The effect of using educational films on achievement among the eighth-grade students in the city of Tulkarm

This study aimed to identify the effect of using educational films on achievement among the eighth-grade students in the city of Tulkarm. The study population consisted of (851) students, according to the statistics of the Directorate of Education in Tulkarm. The study sample consisted of the (73) eighth-grade students at the Abi Salma Al Karmi Basic Girls School in Tulkarm.

This study used an experimental research approach. The researcher chose two intentional classes from three available at school. One was experimental group and the other was a control group. The number of students in the experimental group was (37) (used educational films), whereas the number of students in the control group was (36) (traditional). The researcher prepared an assessment test about the construction technology unit of the eighth-grade technology textbook.

The study found out that there were statistically significant differences between arithmetic means of the experimental group (taught by the educational film) and the control group (taught in the traditional method without the educational film) in the results of the post-achievement test. The study recommended the need to urge the curriculum designers to provide educational films with school textbooks which could benefit the content knowledge.

Keywords: Educational film, achievement, eighth grade
Introduction and background

In general, education faced various challenges that affected its effectiveness and efficiency and thus it failed to meet the requirements of the modern age as well as the variables and requirements of the recent societies. The most important challenges included the revolution of information that characterizes the present era (knowledge explosion), as well as the communication and information technology that changed the nature of life and the educational institutions. These challenges forced decision makers and educators in the educational institutions to reconsider and employ modern methods and technical tools in teaching and learning, adopt nontraditional methods of instruction, and prepare and provide learners with educational materials (Al-Mannai, 2016).

Using modern technological techniques in the educational process has become an urgent need to equip students with many life skills, rather than focusing on the provision of content knowledge as the main objective. Therefore, using modern technologies is the best means of equipping students with life skills. Many modern technologies can be used in the educational process, including computers, educational software, internet, multimedia technology, e-learning and others (Abu Sarah, 2016).

Multimedia teaching provides learners with the opportunity to challenge unfamiliar learning issues, phenomena, and situations. It enables them to better comprehend the information in the form of text, sounds, images, and video clips via computer screens. Therefore, multimedia teaching and learning have significant impacts on learners’ understanding and acquisition of practical skills that empower them to persevere in the learning process (Dalal, 2006).

School nowadays possess multifaceted techniques such as morning talks, TVs, video clips, and a wide range of audio-visual aids (Abu Hashya, 2015).

The educational means are deemed as intellectual and practical practices designed to improve the teaching process, raise the level of the teacher’s performance, save time and effort, and increase learner’s awareness and understanding. The success of the educational process depends on the teaching aids. Departments and ministries of education have started to encourage and support using technical aids in the teaching. These aids are deemed a key factor and can eliminate elements of boredom and make the class more attractive. The educational film is one of these most important aids (Lal and Al-Gundi, 2008).
The educational film is one of the modern techniques which play a major role in increasing learners’ achievement levels. The film helps learners to retain information for longer periods of time because it contains elements of excitement and suspense. It plays an effective role in facilitating learner’s understanding of abstract ideas that are hard to teach using traditional methods. Hence, it increases learner’s motivation to learn, and the ability to achieve a higher level of academic achievement (Swidan and Mubarez, 2007).

Educational films aim to provide learners with real experiences. Using films in the instruction is not something new, but it develops over time (Hijazi, 2009). Understanding an educational film relies not only on the comprehensive educational content, but it also depends on the narrative content in which the educational messages are embedded (Michel et al, 2007).

Films not only affect our emotional responses, but also affect our perceptions of events and personal lives over long periods of time. Finally, it seems that there is some consensus that students generally prefer to use films in the classroom as an educational instrument compared to the more conventional classroom-oriented lessons (Mathews et al, 2012).

The film introduces visual images of abstract concepts and specific concepts taught in organizational behavior and management. Additionally, using educational films can enhance learning in a way that cannot be achieved via any other media (Rajendran & Andrew, 2014).

Cultural and artistic appreciation of the film addresses the educational importance in terms of audiovisual content. A better understanding of the culture and technical requirements of the cinema represents an opportunity for distribution and better communication with learners (Elkington, 2016). Thus, the creative use of educational hardware and software is the responsibility of the conscious educators who are interested in the development of flexible learning programs. These educators are able to put hardware and software at the disposal of the learners and teachers, which can develop the spirit of creativity and development (Shehada, 2006). We have to be pioneers in using these projects to transfer education from age of traditional instruction and memorization to the age of modernity (Saidam, 2016).

After conducting a lot of educational research and producing a lot of methodical educational films, this tool has become an essential part and plays an active role in the teaching and learning process. Therefore, many companies nowadays produce high-tech, multi-topic educational films (16 mm) which cover the needs
of the curriculum. This production keeps pace with the development of production tools and meets the learning needs. In addition to production, companies compete in producing innovative, state-of-the-art digital display projectors and LCD screens (Al-Klub, 2005).

