

The Effect of Using Cinemagraph Pictures in Social Platforms and Mobile Applications in the Development of Peace Concepts*

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The study aims at exploring the effect of using Cinemagraphs in social platforms (Twitter) and mobile applications (WhatsApp) in the development of peace concepts among samples of volunteer youth clubs (VYC) at the University of Hail (UOH) in the Kingdom of Saudi Arabia (KSA). The number of sample students is 182 (males and females), they are divided into 6 experimental groups representing 3 paths: Humanities, Engineering, and Healthcare. Each path is divided into 2 groups: one for males and another for females. The study was applied during the first term of the academic year 2019/2020. In general, the results reveal that there is a correlation between gender (M/F) and academic specialization paths (Humanities, Engineering, and Healthcare) in developing Peace Concepts (PCs) when using Social Mobile Applications (SMA) or Social Media Platforms (SMP). Likewise, a great effect is attributed to the academic specialization paths using Cinemagraph Technology (CGT) in developing PCs for VYC at UOH. However, there is no direct link between gender (M/F) and using CGT in the development of PCs among VYC at UOH.

Keywords: mobile, applications (SMA), academic specializations on developing PCs, specialization, achieving program objectives

1. INTRODUCTION

We live in an era in which move from “information society” to “knowledge society” that was soon evolved to form “the learning community”, such community represents the peak of the societal development; as society develops with many self-learning creatures. This is because intelligence is no more confined to the human race, but has extended to reach machines, tools, systems, and even institutions; thanks to the engineering of artificial intelligence, automatic control mechanisms, and the integration of information and communications technology in more creative ways. This was accompanied by the emergence of societies characterized by collective intelligence, which is the result of integrating the intelligence of its members with its machines in the melting pot of modern technology based on continuous and endless learning.

Thus, education must face this great challenge by relying on learning based on more creative principles; such as, how to learn, how to think. Such learning principles need new formulations and visions that depend on developing a new set of skills and attitudes, not just knowledge and information. Modern education is education, which emerged as a result

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of a new learning style (LS) in current generations, and it is a pattern of *e*-learning based on Click and Have Immediately and Interactivity. It is the LS in which different LS are mixed to produce a hybrid of the forces that can truly be considered the sixth sense in which the current generation lives [1].

Dynamic drawings and Cinemagraphs (CG) are becoming increasingly popular forms of media to portray scenes with animated, ambient textures and elements. Ebooks, logos, infographics, ecards, academic papers, infographics, social networks, new media, websites, and GIFs on social media make use of animated elements to enhance their appeal [2-4], CG extend video textures but focus on animating a specific part of the image [5], Adding a unique layer of interest, like selective movement, can make students pay attention [6]. By freezing most of the moving image details while animating only a few, CG can effectively draw more attention to a subject or area of interest. The moving details are expected to result in a vivid viewing experience, enhancing the perceived realism of the product [7]. The use of images and graphics in education is common because they perform basic and multiple educational functions, and the *e*-learning environment is the ideal environment for using them, with the possibilities of visual presentations, as *e*-learning is given priority for pictures and graphics, due to its multiple capabilities, the most important functions of images and graphics can be identified in the following: (attracting and motivating conceptualizing things and events describing and installing the movement improving skills and vocabulary enhancement gaining procedural knowledge supporting interactive and *e*-discussions achieving learning objectives developing thinking skills) [8].

CG is a new model for digital images, as it integrates the image and the video techniques. Most of its content is a static image with a simple repeated movement that was captured and placed in motion. It is thus able to draw attention to a specific object more creatively and effectively compared to traditional means. As the video and image were integrated into the CG, the frame was inserted, and the concept of time from the video. Therefore, students can watch the CG differently; interpreting complicated meanings as a result of merging and mixing static images and video frames side by side) [9]. The use of such technique may be a quick message that addresses the youth's senses towards forming positive or negative trends towards some values.

CG is used by photographers and marketers to capture attention, tell new visual stories, and drive results. It is characterized by the small size of its files compared to the size of the video files, so it is commonly shared among various social media websites and can be easily used on various internet sites as well [2]. Social media is "a group of Internet-based applications or 'interactive platforms' which allows the creation and exchange of the content generated by the users", it is considered as a fundamental part of the life of the youth [10]. Social technologies can facilitate the process of teaching and learning, help to spread various publications, sharing new ideas, and reutilizing study content, and commentaries [11]. Social networking is helpful to improve personal skills and professional communication by the continuous posting of pictures, videos, audios, chatting, writing blogs, creating and editing individual profiles [10]. Results of different studies indicate that social media websites are both educationally meaningful and popular among students in higher education contexts. The findings explain that the use of social media platforms could be highly appropriate for teaching and learning [12]. Preston *et al.*, (2010) found that nearly 70% of students stated that they learn just as well via online learning communities such as WhatsApp groups, Facebook communities, Twitter chats, and Google+ communities, as they do

in lectures that were held in the classroom in the presence of other students. These factors have made higher education increasingly utilize social networks in the process of teaching and learning [13].

