي بالتعليم الالكتروني لأنه يسهل عملية التعليم.					
3	يشجع الحصول على التغذية الراجعة عند استخدام التعليم الإلكتروني.					
4	يعزز التعليم الإلكتروني لأنه يزيد من دافعية الطلاب نحو التعليم ذي معنى.					
5	يشجع المعلمين على تطوير مهاراتهم الإلكترونية.					
6	يشجع على الاشتراك بدورات استكمال حول التعليم ذي معنى من قبل مختصين.					
7	يوفر الأدوات والأجهزة اللازمة لتسهيل التعليم الالكتروني.					
8	يشجع التعليم الالكتروني لأنه يزيد فعالية الدرس نحو التعليم ذي معنى.					
9	يعمل على استخدام الألعاب الالكترونية لأنها تساهم في تحقيق أهداف المدرسة من خلال برنامج التعليم ذي معنى.					
10	يشجع المعلمين على تنمية مهارات التفكير العليا لدى الطلبة باستخدام الأجهزة الذكية.					
11	يشجع المعلمين على استخدام الأجهزة الذكية خلال عملية تقييم الطلبة.					
12	يشجع تمرير بعض الحصص التعليمية خلال التعليم عن بعد.					

أسئلة المقابلة للمدراء :

1. مـــــا هـــــو دوركـــــم فـــــي تنفيـــــذ برنـــــامج التعلـــــيم ذي معنـــــى؟

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2. ما هي الاستعدادات اللوجستية التي تقوم بها المدرسة في سبيل تنفيذ برنامج التعليم ذي معنى؟

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3. إلـى أي مـدى سـاهم برنـامج التعلـيم ذي معنـى فـي رفـع مسـتوى التحصـيل لـدى الطـلاب؟

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4. كيـــف انعكـــس التعلـــيم ذي معنـــى علـــى البيئـــة التعليميـــة فـــي المدرســـة؟

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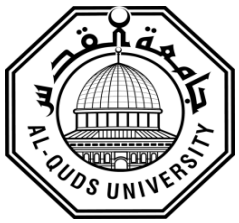
Appendix 3

List of Referees for the Questionnaire

#	Name	Place of work
1	Prof. Mahmoud abu Samra	AlQuds University
2	Prof. Afif Zeidan	AlQuds University
3	Dr. Saeid Awad	AlQuds University
4	Dr. Muhsen Adas	AlQuds University
5	Dr. Einas Naser	AlQuds University
6	Dr. Bouad al Khales	AlQuds University
7	Dr. Suhai Oudah	Bethlehem University
8	Dr. Moein Jaber	Bethlehem University
9	Dr. Mazen Iktato	Bethlehem University
10	Dr. Omar Mezel	Bethlehem University
11	Dr. Nehaya Dawoud	Ben Gourion University
12	Dr. Maha al Awadat	Open University-Beer Sheva
13	Dr. Hashem Ali Ahmad	Palestine Technical University
14	Dr. Neda Farhoud	Birzeit University
15	Dr. Mouhammad Dabous	Al- Esteqlal University
16	Dr. Raed Freehat	Palestine Technical University
17	Dr. Hakam Abu Hejjeh	Palestine Technical University

Appendix 4



Deanship of Graduate Studies
Al Quds University
Faculty of Educational Sciences

Dear Teachers,

The researcher conducted this study to identify the level of support given to "Meaningful Learning" by secondary school Principals in Bethlehem governorate and the Negev sector from the teachers' point of view.

As defined by Antonio, Meaningful Learning means that "previous knowledge is the single most important factor affecting education and when new information is built upon previous or similar ones, the learner will be stimulated to build and create new links that would lead him/her to get a constructive and meaningful understanding as stated in Ausubel's Theory of Meaningful learning."