In 1965, Sony, the Japanese company, introduced the first home video system (VCR). The digital video recorder appeared in 1990 (Al-Tawalba, Al-Sarayrah et al., 2010). Shaker and Safi (2009) point out that the educational film is the film that is produced according to the prescribed school textbooks.

A film is an educational tool that provides the required shared experience (Sonmez&Hakverdi-Can, 2012). The film is one of the best learning educational media that addresses the learner’s senses in an atmosphere of excitement and suspense. It is deemed as an instructional content that provides content knowledge in an effortless interesting and inspiring way. It saves effort and time for both the teacher and the learner (Swidan and Mubarez, 2007).

The educational film can be defined as "an audio-video medium that conveys the educational material to the learners through the internet" (Farawana, 2012). The content is processed and edited using programs such as Camtasia, Premiere, and Snagit (Muhamad, et al, 2009).

Educational films help to overcome the lack of teachers’ professional competencies and lack of educational materials. They help to solve contemporary educational problems such as lack of competencies and buildings; they help to save time, effort and money (Salama, 2007). The films enable the learners to watch people and things that cannot be brought to the classroom (Al-Mahlawi, 2013). They hold the learners’ attention (Ubaid, 2011), and develop the self-learning and individual learning skills. They enable learners to teach themselves according to their abilities and intellectual capacities (Younes, et al, 2004). Films are inexpensive means that can be reused for longer periods of time. A teacher can vary the speed of the screening, according to learners’ attention and motivation (Qandil, 2006). Films can be edited and used as and when required (Zaytoun, 2004). Films are suitable for individual differences among students through individual learning and so a student can learn according to his own speed. Hence, a student can control the amount of time required for his study (Al-Kriti, 2014). It is always possible to use multiple teaching strategies in one program; it is also possible to attach a computer with a video device to take advantage of their capacities together (interactive video) (Eshtewi and Ulaiyan, 2010).
The microscopic video recording can record and screen the process of cell division (single cell), and can record some rare phenomena such as solar eclipse and lunar eclipses (Swidan and Mubarez, 2007). Films can help to teach skills that are difficult to teach in the traditional way like some sports skills and material resistance. More than one sense can be used to learn the content knowledge. In addition, films can be used to screen dangerous scientific processes to students such as fission of the nucleus (Salama, 2005). They can be stopped, resumed, forwarded, and rewound for discussion and interaction between the teacher and learners (Abdul Hamid, 2011). Students can sit in the front rows and follow the screening closely (Lazar, Althier; Sharma, Suniti, 2016).

The educational films provide learners with an opportunity to share creativity and teamwork. They feel they have a control over when and where they can study materials (Hulsizer, 2016). The films give the learners a means of cognitive control by allowing them to play and resume as and when required (Kay & Edwards, 2012). Films can increase social skills, communication skills, play skills (Marino & Myck-Wayne, 2015, p1), and they can also boost the learner’s visual IQ (Islam, 2015).

However, educational films have some cons to the levels of interest, content, and suitability. The video producer has a greater control over the content, which makes the teacher feels that he/she cannot control the content. Moreover, films can only be used if suitable projectors are available, and can be time-consuming (Badawi, 2009). They require great experience and care (Annegarn-Glää, Michael, 2016). The order of images cannot be changed easily and it may not suit the teacher’s desire in many cases (Kavadias, Dimokritos, 2017).

In some cases, students may reach incorrect generalizations from the films (e.g. Egypt is full of pyramids), thus the teacher has to modify his pupils’ misconceptions. Sometimes they get the wrong idea about sizes because images appear bigger on the screens than their real sizes (Ruud, Judith Kish; Ruud, 2017). There are other disadvantages, including the language of the film (foreign languages), time-related misunderstanding (historical films, plant growth) (Culloty, Eileen; Brereton, Pat, 2017), and lack of regular maintenance (Al-Nabahin, 2011).

Educational films contribute to the development of the educational process through their primary function. They raise learners’ interest in the subject. They help generate positive attitudes towards the scientific material, and encourage learners to learn in a creative manner. Video programs can help to plan and
organize the process of learning and instruction in a professional manner. The teacher sets a detailed plan of the educational process, then determines the learning objectives and the methods of assessment (Ubaid, 2011). Films, especially the colored still films, can help to develop aesthetic values. They help to strengthen previous educational experience from other learning methods, and then relate the studied elements of the study (Al-Heela, 2009). They help to stimulate learners’ attention, so they remain focused throughout the screening (Abdul Hamid, 2010). The films enable learners to interact and control their learning depending on their own learning style, track and sequence, and thus acquire content knowledge in the way that suits them (Matrood and Mohamad, 2013). Films can help to store and transfer competencies and capacities in teaching and training to various places in the form of micro-teaching (Al-Nabahin, 2011). They could be used as visual aids in the classroom – educational films shown to a large group of children, adolescents or adults (Southern, 2016). A video can be shown to students when they are reluctant to seek help from the teacher or the coach, or in the case when many students are not present (Hulsizer, 2016).