Recently, peace education as a field has received worldwide attention from scholars, educators, and policymakers. Consequently, the United Nations have consistently promoted the introduction of curriculum contents that emphasize the core values of peace and nonviolence as a major route for instilling a culture of peace in young people [14, 15]. Various countries have recognized the primacy of education in the achievement of a culture of peace by incorporating crucial elements of the UNICEF peace education values into the curriculum systems [14, 16]. The aim of peace education is to deepen students' perception about the PC. Peace education is a prerequisite for post conflict and multiethnic societies in order to reconstruct justice and peace-oriented societies [17].

Peace education programs in some cases have been established within high schools, integrated into undergraduate curricula, and training institutes. Other paths through which peace education programs have been advanced include mainstreaming the concepts and practices into the works of governments, community groups, civil society programs, and nongovernmental organizations [18]. Peace concepts stress on values such as planetary stewardship, development, global citizenship, and humanity as major keys for addressing all forms of violence both within the school context and in the community setting as well [19]. What we see daily through social networking of speeches and images on the cause of peace in the Arab world, contributes to providing an atmosphere of dialogue, exchange of ideas, and transcending differences and conflicts, searching for points of participation and intellectual intersection to build stable societies that think about a common future.

2. THEORETICAL RSSI MODEL

The researchers found the research problem through:

Observation: The researchers formed educational groups on some social networking (TwitterFacebook – WhatsApp) in the subjects that they are teaching. They noted that learners exchange a large amount of expressive, modified, static, and animated images as well as videos, which direct their directions (positive or negative) towards some habits, behaviors, and issues. Then, the unclassified personal interview: The researchers interviewed some students and discussed their use of social networking. They unanimously agreed on the importance of these sites to them as an important source of information. To a great extent, they trust the information when presented in pictures or videos. Sometimes, such websites are considered a source of entertainment. At other times, they use them for educational purposes as they prefer to communicate through them with their teachers or colleagues in the various decisions to complete the assignments and deliver them.

Considerable amounts of studies reveal that peace education activities contributed to the realization of the importance of a peaceful and sustainable future. The findings reveal that the majority of the participants believe that PC should be taught [14, 17, 18]. However, Abbas (2015) emphasized the role of virtual groups in disseminating PC, with the interactions they provide and their dependence on the exchange of various multimedia [20]. In further recognition of the necessity for training in peace educators, scholars have called for the inclusion of PC training for in-service teachers [21]. Distance education can be effect-

tively used for promoting PC [16]. Others conclude that: Peacebuilding in education is a more active attitude that peace education is used as a means of building a more stable and peaceful culture. PC are essential for building a culture that reduces the need to consolidate peace and maintain peace through a comprehensive program [22]. Further than more, Analysis of studies that dealt with the CG [2, 7, 9, 23-25], And studies related to SMA [7, 26], As well as studies related to the use of SMP [27-30]. The researchers achieved: CG is effective in drawing more attention, it enables the creation of several attractive applications such as creating dynamic scenes for games and interactive environments. Also, it has a major role in realizing the temporal events presented during it, and studies recommended more research to enhance the employment of CG and contribute to the success of its use. The importance of using SMP and SMA in teaching and learning, as well as distance training.

Using SMA or SMP (FacebookTwitterWhatsApp Skype) to communicate, help achieve many goals and plans. Both of SMA and SMP can be invested in achieving formal or informal educational purposes, such as: raising the level of knowledge and awareness, increasing the positive spirits of the learner, expanding the circle of learners, combining individualism and collectivism, and encouraging ideas and creativity [31-34]. Relly, In the development of *e-learning*, we are always creatively incorporating great technology into our interactive courses, including videos, infographics, and animation. Cinemagraphs are the latest trend to join the multitude of resources at our *e-learning* fingertips [35]. Accordingly, the research problem can be formulated in the existence of a deficiency in the PCs among UOH youth, the absence of technological programs at the university that earn them concepts of peace; and despite the presence of students most of the time on social networking programs, they were not used to develop important concepts and values of society and were not intellectually protected from their exposure to strange and extremist ideas. Accordingly, the main question can be formulated: "What is the effect of using CG on SMP and SMA in developing PCs for the VYC in UOH?".

Questions:

1. What is the effect of CG in SMP (Twitter) in developing PCs among YCV at UOH?
2. What is the effect of CG in SMA (WhatsApp) in developing PCs among VYC at UOH?
3. What is the difference between the uses of CG in SMP/SMA (WhatsApp/Twitter) in developing PCs among YCV at UOH?
4. What is the effect of gender (Male/Female) when using CG in developing PCs among VYC at UOH?
5. What is the effect of the academic specialization (HealthcareEngineeringHumanities) when using CGT in developing the PCs among YCV at UOH?
6. What is the relation between the gender (F/M) and the academic specialization in developing PCs when using SMA?
7. What is the relation between the gender (F/M) and the academic specialization in developing PCs when using SMP?

Hypotheses

First and second hypotheses are: There are statistically significant differences at the level (0.05) due to using CG in SMP in developing PCs for VYC at UOH. And There are statistically significant differences at the level (0.05) due to using CG in SMA in develop-

ing PCs for VYC at UOH. Third and fourth hypotheses are: There are no statistically significant differences at the level (0.05) between the use of CG in SMP and SMA in developing PCs among VYC. And There is no statistically significant effect at (0.05) level due to gender (M/F) when using CG in the development of PCs among VYC at UOH.