This study is submitted in partial fulfillment of the requirement of Master Degree in Educational Administration, from Al-Quds University. The researcher; therefore, has prepared a questionnaire, so please answer the questions accurately and objectively, bearing in mind that this study will be used for scientific research purposes

Thank you for your cooperation

The Researcher

Khaled al-Hassanat

Section I: - Preliminary Information:

Gender: ( ) Male ( ) Female

Location: ( ) Bethlehem ( ) Negev

Years of Experience as Teachers:

( ) Less than 5 years ( ) 5 to10 ( ) 10 years and above

Qualification: ( ) Diploma ( ) B.A ( ) M.A and above

Section II:

The Role of the Principals in Supporting the Meaningful Learning:

#	Paragraph	Agree	Neutral	Disagree
1	The principal encourages using different education methods suit the meaningful learning.			
2	The principal supports the cooperation in taking the resolution in the school.			
3	The principal encourages presenting new ideas in the meetings.			
4	The principal shows a great respect to the teachers.			
5	The principal encourages the cooperation between the administration and the teachers.			
6	The principal encourages the professional development among teachers.			
7	The principal observes the teachers in the classes			
8	The principal gives the feedback continuously.			
9	The principal gives guidance for every new teacher.			
10	The principal uses the methods of reward and punishment to implement teaching			
11	The principal encourages the teachers to express their opinion in different educational issues.			
12	The principal appreciates the new suggested ideas to develop the educational process.			
13	The principal encourages the teachers to cooperate in establishing new vision and planning the school goals.			
14	The principal holds regular meetings to cope with the meaningful learning.			

The Role of the Principals in Supporting Alternative Evaluation:

#	Paragraph	Agree	Neutral	Disagree
1	The principal explains the difference between the alternative and the traditional evaluation.			
2	The principal provides the needed information when using the strategies of the alternative assessment as a required for the meaningful learning			
3	The principal encourages taking part in workshops about the strategies of using the alternative evaluation.			
4	The principal encourages the teachers to be aware of the importance of giving feeding back when using the alternative evaluation.			
5	The principal encourages the alternative evaluation for its effectiveness in achieving the schools goals.			
6	The principal encourages using the alternative to evaluate the achievements of the students.			
7	The principal provides financial support to the alternative assessment.			
8	The principal encourages using the alternative evaluation as an effective way in the education process.			
9	The principal encourages using the student portfolio as a kind of the alternative evaluation.			
10	The principal encourages the teachers to be aware of the differences of the student's characters while using the alternative assessment.			
11	The principal encourages students to do their work in groups to increase cooperation among the students..			
12	The principal encourages teachers to adopt the scientific methods when using the school research as a way of the alternative evaluation process.			

The role of principals in supporting the use of technology:

#	Paragraph	Agree	Neutral	Disagree
1	The principal encourages using the electronic learning in the class.			
2	The principal recommends using the electronic learning because it facilitates the leaning process.			
3	The principal encourages getting the feedback when using the electronic learning.			
4	The principal strengthen using the electronic learning to increase the students' motivation through the meaningful learning.			
5	The principal encourages the teachers to improve their electronic skills.			
6	The principal encourages taking part in workshops about the meaningful learning held by specialists in this field.			
7	The principal brings the necessary tools and equipment to make the electronic learning easy.			
8	The principal encourages the electronic learning because it increases the effectiveness of learning towards the meaningful learning.			
9	The principal encourages using the electronic games because they help in achieving the school goals through the meaningful learning program.			
10	The principal encourages the teachers to improve their high order thinking skills.			
11	The principal encourages the teachers to use the smart phones to evaluate the students.			
12	The principal encourages distance learning classes			

Appendix 5

Deanship of Graduate Studies
Al Quds University
Faculty of Educational Sciences

Dear Principals,

The researcher conducted this study to identify the level of support given to "Meaningful Learning" by secondary school Principals in Bethlehem governorate and the Negev Sector from their point of view.