When enhanced with written reflection, documentary films can help students develop social and emotional learning in ways not available through textbooks or lectures. The platform complements classroom curricula and highlights issues that teenagers care about, such as technology and society, race and gender identity, and civil rights. (Vaughan-Lee, 2015). Research suggests that video modeling can be an effective intervention method to teach children with autism (Marino &Myck-Wayne, 2015). Films can also help to increase language skills such as speaking and reading as well as other language skills such as research, interviews, and organizing ideas (Malki, 2009). As an instructional tool, videos provide valuable insight into teaching and its complex nature and present examples for the purpose of professional development. The main purpose of video use is for professional development through the presentation and reviewing of examples that show students how to learn in the classroom. (Sonmez&Hakverdi-Can, 2012).

The process of producing an educational film can take several steps. First, a producer can find ideas that fit the context through the full coexistence of the surrounding environments, problems, issues and interests (Kavadias, Dimokritos, 2017).
Second, planning should include a complete plan covering all aspects of the educational program: selecting a topic from various disciplines, defining and formulating the general objective, defining the behavioral objectives, sorting the educational, behavioral objectives, defining the characteristics of the targeted group, selecting teaching aids, searching for relevant scientific facts including information, figures, pictures, and pre- and posttests (Southern, 2016). The program presenter should possess the necessary competencies of a successful presenter in terms of voice and appearance, and he should also be creative and be keen on by learners and viewers. (Muhamad, et al, 2004).

The third is the stage of preparation and presentation. At this stage, a teacher performs a set of arrangements, including watching the program in advance, setting the place appropriately, preparing learners for watching the program (he presents the core points in the subject of the study to draw the learners’ attention), and telling them about the required tasks during and after the screening to attract attention (Obaid, 2011).

The program can be filmed using one or more cameras. Appropriate music, sound effects and lighting are selected. Ready and supporting imagery, figures, photos, and educational materials must be edited in the program based on the director's instructions. They must achieve the objectives of the program, according to the scenario and subject (Lazar, 2016).

Before the screening, teachers make sure that there is a sound commentary. They also need to prepare the place in terms of lighting, ventilation, seating, screen position, LCD projector, and that the video is ready to play. (Rodgers, Wendy, 2018).

After the screening, students need to answer questions (Hijazi, 2009) to assess the students' achievement and verify the achievement of the intended objectives. Sometimes students have to do related tasks after days of screening, such as writing reports, conducting experiments, conducting field visits, painting, or other activities (Ruud, 2017).

The success of the educational film is based on several elements. A film will be successful if it provides the student with real life experiences, whether at school or at home. Students can see and hear by themselves, which gives them direct experiences. Films can contribute to the retraining of ecological perceptions when it overlaps with viewers’ personal affiliations and experiences (Culloty, Eileen; Brereton, Pat, 2018).
The success of using instructional films depends primarily on how the teacher develops a plan or strategy to maximize the educational benefits. Lack of a structured planning usually turns the screening into some sort of entertainment. Thus, the screening in the classroom becomes a waste of time (Ajaj, 2014, http://cutt.us/JxBd). The screening should include technical aspects, (Southern, 2014), individuals, objectives, content, and interaction (Odeh, 2016).

Teachers should have a good level of understanding of the film and the ability to be conscious in the selection of the films. They should be able to watch and analyze the film content, cinematography, and technical aspects. They need to have the ability to manipulate language, technical resources, creativity, and the production of anime (Reia-Baptista et al., 2014). In order to hold students' attention, educators need to reach them emotionally (Vaughan-Lee, 2015). The video format plays an important role in the success or failure of the film (Malage & Koppel, 2017).

There are things to consider during the screening an educational film. What is seen and what is heard should be compatible. A variety of screening methods should be used to maintain excitement and attention, address learners directly, and promote answers through feedback and appraisal. Screening must not exceed 30 minutes in order to hold learners’ focus. The material must be divided into small parts of three 3-4 minutes (Rodgers, Wendy, 2018).

There are important elements in the design and production of anime films. The production team should consider the elements of the successful program in terms of image, sound, achievement of objectives, learners’ imagination, language suitability, and screening in the classroom (Torabian, Asefeh, 2017). Teachers should prepare students for screening, and encourage them to think and play a positive role. Teachers should follow-up after the screening to assess the achievement of the envisioned objectives, the continuation of the learning process, and the correlation of the parts of the subject (Nieminen, Marjo, 2018).

If the video is still, the teacher should offer comments during the screening, according to the students’ levels. If the video includes commentary, the teacher should delay his comments to the end of the screening (Öman, Anne, 2017). The beginning of the video should be interesting for students (O’Neill, Deirdre, 2015). The video should be relevant to the pupils’ levels and ages; it should also be directed and edited with high quality (Salama, 2005). The video should also provide learning and fun at the same time; a teacher should give a brief presentation of the content after the screening ends (Bruch, Anne, 2016).
The problem of the study

The researcher points out the issue of the educational films and their relationship to academic achievement has a paramount importance in the educational process, especially for pupils in the basic levels. They are important for students since they alleviate the complexity of the environment. The films organize and classify a large number of events, things and phenomena that constitute the main scientific principles and concepts. They help to understand the problems that people face in their daily life situations. The basic school stage is one of the most important and most suitable stages for reinforcing the scientific concepts. Most scientific concepts at this stage are abstract and hard to understand. Most students learn the tangible concepts better.