Fifth, sixth, and seven are: There is no statistically significant effect at (0.05) level due to academic specialization when using CG in the development of PCs for VYC at UOH, There is no statistically significant interaction at the significance level (0.05) between the gender (F/M) and the academic specialization in developing PCs when using SMA, and There is no statistically significant interaction at the significance level (0.05) between the gender (F/M) and the academic specialization in developing PCs when using SMP.

Goals

The research aims to: production of CG to develop PCs for the VYC at UOH, Identifying the impact of the use of CGT on social media on developing PCs for VYC at UOH. Also, Identifying the impact of using CG in SMA on developing PCs among VYC at UOH. Knowing the impact of academic specialization on using CG in developing PCs for VYC at UOH, and Knowing the effect of Gender on the use of CG in developing PCs among VYC at UOH.

Tools

The researchers used three tools: first is a PCs list that is required to be developed by the YVC, second is PCs Test, and third is a proposed program based on the use of CGT.

Design of the RGL Scheme

The research used the descriptive approach to analyze previous studies and pedagogical literature, and the semi-experimental approach was used with a pre/posttest as shown in Table 1, to identify the impact of a proposed design based on the use of CGT in SMA and SMP in developing PCs for UOH youth.

Table 1. Research experimental design.

Group	Pre-Test	Treatment	Post-Test	
(1) Male / Healthcare	PCs Test	CGT / WhatsApp	PCs Test	
(2) Female / Healthcare		CGT / twitter		
(3) Male / Healthcare		CGT / WhatsApp		
(4) Female / Healthcare		CGT / twitter		
(5) Male / Engineering		CGT / WhatsApp		
(6) Female / Engineering		CGT / twitter		
(7) Male / Engineering		CGT / WhatsApp		
(8) Female / Engineering		CGT / twitter		
(9) Male / Humanities		CGT / WhatsApp		
(10) Female / Humanities		CGT / twitter		
(11) Male / Humanities				
(12) Female / Humanities				

Participate

A sample of VYC (Applied Medical Sciences/Healthcare Path Engineering/Engineer-

ing Path Education/Humanities Path) at UOH was selected. It was divided into 12 groups according to the experimental design (Table 1).

Limitations

While the study demonstrated positive results, there were 4 limitations that should be mentioned. First, the research was limited to producing a group of CG dealing with PCs, second the research procedures were applied to small groups of VYC from UOH (Young men from UOH are interested in directing efforts to volunteer and development work for the community), KSA, and third was the study was applied during the first term of the academic year 2019/2020 (just for 20 days).

3. THEORETICAL FRAMEWORK

CG is a particular type of animated GIF that is almost entirely static, apart from some small details within the image that move subtly in an infinite loop. Its contemporary emergence seems closely connected with the present reconfiguration of the traditional categories of stillness and movement from the standpoint of interconnectedness and simultaneity. With the loop as its structural principle, based on repetition and brevity, the cinemagraph's iterative operation generates an analytical experience that suggests that it is impossible to look at the image's movement without simultaneously seeing its static 'counterpart' [4].

3.1 CG a Living Photograph

CG is a hybrid of digital photos and videos (Keating, 2018), the CG is an almost completely still GIF image in which, nonetheless, one or more animated details are present, repeating themselves indefinitely in a 'subtle', sometimes almost imperceptible, circular movement [4, 36]. CG combines the approach of still photography with the dynamism of video. They are a potentially great way to leverage consistency with new innovations in storytelling and creativity. And, if you're already shooting photos and videos anyways, the barrier for entry is low. It is a low risk, high reward creative experiment [37]. CG: The research team defines it procedurally as 'Static' images characterized by the presence of a moving hint in the form of a moving part (video) of these images, in which the designer intentionally refers to the movement area (video) indefinitely to develop PC.

3.2 Characteristics of CG

CG extends video textures but focuses on animating a specific part of the image, IT represents a hybrid, a paradoxically animated photographic image, obtained via the use of techniques originating in photography, cinema, video, and collage. The moving elements which make up a GIF are, in this case, isolated within the image to create an estranging suspension between the immobility of the still as a whole and the animation of the individual detail. Also, Unlike GIFs, which are often lower quality, full animations on a loop pulled from an existing video clip, CG are a bit more subtle and artistic [6, 37].

Also, we can use the CG effect to create an emotional response in the learner which leaves a longer lasting impression than a still image. Master time and use time lapse and slow motion effects to vary playback speeds at the click of a button for that extra bit of

magic. CG can be further polished through special effects or text overlays. Ideal to capture the perfect moment with excellent positioning and using the best format for the job [3, 4]. CG is a new medium that combines the benefits of static images and videos; most of the frame is static, but some parts animate in a seamless loop [5]. Therefore, the most important characteristics as follows: These small, dynamic snippets of time convey more richness than a still photo, without being as heavy as a longer video [38], A type of media where dynamic and still elements are juxtaposed, as a way to focus the viewer's attention or create an artistic effect [38], and only parts of the scene are animated to emphasize selected dynamics in the scene [39].