As defined by Antonio (2014): Meaningful Learning means that "previous knowledge is the single most important factor affecting education and when new information is built upon previous or similar ones, the learner will be stimulated to build and create new links that would lead him/her to get a constructive and meaningful understanding as stated in Ausubel's Theory of Meaningful learning"

This study is submitted in partial fulfillment of the requirement of Master Degree in Educational Administration, from Al-Quds University. The researcher; therefore, has prepared four open-end questions, so please answer the questions accurately and objectively, bearing in mind that this study will be used for scientific research purposes

Thank you for your cooperation
The Researcher
Khaled al-Hassanat

Section II: Interview Questions:

1-What is your role in supporting Meaningful Learning program?

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2- How do you describe the school's logistic strategies that aim at creating Meaningful Learning?

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3- To what extent does Meaningful Learning contributes in improving students achievements?

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4- How does Meaningful Learning affect the school's learning environment?

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Appendix 6

Appendix 7

دور مديري المدارس الثانوية في محافظة بيت لحم ومنطقة النقب لدعم برنامج التعليم ذي معنى من وجهة نظرهم

اعداد الطالب: خالد أحمد عطية الحسنات

اشراف: د. محمد شعيبات

الملخص

هدفت الدراسة التعرّف إلى دور مدراء المدارس الثانوية في محافظة بيت لحم ومنطقة النقب في دعم التعليم ذو معنى من وجهة نظرهم أنفسهم، ومن وجهة نظر المعلمين.

تم تنفيذ الدراسة في خلال الفصل الثاني من العام الدراسي 2016-2017، وتم استخدام المنهج الوصفي، حيث تكون مجتمع الدراسة من جميع مدراء المدارس الثانوية في محافظة بيت لحم (53)، ومنطقة النقب (41)، وجميع المدارس الثانوية في المنطقتين (94) مدرسة. وتكونت عينة الدراسة من (8) مدراء و(240) معلماً ومعلمة من المنطقتين. واستخدم الباحث أداة الاستبانة المكونة من (38) فقرة والموزعة على (3) محاور للتعرّف إلى وجهة نظر المعلمين في موضوع الدراسة، في حين استخدم المقابلة التي تكونت من (4) أسئلة مفتوحة لفحص وجهة نظر المدراء في موضوع الدراسة.

أظهرت النتائج أن دور المدراء في دعم التعليم ذو معنى من وجهة نظر المعلمين جاء بدرجة مرتفعة بمتوسط حسابي (3.37)، كما أظهرت عدم وجود فروق دالة احصائياً تبعاً لمتغيريّ الجنس والمؤهل العلمي، في حين أظهرت وجود فروق دالة احصائياً تبعاً لمتغير سنوات الخبرة ولصالح فئة أقل من خمس سنوات، وتبعاً لمتغير المنطقة الجغرافية ولصالح منطقة النقب. كما أظهرت النتائج أن المدراء يدركون أهمية دورهم في دعم التعليم ذو معنى، حيث كان هناك اتفاق فيما يخص التخطيط للعام الدراسي، وتخصيص ميزانيات كافية لدعم برنامج التعليم ذي معنى.

في ضوء نتائج الدراسة، أوصى الباحث بضرورة قيام المعلمين باستبدال وسائل التقييم التقليدية بوسائل ذات صلة بالتعليم ذو معنى، وتوظيف التطبيقات التكنولوجية في عملهم، وتشجيع الطلبة على استخدام مهارات التفكير العليا في حياتهم اليومية، كذلك أوصى بضرورة اهتمام المدراء بتوظيف التعليم ذو معنى عند بناء رؤية المدرسة، وتشجيع التعاون بين المعلمين، وأخيراً أوصى بضرورة اهتمام وزارة التربية والتعليم الفلسطينية بزيادة إدراك المجتمعات المحلية بأهمية التعليم ذو معنى في المدارس، وتبني تجربة منطقة النقب في تطبيق التعليم ذو معنى في مدارسها بهدف تطبيقها في المدارس التابعة لوزارة التعليم الفلسطينية.