The researcher confirms that there is a low level of achievement in some subjects. Teachers do not often use modern teaching techniques, and they do not keep up with the up-to-date developments in the field of education in line with the curriculum. These recent developments in the educational process, such as educational videos, encourage the use of modern methods which increase the level of thinking, motivation and achievement among students.

The problem of the present study has risen because teachers tend to use the traditional methods of teaching and hardly use modern teaching methods. There are many TV LCD screens in schools nowadays, but they are scarcely used for screening educational films. Likewise, other useful educational programs which increase the learners’ enthusiasm and thus improve their academic achievement due to the elements of suspense and pleasure.

The educational films hold the attention of the students for longer periods of time. Unlike other traditional methods, they help learners to learn faster and retain more information. Moreover, they help to facilitate the understanding of difficult, abstract concepts by displaying them closer to reality. They help to retrieve information during the exams, thus increase learner’s achievement. They also help to alleviate boredom during the lesson, and save the teacher’s effort and time.

Al-Nabahin (2011) states that using videos in schools increases knowledge and culture, enables to restore history, strengthens the language, teaches the disabled persons, and the entertains the viewers. Students learn much better with videos, instructional videos and video cassettes.
Farwana (2012) refers to the importance of video as an educational instrument that contributes to the development of the educational process because of its adverse advantages. He summarizes its advantages: “It is a comprehensive educational tool to combine sound, image and movement. We can use more than one educational medium in one program. It can address the problem of incompetent teachers; we can use video to train teachers on new teaching methods.

Therefore, the researcher tried to solve this problem by answering the main question of the study:

What is the effect of using the educational film on the achievement of the eighth-grade students in the city of Tulkarm?

**Hypotheses of the study:**

This study sought to examine the following null hypothesis:

There are no statistically significant differences at the level of significance of ($\alpha \leq 0.05$) between the average means of the students of the experimental group (who studies with the educational film) and the students of the control group (who studies with the traditional method without using the educational film) in the scores of the post-achievement test. Could you classify the test to three domains: concepts, procedures and problem solving? 4 hypotheses instead on 1 ???

**Objectives of the study:**

This study aimed to identify:

- The effect of using the educational film on the achievement of the eighth-grade students in the city of Tulkarm.
- The effect of using the educational film to simplify the subjects of the eighth-grade students in the city of Tulkarm.
- The effect of using the educational film to establish and maintain the teaching material of the eighth-grade students in the city of Tulkarm.

**The significance of the study**

The study has both theoretical and practical significance.

1. **Theoretical significance:**
The study highlights the bigger role of educational films in the classrooms. It highlights the use of free instructional tools, such as educational films. It seeks to help and encourage teachers to use the educational film because of its significant role in increasing academic achievement. Within the researcher's knowledge, there are very limited studies on this subject. This study is deemed as one of the most important modern studies and its findings should be widely circulated among teachers because of its significant impact on increasing student's academic and scientific achievement.

2. Practical significance:

This study urges the educators to use modern methods of education and avoid the traditional methods as much as possible. It also provides the specialists with a training program that teaches the design skills of the educational film for both old and novice teachers. It also contributes to the development of teaching skills of the educational film design by students, so they can pick up this skill faster and more proficiently.

The present study highlighted the importance of using educational film in the learning process for schools in Tulkarm in particular and all other governorates in general. The film increases academic achievement and holds students’ attention. The study also aimed to identify the main challenges that hindered using videos in education, and find the best possible solutions through good planning based on scientific methods.

The terms of the study:

Educational Film: The educational film is an advanced educational material that combines sound, image, movement and other various effects. It provides knowledge, skills, events and experiences in an attractive and sequential manner that stimulates students to follow up without pain and effort experienced by learners and teachers during the study. It saves effort and time for both the teacher and the learner. (Al-Kloub, 2005, p195). The images that accompany the sound encourage the students to become more motivated and interested in learning the language. (Tekin&Parmaksiz, 2016, p200)

The researcher (operational definition): The educational film is the type of film that is used as a learning tool or an instrument which helps teachers deliver information to the students. It's an interesting audio-video method that holds the learners’attention and broadens their knowledge scope. It helps them to
understand and simplify the subject in a way that raises the student's attention and promotes the scientific and academic level.

**Academic achievement** (term): The amount of achieved educational objectives by the learner in a given subject as a result of acquiring educational experiences and attitudes (Ali et al., 2011, p311). It is also defined as the student’s average scores in the achievement exams and the scientific performance after learning the subject in the traditional way or after completion of the educational portfolio (Al-Mutairi, 2013, p6).