CGT offer even more opportunities to tell a story and make an emotional connection to a learner than a photograph, with the added impact of movement to draw the eye, it can be a powerful means of storytelling in today's digital landscape [37], and it works well for *e-learning* because it reduces the amount of on-slide animation that helps create depth and richness. Also, it is easy to create a variety of interactive moments that cannot be represented by still images, add visual hints to the learner by focusing on a specific part of an image, and deal with personal photos, pick up minute facial expressions, and movement differences [2]. CG can provide opportunities for students to participate in activities, interact with peers, and build self-confidence. They also allow students to explore diverse interests and learn skills that will benefit their personal and professional development. Introducing CG will allow students to create eye-catching content guaranteed to impress for events, digital yearbooks, and online resources [40]. Among the most important techniques that are based on CG are Graphs as a medium that combines static and video images, Gestalt Theory, Information Processing Theory, Dual Coding Theory, Mono Coding Theory, and Connectivism Theory [2].

3.4 CG Production

CG is a usable technology, only utilizing a digital device and produced by artists, designers, or ordinary users. Several interactive tools have been developed to make it easier to create CG, including mobile apps and several research systems [5]. These approaches focus on developing a convenient interactive representation to allow a user to composite a CG by manual strokes. Commercial and mobile apps such as Microsoft Pix, Loopwall, Vimeo's Echograph and Flixel's Cinemagraph Pro are available, with varying degrees of automation. Also, cinemagraphs can be created using Adobe Photoshop, Premiere and After Effects [7, 24, 36, 37].

Clarke [42], Catanese [41] pointed out different Steps to create CG: (clear planning recording storyteller importing and clipping creating your mask editing your mask reversing (or not) exporting your CG). In these media, dynamic and still elements are juxtaposed to create an artistic and narrative experience. Creating a high quality, aesthetically pleasing CG requires isolating objects in a semantically meaningful way and then selecting good start times and looping periods for those objects to minimize visual artifacts [38].

3.5 SMP and SMA in Learning

Studies have shown that the successful uses of SMP and SMA in learning are: making and sustaining communication and collaboration, finding resources, media sharing, student

engagement, improved literacy, communication, reading skills, [43, 44], assessment, experiences sharing and provision of support, planning, and organization and evaluating educational resources [10]. Willbold [44], Norman [45], Habibi *et al.* [13] have confirmed that: the biggest advantage of social media is better communication. A student can connect with anyone at any point in time. It has also been found out that social media are an effective way to promote students' engagement as it enables shy, intimidated or bored students to share ideas and to express their opinions more comfortably and it could be used as valuable educational tools capable of enriching the learning experience [10, 43].

Some researches pointed to the educational benefits of social networking that help students prepare for important lessons and learn certain concepts with great efficacy. Social media websites will contain the latest data on various school subjects and thus, the students have the opportunity to survey and look into what is new [28, 44]. Likewise, social media can enhance collaborative work, facilitate collective decision making, and allow expressing the learner's expression or state of mind [30, 46]. Distraction, because sometimes students start using social media for personal purposes and get carried away; this means, they sometimes hold back others from exhibiting the necessary communication skills as they are completely absorbed into this world of different social media applications. Likewise, lack of direct human interaction, if the student makes excessive use and spends too many hours, this will logically affect the human relationships they have with other people in the real environment [28]. The volume and variety of available information on SMP could be a disadvantage and long lessons delivered online could become boring [30].

Alloway *et al.* [29], Alqarni [47], Ricoy & Feliz [48], Ross, *et al.* [49], Tucker & Clarke [50], AlTalwati [51], Yu, Tian, Vogel, and Kwok [52] confirmed that Twitter (as SMP) is one of the best platforms and social networks in the education process. While Platon, *et al.* [28], Abdulkhaleq & Ahmed, Mwakapina, Mhandeni, and Nyinondi, Abd-Alfattah emphasized the effectiveness of WhatsApp (as SMA) in teaching and learning processes. It can be effectively used for providing supplementary support to motivate students and to get higher grades.

3.7 Why PC in Learning

The research team defines them procedurally as: "a set of concepts that enhance the values of peace among VYC at the UOH". Education for peace implies active PC through values, life skills and knowledge in a spirit of equality, respect, empathy, understanding, and mutual appreciation among individuals, groups, and nations. Peace and education are complementary to each other as both contribute to the development and welfare of human beings [22]. Peace education is crucial for building a culture that reduces the need for peacekeeping by creating a comprehensive program that teaches people to interact with others and avoid unnecessary aggression. Dulnuan, Özkutlu [17], Akande [14], and Elachi [18] analyzed peace education importance, and stated these reasons that explain why PCs should be taught: To provide students with the capability and values they must have to build and sustain peace in their respective families, friends, community, workplace, country, world, and within themselves, as well, To constructively handle the aftereffects of war or conflict and the presence of violence in individuals' daily lives like increased violence and aggression. Furthermore, to develop the social responsibility need-ed in the 21st century. Also, to provide hope for a better future for the younger members of society.

