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ABSTRACT

This research aims to explore the use of stop-motion as an educational tool in explaining and teaching printmaking.

The main objectives are demonstrating how the stop-motion technique can simplify complex artistic processes like printmaking which requires a precise sequence of steps, analyzing the effectiveness of the technique in enhancing students' visual comprehension and engagement compared to traditional teaching methods exploring the educational benefits that this technique offers in improving students' self-learning skills ,identifying practical applications of stop-motion in various types of printmaking, including relief printing, screen printing, and etching and investigating the possibilities of integrating stop-motion with future educational technologies such as augmented reality and virtual reality to enhance the learning experience.

The research followed a descriptive and analytical methodology, based on reviewing the literature and previous studies related to the stop-motion technique and its role in education, with a focus on its use in visual arts and printmaking, conducting an applied analysis of the stop-motion technique in demonstrating the stages of printmaking by filming and analyzing educational videos that illustrate the steps of printmaking using stop-motion, comparing traditional teaching methods with stop-motion by

analyzing the effectiveness of the technique in simplifying and clarifying artistic processes compared to verbal explanations or traditional hands-on lessons, providing practical examples of educational applications of stop-motion in printmaking, along with suggestions for future developments in this field.

From the expected results enhancing students' understanding of printmaking through the use of stop-motion techniques, improving the level of visual engagement and the ability to self-learn, offering innovative educational tools that help teachers explain complex concepts more easily.

KEYWORDS **Printmaking; stop-motion; interactive learning**

الملخص:

يهدف هذا البحث إلى استكشاف استخدام تقنية إيقاف الحركة كأداة تعليمية في شرح وتعليم الطباعة الفنية. تتلخص الأهداف الرئيسية في توضيح كيفية استخدام تقنية إيقاف الحركة لتبسيط العمليات الفنية المعقدة مثل الطباعة الفنية، والتي تتطلب تسلسلًا دقيقًا في الخطوات، وتحليل مدى فعالية التقنية في تعزيز الفهم البصري والتفاعل لدى الطلاب مقارنة بطرق التدريس التقليدية، واستكشاف الفوائد التعليمية التي تقدمها هذه التقنية في تحسين مهارات التعلم الذاتي لدى الطلاب، والتعرف على تطبيقات عملية لتقنية إيقاف الحركة في مختلف أنواع الطباعة الفنية، بما في ذلك الطباعة بالقالب، الطباعة الحريرية، والحفر، ودراسة إمكانيات دمج تقنية إيقاف الحركة مع تقنيات تعليمية مستقبلية مثل الواقع المعززوالواقع الافتراضي لتعزيزتجربة التعلم.

واتبع البحث المنهج الوصفي والتحليلي معتمداً على مراجعة الأدبيات والدراسات السابقة المتعلقة بتقنية إيقاف الحركة ودورها في التعليم، مع التركيز على استخدامها في الفنون البصرية والطباعة الفنية، وتحليل تطبيقي لتقنية إيقاف الحركة في شرح مراحل الطباعة الفنية، وذلك من خلال تصوير وتحليل فيديوهات تعليمية توضح خطوات الطباعة باستخدام إيقاف الحركة، ومقارنة بين أساليب التدريس التقليدية وإيقاف الحركة عبر تحليل مدى فعالية التقنية في تبسيط وتوضيح العمليات الفنية مقارنة بالشرح الشفهي أو

الدروس العملية التقليدية، وتقديم أمثلة عملية للتطبيقات التعليمية لاستخدام إيقاف الحركة في الطباعة الفنية، مع اقتراح بعض التطورات المستقبلية في هذا المجال.

الكلمات الدلالية: طباعة فنية؛ إيقاف الحركة؛ التعليم التفاعلي

1. Introduction

Education in the field of arts is one of the most significant areas that combine artistic creativity and technical skills. It focuses on developing students' abilities in various disciplines, including drawing, sculpture, design, and printmaking. With technological advancements shaping the world, it has become essential to adopt modern educational methods that align with the changes in learning approaches and students' needs.

Printmaking is considered one of the most complex art forms, requiring a precise understanding of multiple sequential steps, along with advanced complex operations and clarifying intricate details. Stop-motion has proven its effectiveness in various fields, such as animation, documentaries, and education, as it technical skills to comprehend the tools and materials used in creating artistic works. Despite the importance of these skills, traditional teaching methods often face challenges in simplifying processes and enhancing students' visual interaction, making it difficult for them to fully grasp the concepts.