The researcher points out (operational definition) that the academic achievement is the student’s score after learning and completing a specific educational subject. The teacher determines this score based on the learner's efforts on a given subject as a result of a specific achievement exam or position in the learning process.

Eighth Grade (term): The first grade in the upper elementary level; age group ranges between 13-14 years (Tarawneh, 2012).

The researcher (operational) confirms that the eighth-grade students are a group of males and females, aged between 13-14 years. They learn at an intermediate level, between grades 7 and 9.

The city of Tulkarm: a city in Palestine located in the northern West Bank. It has an area of 32.61 dunums. It has many health, educational and cultural centers and other centers that serve the citizens and meet their needs.

**Limitations of the study**

**Time**: the second semester of the academic year (2017/2018).

**Place**: 8th-grade students in the Abi Salma Al-Karmi School in the city of Tulkarm.

**The scope of the study**: The results of the study were disseminated within the limits of the research.

**Related studies**

The study of Ahmad et al. (2016) aimed to identify the attitudes of kindergarten or preschool teachers towards using educational film in the childcare centers. The sample of the study consisted of 40 preschool teachers in the Jableh city in the Latakia Governorate, Syria. They worked in 7 kindergartens (5 private and 2 public). The population of the study consisted of all preschool teachers (260) according to the statistics of the Latakia Directorate in the academic year
(2015/2016). To achieve the objectives of the study, the researcher used a scale to measure their attitudes. Data were then collected and analyzed. The attitude scale comprised 31 items, of which 17 were positive questions and 14 were negative questions. The researcher used the five-level Likert Scale. The study discovered that there were positive attitudes among preschool teachers towards using educational videos in the kindergartens. The study recommended the need to provide the necessary means for educational videos (TVs and PCs) and the need to provide them with incentives to encourage them to use educational videos in an interactive activity room.

The study of Abbas (2016) revealed the impact of using film in the development of some scientific concepts of the preschool children (5-6 years) years in the Latakia Governorate, Syria. The study aimed to identify the average mean of the experimental group responses according to the variables of (type, kindergarten support, kindergarten place). The study used a semi-experimental approach (experimental group and a control group). The population of the study consisted of (5715) children. The researcher prepared and screened 8 educational films. The films were shown to a group of arbitrators to assess their validity. After making the necessary changes, the films were screened to children in the experimental group. The children in the control group were taught in the traditional way (without films). The study sample consisted of (40) children from two kindergartens; the first was in the rural region of Latakia and the second was in the city of Latakia. The collected data were processed and analyzed using the program (SPSS). The study found out that the educational film was effective in the development of concepts among preschool children aged (5-6) years. The study recommended the need to benefit from educational films in the development of some scientific concepts among preschool children in the kindergarten.

The study of Tekin and Parmaksiz (2016) aimed to examine whether using feature films in video lessons has an effect on the development of listening skills of students or not. The research has been conducted at one of the state universities in the Black Sea region of Turkey with 126 students. The students watched and listened to only the sentences taken from categorized feature films. In the research, the Factorial Research Design, one of the quasi-experimental designs, was used. Data for this research are obtained from three experimental groups participating in different implementations. Within the scope of the implementation process, pilot groups have accessed clips extracted from authentic movies with different content (Horror, adventure and drama) for a
month at the laboratory courses in school. The students were asked to write down the sentences they heard from the clips. These sentences were compared with the original sentences from the clips. Study pages with 20 video clips (10 short, 10 long) were added. Moodle Internet-based course preparation system version 1.9.7 was used as the data gathering tool, whereas gradual scoring scale (rubric) was used in order to determine the cases of understanding what they hear. The study found that there was no significant difference between the categories of authentic movies (horror, adventure, drama) and the success of students. At the end of the research, it was found out that the categories of the films did not make a statistically significant difference in the success of the students while there was a statistically significant difference in the success of male students in each film category in respect of short replicas. The study recommended the need to implement this application at laboratory courses. This application can be carried on the Internet and the mobile environment and the students can access the videos any time they wish, which might be a subject of research whether this will have an impact on success level or not.

Saeverot& Torgersen(2016) investigate the importance of individual differences in short-term memory capacity (STM) for learning from a film (digitized video) and analogue text in a natural learning environment in Norway. The results are based on a survey of 396 students at Bachelor's level (military cadets, teachers, college and psychology majors). Respondents were divided into two groups, one receiving a film presentation and one reading an analogue text (the film narrative). The subject matter was the formation of the Norwegian nation in the tenth and eleventh century (history subject at high school/college level). A knowledge test measuring the total learning outcome as well as details and interconnection were developed. The difference between details and context was emphasized. Details referred to some dates and names, which were measured with 9 questions. The context was measured with 4 questions. The study used an experimental method. The study found that there was a significant correlation between the ability of the visual and aural memory capacity and learning from the text of the film.