Procedures

The process of producing a learning environment based on CGT passed after reviewing several design models [8], which are general models, and the researchers produced a proposed model for designing CG format Fig. 1, as follows:

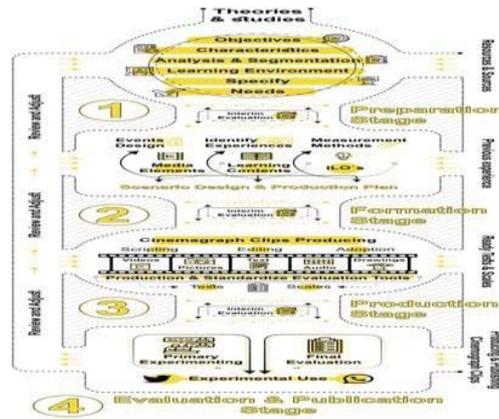


Fig. 1. Educational design model for CG.

The Preparation Stage: It included:

(1) Analysis:

- Learners Characteristics: VYC at UOH from 3 Paths (Engineering Humanities Health-care) are motivated to work for societal development.
- Environment: The research depends on the learning environment (Twitter as an SMP–WhatsApp as an SMA), and each of them is considered an appropriate environment to send and receive pictures and videos in all its forms, with the ability to comment, and save.

(2) Specify:

- Needs: By comparing reality with what we are targeting, and identifying the gap, the educational needs are lack of cognitive aspects related to the PC, and thus required to be provided.
- Objectives: The research aims at studying the effect of the CG used on Twitter and WhatsApp on developing PCs for VYC of UOH, and to study the impact of the correlation between gender and academic specialization.
- Theories and previous studies: related to the use of research variables and their analysis.

(3) Preparing a list of PC: It was prepared as following:

- Refer to theoretical literature and previous studies that dealt with the PCs to define the PCs that are appropriate for undergraduates.
- Ask an open question to a sample of faculty members “What are the most important PC that must be available in university education?”
 - (i) An initial PC list has been prepared (consists of 52 concepts) and presented to a group of specialized arbitrators from Hail, Qassim, and King Abdulaziz Universities. They were asked to express their opinion on the PC list in terms of the extent to which

the concepts are appropriate for students and the extent to which the concepts are appropriate for the KSA environment, and to add, delete or suggest what they think is appropriate, and the arbitrators gave some notes about the list, and they also proposed to delete some concepts because they are not suitable for study such as Modesty, Shura, Constructive Criticism, Solidarity. The concepts in which the consensus exceeded 80% and excluding those below were taken, the instrument became finalized with 20 concepts.

Standard needs: To define the criteria for producing CG

The studies of [42] were analyzed to determine the criteria for designing CG. 13 criteria were stated and 58 subindices, they were prepared in a list and presented to arbitrators to get their opinions recognized and the suitability of the criteria and indicators for the production of CG. Then, collecting arbitrators opinions, the criteria and indicators in which the consensus exceeded 80% and excluding those below were taken, and the list reached 11 criteria and 46 indicators. Some modifications were made by editing and rephrasing the used language.

The Formation Stage:

- Formulating the indented learning outcomes (ILO's): The ILO's based on CGT were drawn up, defined in the light of the general goal of "developing some PCs for VYC at UOH" and branched from this (21) goal.
- Defining the content elements: The educational content elements were identified in the CG that achieve the educational goals, where the elements were derived from the goals, and the content was analyzed for the targeted PC.
- Selection of media components: materials and media appropriate for the characteristics of VYC of UOH that will be used in the production of CG were chosen, and alternatives were chosen for the materials and media necessary for each concept.
- Building measurement tools: the achievement test was designed in light of the objectives to identify the extent to which learners achieve ILO's. The test consisted of 30 questions. Here are the steps to prepare it:
 - (a) Determining the objective of the test: The achievement test was prepared with the aim of measuring the level of the study sample's ability to understand PC, by applying it pre and post.
 - (b) Defining the educational goals that the test measures: The educational goals for PC have been clearly defined behavioral indicating the final behavior.
 - (c) Drafting the initial image of the test and determining its scores:
 - Vocabulary Formulation: The test vocabulary numbered (30) was formulated.
 - The degree of the test: The test consists of (30) singles so the maximum test score (30).
 - Test Instructions: the instructions were formulated in a clear, easy, and simple manner, while students must read instructions before starting to answering.
 - (d) Test set: After formulating the vocabulary and instructions of the test, it was necessary to ensure the validity of the test for implementation, and this was done through:
 - (i) Determining the sincerity of the arbitrators: The preliminary image of the test was presented to a group of experts, to ensure that the questions are sincere and measure what was set to measure it, and that they cover all objectives. In light of the results of the arbitration, the necessary adjustments were made, which enabled us to prepare the

final image of the test that consisted of (30) singles.

(ii) Calculating the test stability: The stability and internal consistency of the test were confirmed by measuring the internal consistency factor (alpha α) on the results of the study exploratory of a sample other than the participate using the SPSS package. Table 2 shows the results of the statistical stability measurement.

Table 2. Results of calculation of stability coefficient (α).

Coefficient of stability	Sample number	Vocabulary test	Value
α coefficient	8	30	0.91

It is clear from the table that the high rate of test stability coefficient (0.91), which indicates the accuracy of the test in measurement and its consistency in what it provides us.

Designing experiences: Educational experiences have been prepared to suit the ILO's, as the thesis was formulated in light of content elements and student characteristics. Then, Scenario and production plan: A scenario has been prepared to produce and include photos, video clips, and texts of the targeted clips. The scenario has been used to produce CG. Finally, designing educational events: According to the proposed model, the elements of the learning process are determined as follows: (grabbing the attention of the learner presenting stimulidirecting learning introducing learning goals recalling previous learning), and takes into account these elements in the CG production.

Production Stage

Videos, images, and texts were identified at previous stages, and searched for, by adopting the available, amending in readymade media, or producing new ones, according to the steps of the proposed model, as follows:

Preparing the media used in production: The necessary sources for cinematic cinema production were identified, such as: photos, videos, and written texts, Photos: The photos and graphics that the program needs were obtained through the Internet. Most of the photos needed by the program have been processed to take into account all the technical and educational specifications in terms of color, size, or data on them, and Texts: The texts were written using the Arabic Paint program.

Searches were made on the internet for videos on peace concepts, achieving program objectives, and addressing them with an After Effect program. And Selecting the authoring system: CG was produced using flixel and the ClipGraph program package, Sound Forge to produce and process audio files and Canva to produce text.

Most of the photos and videos needed by the program have been processed in a way that takes into account all the technical and educational standards of the CG producer. The extension of all CG was Gif to fit and handle clips on Twitter and WhatsApp.

Evaluation & Publishing Stage

Formative evaluation: It is a continuous process that was at the end of each stage. Its purpose is to ensure that all procedures of each stage complete the design model with quality and efficiency. Where audits and continuous adjustments are made. Then, Final evaluation: The CG were presented to a group of specialists, to ensure their validation and make the necessary adjustments in order to be permanently valid, and in the light of opinions

and suggestions, the amendments were made and the CG clips became valid.

Also, Exploratory experiment: CG were experimented with on a small of six students, recording the opinions and observations of students on the CG to do the necessary adjustments, and disclose the difficulties that may face the experimental application. Then, Publication and availability: at the end of the final evaluation, we had 30 CG ready for the research experience, which was made available to VYC at the UOH through the experimental application of the program based on CG in the first semester of the academic year from 10/10/2019 to 11/5/2019.

4. PERFORMANCE EVALUATION

To answer Q1, the first hypothesis was validated by applying *T*-test for the associated samples using SPSS between the pre/post measurement.

Table 3. The difference between Pre/Post Test when using CGT in SMP.

Measures	<i>N</i>	Mean	Std	<i>T</i>	Df	Sig.
Pre	92	16.52	2.73	37.73	91	0.000
Post	92	32.62	2.90			Sig.

From Table 3, it is noted that the value of *T* is (37.73) at the degree of freedom (91), and the computerized significance (0.000), and, the value of *T* is a function, therefore we can modify the first hypothesis to “There are statistically significant differences at the level (0.05) due to the use of CGT in the SMP in developing PCs for VYC in UOH”.

To answer Q2, the second hypothesis was validated by applying *T*-test for the associated samples using SPSS between the pre/post measurements.

Table 4. the difference between Pre/Post Test when using CG in SMA.

Measures	<i>N</i>	Mean	Std	<i>T</i>	Df	Sig.
Pre	92	17.33	2.21	37.20	91	0.000
Post	92	32.32	3.64			Sig.

From Table 4, it is noted that the value of *T* is (37.20) at the degree of freedom (91), and the computerized significance (0.000), and since this calculated significance is less than (0.05), the value of *T* is not a function, and therefore we modify the second hypothesis “there are statistically significant differences at the level (0.05) due to the use of CGT in SMA (WhatsApp) in developing PCs for VYC UOH.”

To answer Q3, The Third hypothesis was validated by applying *T*-test for the Independent samples using SPSS.

Table 5. Difference between the uses of CG in SMP/SMA in developing PCs.

Types	<i>N</i>	Mean	Std	<i>T</i>	Df	Sig.
SMA	92	32.62	2.90	0.63	182	0.531
SMP	92	32.32	3.64			Not Sig

From Table 5, it is noted that the value of T is (0.63) at the degree of freedom (182), and the computerized significance (0.531), the value of T is not a function, therefore we accept the third hypothesis “There are no statistically significant differences at the level of statistical significance (0.05) between the use of CGT in SMP and SMA in developing peace concepts among VYC at UOH”.

To answer Q4. The fourth hypothesis was validated by applying T -test for the independent samples using SPSS.

Table 6. Difference between (M/F) on developing PCs when using CG.

Genders	N	Mean	Std	T	Df	Sig.
Males	92	32.62	3.47	-0.63	182	0.531
Females	92	32.32	3.09			Not Sig

From Table 6, it is noted that the value of T is (0.62) at the degree of freedom (182), and the computerized significance (0.531), and since this calculated significance is less than (0.05), the value of T is not a function, therefore we accept the fourth hypothesis “There is no statistically significant effect at the level (0.05) due to gender (M/F) when using CG in the development of PCs among VYC at UOH”.

To answer Q5, the fifth hypothesis was validated by applying the Test for the Independent samples using SPSS.

From Table 7, it is noted that the value of F is (10.55) at the degree of freedom (182), and the computerized significance (0.000), since this calculated significance is less than (0.05), the value of F is a function, the results revealed that there is a statistically significant effect at the level (0.05) due to the academic specialization when using CG in developing PCs for VYC at the UOH.