Alison’s study (2015) aimed to explore the use of instructional videos in K-12 classrooms. A mixed-method study was used to answer the research questions. The superintendents at two different school districts in southwestern Pennsylvania distributed an online, researcher-created survey via a mass e-mail system. The survey included a variety of demographic questions, technical questions, and pedagogical questions. A pilot test was conducted in order to
further refine the researcher-created survey instrument. A descriptive statistical analysis was used to analyze the quantitative data received from the survey questions. A total of 324 classroom teachers was invited to participate in the study, and 73 teachers responded to the survey creating a 23% response rate. The quantitative data were analyzed through descriptive statistics. Based on the findings, 85% of the K-12 educators who responded used instructional video technology for educational purposes.

Salman's study (2014) aimed to identify the effectiveness of the educational video in the development of the English language reading skills among the third-grade students. The researcher designed a video-based teaching program to teach English reading skills. The researcher selected a sample of (60) students from the third-grade pupils (the basic level) from the public schools in the Quneitra Governorate. The researcher used a semi-experimental method. The sample was divided into two groups. The pilot group learned reading skills through an educational video; the control group learned the same reading skills through the traditional method. The researcher compared the results of the two groups through observation and a number of achievement tests to measure their reading skills. The study found out that there were statistically significant differences between the average means of the pilot group and the control group. The results confirmed that learning English language skills with videos was better than learning it using traditional methods (94%).

The Sharabati’s study (2014) aimed to investigate the effect of using videos on changing students’ alternative concepts on the subject of the organism diversity and classification. It compared their academic achievement with learning through the traditional methods. The study used a semi-experimental approach. The study population consisted of the eighth-grade students (6700) from the governorate of Ramallah and Al-Bireh in the academic year (2014-2015). The study sample consisted of (524) students from eight schools in the governorate. The pilot sample consisted of (128) students while the control sample consisted of (396) students. The tools of the study included tasks, videos, achievement, and alternative concept tests. The study was conducted on 30 female students. The validity and reliability of the study instrument were verified. When the achievement test was re-applied after three weeks, the reliability coefficient reached (0.82). The study results showed that there were statistically significant differences between the pilot group and the control group in the achievement test in the subject of the organism diversity and classification in favor of the pilot group.
Al-Masri and Al-Dara (2013) examined the effect of the interactive video on the skill performance and score level of the discus throw. The study sample comprised of 40 freshman students at the Faculty of Physical Education and Sports at the Al-Aqsa University in Gaza in the second semester (2009-2010). The empirical group (20 students) studied using the interactive videos, whereas the control group (20 students) studied through the traditional methods. The researchers used the experimental approach. They used the method of applying and re-applying the test again on the study sample. The tests were re-applied to the same sample after seven days (31/3/2010 – 6/4/2010). The study found out that the interactive videos had a greater impact on students’ skill performance and score level.

Matrood and Mohamad (2013) examined the effect of using interactive video in acquiring & retention the technique of performance snatch lift in weightlifting. The researchers adopted the experimental style that was appropriate for the study. The research society consisted of students of the preparatory stage, the ninth grade in the semester (2011-2012). The sample (112 students) was divided into (4) groups. The sample consisted of the students of two groups randomly chosen. The sample (20 students) was intentionally chosen, and divided into two groups. The first one was experimental that teaches through interactive video and the second one (the control) was taught through the traditional method (showing & explaining). The sample of the study represented (15%) of the entire population. The program lasted for (5) weeks for two teaching units for every group. The time of teaching unit was (40) minutes. To achieve the objectives of the research, the serious tests were conducted. The collected data were processed and analyzed. The researchers concluded the following: The study proved the effectiveness of the educational program which was prepared by interactive video technique for the group in acquiring the skill of the performance of the art of snatch lift.

Moskowitz & Sharf (2012) examined the use of films as an educational tool in sociology instruction. The study examined and demonstrated practices in using elements and techniques employed by the action research method to derive a better classroom outcome. The study used qualitative methods and interviews with students who participated in this process. The interviews were open without a questionnaire, and were mainly conducted after the lesson in a friendly manner. The researchers interviewed 30 students, and used film as a teaching method once during each semester, for several years. The data were collected from three small colleges in the Galilee (northern Israel). The worksheet was
used three times – before the screening, during screening, and after it. The study used a descriptive approach. The study found that the film succeeded in concretizing the curriculum. In addition, it supplied many situations that illustrated sociological theories and concepts, such as values, patterns of behavior, and norms that are elements of organizational culture. The study recommended that the use of film was useful because it contributes to the involvement, collaboration, pluralism, creativity, assessment, and evaluation of the students. It encouraged teachers to use film for active learning in school, college, and university.

**Methodology and procedures**

**Methodology of the study**

This study used the experimental method (A collection of stories, worksheets, achievement test) to investigate the effect of the use of the educational film on the achievement of eighth-grade students. The sample of the study comprised two groups. A pilot group studied using educational films; a control group studied using the traditional method without using educational films.