Table 7. Difference between academic specializations on developing PCs when using CG.

Variance Sources	Sum of squares	Df	Mean Square	F	Sig
Between	206.23	2	103.12	10.55	0.000
Within	1769.57	181	9.78		Sig
Total	1975.80	183			

To determine the significance of differences for the dimensional comparisons between the levels of the independent variable, the Toki test is used as follows:

Table 8. Results of the Toki test between (M/F) on developing PCs.

Major(i)	Major(j)	Mean diff	Sig
Health	Engineering	1.84	0.004
	Human	2.53	0.000
Engineering	Human	0.69	0.434

The presence of a statistically significant effect at the level (0.05) due to the academic specialization (Engineering, and Healthcare) when using CG in developing PCs for VYC

at UOH in favor of the healthcare specialization, the presence of a statistically significant effect at the level (0.05) due to the academic specialization (Humanities, and Healthcare) when using CG in developing PCs for VYC at UOH in favor of the healthcare specialization. And, the presence of a statistically significant effect at the level (0.05) due to the academic specialization (Humanities, Engineering) when using CG in developing PCs for VYC at the UOH in favor of Engineering specialization.

To answer Q6, the sixth hypothesis was validated by applying the multiple contrast analysis tests using SPSS.

From Table 9, it is noted that the value of F is (4.24) at the degree of freedom (92), and the computerized significance (0.002), the value of F is a function.

Table 9. Relationship between gender and academic specialization in developing PCs when using SMA.

Sources	Sum of squares	Df	Mean square	F	Sig
Corrected model	238.27	5	47.65	4.24	0.002
Intercept	96038.26		96038.26	8553.64	0.000
Major	168.27	1	84.14	7.49	0.001
Gender	0.24		0.24	0.02	0.885
Major*gender	69.47	1	34.73	3.09	0.050
Error	965.59	86	11.23		
Total	97277	92			

There is a statistically significant (0.885) effect at the significance level (0.05) between gender (M/F) in developing PC when using SMP, there is a statistically significant (0.001) effect at the significance level (0.05) between the academic specialization in developing PC when using SMP. And, there is a statistically significant relationship at the significance level (0.05) between the gender (M/F) and the academic specialization in developing PCs when using SMP. The results revealed that there is a statistically significant relationship at the level (0.05), so we modify the sixth hypothesis "There is a statistically significant relationship at the significance level (0.05) between the gender (F/M) and the academic specialization in developing PCs when using SMP".

To answer Q7, the seventh hypothesis was validated by applying the multiple contrast analysis tests using SPSS.

From Table 10, it is noted that the value of F is (1.81) at the degree of freedom (92), and the computerized significance (0.120), since this calculated significance is less than (0.05), the value of F is a function.

There is a statistically significant (0.040) effect at the level of significance (0.05) between gender (M/F) in developing PCs when using SMA, there is a statistically significant (0.202) effect at the significance level (0.05) between the academic specialization paths in developing PCs when using SMA. And, there is statistically significant interaction (0.714) at the significance level (0.05) between gender (M/F) and academic specialization paths in developing PCs when using SMA. The results revealed that there is a statistically significant relationship at the level (0.05), so we modify the 7th hypothesis "There is a statistically significant relationship at the significance level (0.05) between gender (F/M) and the academic specialization in developing PCs when using SMA".

Table 10. Relationship between gender and academic specialization in developing PCs when using SMA.

Sources	Sum of squares	Df	Mean square	F	Sig
Corrected model	73	5	14.60	1.81	0.120
Intercept	97845.85	1	97845.85	12112.99	0.000
Major	54.22	2	28.11	3.36	0.040
Gender	13.36	1	13.36	1.65	0.202
Major*gender	5.47	2	2.73	0.34	0.714
Error	694.69	86	8.08		
Total	98659	92			

The simplicity of CG and their ability to draw attention to a specific object or element creatively or more interactively compared to other traditional means (static images). Also, presenting images with CG helped to make the information presented tangible, and youth can easily remember them because each image has a simple part of the movement that focuses on the target concept. The SMA or SMP instant messaging system is simple, intuitive, and very easy to use. users have the chance to continue chatting about CG content, learning is becoming more personal and is becoming increasingly based on online social interactions that enable collaborative, and portable processes. Furthermore, Learning is becoming ubiquitous, durable, and increasingly at odds with formal education. As well, the results are consistent with what was confirmed by: Park, *et al.* [9], Niewland [25] that indicated the effect of nonverbal communication with CG, and their effect on visual attention, intention to purchase, and focus points, and its effect on the perception of events. Both of Akhmad *et al.* [13], Hantoush [34], Yu, *et al.* [52] indicated the positive impact of social networking sites on students learning processes and positive behaviors.

Mobariz [2] confirmed that CG achieve concepts of physical and health education and in developing visual perception. Also, Yeh, Bai, *et al.* [5], Yeh & Li [24] confirmed the ability of CG to project important concepts to focus on the image, it also provides attractive applications and dynamic scenes that help recall emotional memory; a powerful and attractive tool to win the attention of those who deal with social media.