**Population of the study**

The study population consisted of all the eighth-grade students in the public schools in the city of Tulkarm in the second semester of the year (2017/2018). The total number of the students was (851) according to the statistics of the Directorate of Education in Tulkarm.

**Sample of the study**

The sample of the study consisted of the eighth-grade students in the Abi Salma Al-Karmi Basic Girls School. The researcher chose two of three classes available in the school. One class was experimental group and the other as a control group. Table (1) shows the distribution of the study sample.

Table 1: Distribution of study sample according to the number of classes and the number of female students

<table>
<thead>
<tr>
<th>Group</th>
<th>Gender</th>
<th>School</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Experimental</td>
<td>Female</td>
<td>Abi Salma Al-Karmi</td>
<td>37</td>
</tr>
<tr>
<td>Control</td>
<td>Female</td>
<td>Abi Salma Al-Karmi</td>
<td>36</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td></td>
<td>73</td>
</tr>
</tbody>
</table>
The researcher chose Abi Salma Al-Karmi Girls School because it was known for its efficient teachers. The school administration and the IT teacher agreed to conduct the study at this school and to cooperate with the researcher.

**Instruments of the study**

According to the methodology of the study, the researcher used the following tools to collect information.

**Achievement Test:**

The researcher developed an achievement test to assess the effect of the use of the educational film on the achievement of the eighth-grade students in the unit of Construction Technology in the eighth-grade Technology textbook in the academic year (2017/2018). The test consisted of (6) True/False items, (4) multiple-choice items with four choices, and (11) essay items. Each item in the test measured a behavioral objective based on the chosen learning material (Construction Technology). The questions were diverse and comprehensive for all levels. Annex 4 shows the final Achievement Test.

**Validity of the test:**

The initial version of the test was presented to 6 experienced and specialized arbitrators of teaching methods as well as technology teachers in the Palestinian schools. This procedure aimed to validate its suitability based on Bloom’s Taxonomy of Educational Objectives, to ensure the test items were related to educational material, and to verify the items accuracy, clarity and scientific and linguistic integrity (Annex 1). In the light of arbitrators’ observations and suggestions, the researcher carried out the requested changes. The initial form of the test consisted of 10 True/False items and 12 essay items. After the modifications, the final version of the test consisted of 21 items. The number of the True/False items became 6, the number of multiple-choice items with four alternatives became 4, and the number of essay questions became 11.

**Reliability of the test**

To verify the reliability of the test, the test was applied to a study sample from the study population and not from the study sample. The sample consisted of 20 female students. The test was applied and re-applied (Test - Retest) on the same students two weeks after the first application. The Pearson correlation coefficient between the first and second test scores was calculated. The reliability coefficient reached 0.80.
Correction of the test:

After the test was distributed to the sample members of the study, the test papers were collected and corrected. One point was given for each correct answer, and zero for the wrong answer. The highest possible score was (30), and the lowest was (0). Annex (5) shows the model answers.

Educational Film Collection:

The researcher produced various videos films. The CD included all videos clips of the content of the scientific material of the unit of Construction Technology from the technology book of the eighth-grade for the academic year (2017/2018). The collection consisted of three films. The researcher prepared them after an extensive and specialized search for suitable videos on YouTube. This process included the removal of unwanted parts of the chosen videos, merging the suitable clips, adding the voice of a student to the final film, and adding text and photos to illustrate the ideas.

These are the final video films.

- "Stone is the White Gold of Palestine": This video showed the phases of the stone industry. After the removal the unwanted parts, a number of images were added to the film, simple texts were added to illustrate the concepts, and the quiet music was also added to the film.

- "Types of Stone": This video included a set of pictures of stone locations in Palestine as well as pictures of the types of stone. The researcher added commentary audio to the video in a simple language for the students. Simple texts were also added to illustrate the pictures, and the quiet music was added to the film.

- Stone Lesson Competition: This video included a contest on the lesson of the white stone of Palestine. It contained thrilling tracks and a set of questions with suggested answers, and it displayed the correct answers.

Variables of the study:

Independent Variable: The teaching method had two levels: (Traditional method without the educational film, and teaching using the educational film).

Dependent variable: The study included one variable, the development of educational achievement.

Controlled variables:
• Gender: Females only.
• Age: 13-14 years old.

• Educational content: The same unit was taught for the two groups.
• Number of classes: The two groups were taught the same number (3 classes).

**Procedures of the study:**

To implement the study and achieve its objectives, the researcher carried out the following procedures:

- The researcher reviewed the educational literature and previous studies and chose to use the educational film and its impact on academic achievement as a subject for the present study.

- The researcher selected the student community and educational content. He chose the eighth grade and the unit of Construction Technology; the fourth unit in the eighth-grade technology book in the second semester (2017/2018).

- The researcher prepared the study tools (a set of educational videos) to teach the pilot sample. The researcher also designed the lesson plans as well as the achievement test, which was presented to the arbitrators, then made the requested changes. (Annex 2).