Similarly, Almansour [30], Faizi *et al.* [43] showed the use of SMP could be highly appropriate for teaching and learning. Social media tools are also effective ways to increase students' engagement. social networks used efficiently for professional improving, learning through the use of social media websites can improve as long as developers keep an open approach with regard to social studies. Students are showing interest in the idea of studying through social media [28]. The results of studies [26] have also been obtained clearly demonstrate the effectiveness of WhatsApp social networking in comparison with faceto face learning. The mobile learning helps students to create a learning community, to easily construct knowledge and to share it with other members of a WhatsApp group through instant messaging, the effectiveness of using mobile applications (Whats-App) in increasing achievement and motivation.

Otherwise, the results can be explained according to the theory of mono hypothetical coding: through simple movement in images, the focus is placed on important concepts or the important part to be focused, which helps to communicate the information without distraction (sometimes dispersion occurs as a result of the followup of moving pictures and leaving understanding and learning, which does not happen with CG). Or according to the theory of binary coding: visual materials have contributed to the effectiveness of education,

by enabling learners to store materials in two forms of linguistic and visual representations, and when verbal and visual information is presented contiguously in place and time, it enables learners to form interlinkages between them during the coding process. This leads to an increase in learner paths to retrieve information, because verbal stimuli may activate visual representations, and the possibility for learners to remember concrete information is better than abstract because concrete information calls for mental images.

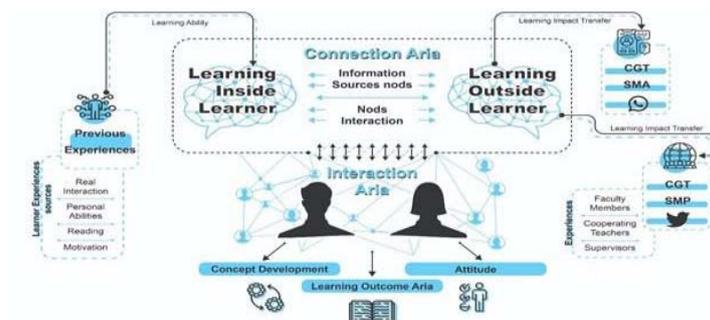


Fig. 6. The results explanation through the theory of connectivism.

The researchers provide an integrated interpretation through the Connectivism theory, as shown in Fig. 6. The researchers divided Fig. 6 into three areas (contact reaction outcomes), and according to the Connectivism theory, the researchers believe that learning is divided into learning outside of the learner, that includes nodes resulting from the use of the entire CGT used either with SMP (Twitter) or with SMA (WhatsApp), the overlap of the experiences of colleagues, the impact of technology and the quality of the devices used. Accordingly, the effect of learning is transmitted to interact and overlap with the other type, which is learning within the learner, which arises from a contract consisting of the learner's personal abilities, motivation, self-readings, and academic level. These nodes that are formed internally or externally are affected and interact with the gender and with the academic specialization, and the learning outcomes are concepts (or even attitude or skills) resulting from the total interactions and nodes formed.

5. STUDY CONCLUSION AND RECOMMENDATIONS

This research was conducted at University of Ha'il, where it is encouraging their faculty members to use Blackboard in their teaching. The result of the study showed that the faculty members recorded high rating in using Blackboard at Deanship of Preparatory Year at University of Ha'il. Moreover, this study measured whether there were statistically significant differences in using Blackboard among some variables such as gender, academic ranking, or number of training courses of faculty members' background. The results reported that there were no statistically significant differences between the faculty members and their gender. This revealed that both gender (F&M) have a good knowledge of technology use. Additionally, the findings of this study indicated that there were no statically differences between faculty members and their academic ranking and the numbers of

training courses in using Blackboard. So, most of the participants were young instructors and this is considered as an indicator to utilizing Blackboard effectively in their teaching.

Given the results of this study, the researcher recommends more information for the faculty members of the successful experiences of colleagues using the Blackboard learning management system is necessary. It helps the university faculty apply Blackboard features in distance teaching. In addition, future research is needed to examine the effect of different variables on faculty members' use of Blackboard.

A qualitative research study is needed to get a clear view of faculty members and students' experiences using Blackboard. These future studies are needed to investigate the quality of faculty use of Blackboard in their courses from the students' point of view. That will give faculty members a clear view of the effective use of Blackboard in teaching. On the other hand, students' opinions of faculty use of technology should be examined in future research. Comparative studies could be applied to find the relationships between faculty and students views of using Blackboard in distance learning.

6. CONCLUSIONS

The positive use of CG on SMP or SMA may contribute to promoting many peace values among members of society. And, it is possible to create a new environment that provides an atmosphere of dialogue, exchange of ideas and visions, transcending differences and conflicts, and searching for points of participation. The use of CG technology in introducing different educational and life concepts. So, Policymakers need to pay more attention to PCs and it also facilitate the procurement of relevant PCS resources for educators. At last, Training programs for teachers on the PC and tolerance and nonviolence may be organized. Studying the effect of merging CG with ebooks on developing thinking skills or the effect of the interaction between learning methods and gender when using CG on developing skills. Also, the effectiveness of designing a distance training environment based on CGT.

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