- The researcher visited the Abi Salma Al-Karmi Basic Girls School on 22 March 2018. He proposed to conduct the study on two classes of the eighth graders. The school administration and technology teacher approved and welcomed the proposed research. Thus, this school was chosen for the study.

- The researcher personally applied the study and taught the pilot group the unit of Construction Technology using the prepared educational films. He taught the control group using traditional method (without educational films). The teaching ended on 3 April 2018 (3 lessons a week for both the control and pilot groups).

- The researcher conducted the post-achievement test (Annex 5) on the control and pilot groups at the same time and on the same day (18 April 2018).

- Data were collected and processed, the results were discussed, and recommendations were written by the researcher.

**Statistical Processes:**
To achieve the objectives of the study, answer its question and test its hypotheses, the researcher used the Statistical Package for Social Sciences (SPSS) program, including the average means and the standard deviations of the control and pilot group on the achievement test, T-test for the independent samples, and Pearson Correlation Coefficient.

**Result analysis and discussion**

**Results of the study hypothesis:**

The hypothesis of the study assumes that there are no statistically significant differences at the significance level of (α≤0.05) between the average scores of the pilot group (who studies using the educational film) and the average scores of the control group (who studies using the traditional method without the educational film) in the students’ scores in the post achievement test.

To test this hypothesis, the researcher used the T-test for the independent samples to identify the significance of the statistical differences at the significance level of (α≤0.05) between the average scores of the pilot and the control groups in the post-achievement test. (Table 2 shows the results of the T-test).

**Table 2**

Average means, standard deviations and T-test value of the scores of the experimental group (using educational videos) and the scores of the control group (traditional method without educational videos) in the post-achievement test.

<table>
<thead>
<tr>
<th>No</th>
<th>Group</th>
<th>Members</th>
<th>Average</th>
<th>SD</th>
<th>T Value</th>
<th>Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Experimental</td>
<td>37</td>
<td>21.18</td>
<td>5.65</td>
<td>2.699</td>
<td>*0.009</td>
</tr>
<tr>
<td>2</td>
<td>Control</td>
<td>36</td>
<td>17.51</td>
<td>5.94</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table (2) showed that the T-test value was (2.699) and that (P = 0.009) i.e. It has a statistical significance at (α≤0.05). Therefore, we rejected the null hypothesis and approved the alternative hypothesis that there were no statistically significant differences at the significance level of (α≤0.05) between the average scores of the experimental group (who studied using the educational film) and the average scores of the control group (who studied using the traditional method without the educational film) in the students’ scores in the post achievement test.
Table (2) showed that the average score of the students in the experimental group was (21.17); whereas the average score of the students in the control group was (17.51). Thus, there was a significance in favor of the pilot group that used the educational videos.

The researcher attributed the significance of teaching with educational films over the teaching in the traditional method to the characteristics of the videos, especially their ability to hold students’ attention, stay focused, and follow up to the end. In contrast, the traditional method didn’t hold students’ attention and disengaged them. Students did not stay focused throughout the lesson. Besides, the multisensory engagement made the experiences richer and more memorable. The film included audio-video elements such as sound, imagery and motion.

Content knowledge was easily learned and easily recalled later because educational films integrated images with simple, familiar commentary in a way that attracted students' attention. Therefore, strange vocabulary (e.g. *Tobzeh*) was much easier to learn and to recall later by watching films than just listening to the teacher.

The researcher stressed that watching films helped to retain information, and improved the performance of the students in the exams. Films enabled students to see persons and places that could not be brought to the classroom, such as stone-cutting machines and workers in the stone industry. Films saved the cost of printing pictures which were used in the traditional method. Therefore, teachers could use films to deliver content knowledge to the student in a clear way.

Films included color elements. Most of the concepts in the school textbooks were colored. The colors helped draw the student's attention to the concepts in the film's content. In contrast, the traditional teaching method, teachers used single-colored pens which distracted students’ attention.

The film included more than one study instrument. It included the elements of music tracks, voice, pictures, videos, and special effects, which attracted learners’ attention and focus. With traditional methods, these elements could not be all integrated together.

As for the summative assessment, the pilot group used a film entitled Stone Lesson Competition, which included thrilling tracks and questions that contributed to increasing students’ attention, excitement, and participation. On the other hand, the control group used the traditional written test which was neither exciting nor motivating.
The results of the present study agreed with the studies of Abbas (2016), Salman (2014), Sharabati (2014), Matrood and Mohamad (2014), and Moskovich & Sharaf (2012). All these studies confirmed the important effects of the educational films on the students’ achievement.

**Recommendations of the study:**

Based on the study findings, the study recommends the following:

- The need to use educational films due to their role in achieving the lesson objectives.

- The need to hold training courses for the teachers on using and editing educational films.

- Official educators and curriculum designers should provide educational videos with the school textbooks to serve content knowledge.

- The need to conduct further studies on other educational levels that were addressed in the present study.

- The need to provide equipment and devices that help to display educational films in the classrooms in all Palestinian schools.
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