In this context, the Stop-motion technique has emerged as an innovative educational tool capable of providing an interactive and unique learning experience. This technique relies on capturing sequential shots that showcase each step of the artistic process, contributing to simplifying

helps enhance visual interaction and increases students' ability for self-directed learning.

This research aims to explore the possibilities of employing stop-

motion technology in teaching printmaking. It analyzes how this technique can be used to simplify complex artistic processes, such as relief printing, screen printing, and etching. Additionally, the research seeks to compare the effectiveness of this technique with traditional teaching methods and highlight its benefits in enhancing visual interaction and fostering students' self-learning skills.

The significance of this research stems from the urgent need to develop innovative educational tools that enhance the learning experience in the arts, particularly in areas requiring precise technical steps. By providing practical examples of applying stop-motion techniques in teaching printmaking, this research contributes to offering effective educational solutions that align with the demands of the modern era. It also proposes new horizons for integrating this technique with future technologies, such as augmented reality and virtual reality, to further enrich the educational experience.

This study represents a step toward advancing visual arts education curricula by leveraging technology to deliver educational content focused on simplifying concepts and enhancing visual interaction. It aims to contribute to building a generation of creative artists capable of employing modern technologies in producing outstanding artworks.

2.1. Research Problem:

The research problem lies in the difficulty of explaining and teaching printmaking techniques, which require a precise sequence of steps and a deep understanding of complex methods. Traditional teaching methods may struggle to effectively convey these processes to students, highlighting the need for innovative educational tools such as stop-motion technology.

2.2. Research Aims:

1. Demonstrate how stop-motion technology can simplify complex

printmaking processes.

2. Analyze the effectiveness of technology in enhancing visual understanding and student engagement compared to traditional methods.
3. Improve students' self-learning skills through the use of this technology.
4. Explore practical applications of stop-motion technology in various types of printing.
5. Investigate the potential integration of stop-motion technology with future technologies such as augmented reality and virtual reality.

2.3. Research Importance:

The importance of this research lies in the urgent need to develop innovative educational tools that enhance the learning experience in the field of arts, especially in areas requiring precise technical steps. By providing practical examples of applying stop-motion techniques in teaching printmaking, this research contributes to offering effective educational solutions that align with the demands of modern times. It also suggests new horizons for integrating this technique with future technologies such as augmented reality and virtual reality, further enhancing the learning experience.

2.4. Research Hypotheses and Assumptions:

Research Hypotheses:

1. The use of Stop-Motion technology can enhance students' understanding of printing skills.
2. Integrating technology into art education contributes to improving learning outcomes.
3. Stop-Motion technology will increase students' engagement and interest during the learning of printing techniques.

Research Assumptions:

1. Students have the ability to interact with the new technology if it is introduced appropriately.

2. Stop-Motion technology is an effective and suitable tool for illustrating complex artistic processes.
3. Integrating modern technology into art education can enhance students' creativity and innovation.
4. The use of modern techniques like Stop-Motion aligns with advancements in the field of art education.

2.5. Research Methodology

Descriptive Methodology: To review the literature and previous studies related to stop-motion techniques and their role in education, and to analyze the results of the surveys based on the data collected from the participants.

Analytical Methodology: To analyze educational videos designed using stop-motion techniques and compare them with traditional teaching methods.

3. Results and Discussions:

Results:

1. Integration of stop-motion techniques significantly enhanced students' understanding of printmaking.
2. Students reported improved technical skills due to the step-by-step visualization of the process.
3. Higher levels of student satisfaction and creativity were observed when using stop-motion.
4. Stop-motion was effective in simplifying complex steps, making the learning process more engaging.
5. The technique allowed students to grasp abstract concepts more easily.
6. The technique supported self-learning by allowing repeated viewing of videos.
7. It demonstrated its ability to enhance visual engagement compared to verbal or

traditional practical explanations.

8. Results from the questionnaire indicated students' preference for stop-motion videos over traditional methods.

Discussions:

1. Stop-motion is an effective visual aid for teaching printmaking, helping to simplify the learning process.
2. It bridges the gap between theory and practice, making abstract concepts more tangible for students.
3. The technique has potential applications in other art forms and educational settings.
4. The research suggests that stop-motion can transform traditional art education by increasing student engagement.
5. Incorporating technology in traditional art education can enhance the learning environment and foster creativity.

Summary:

In summary, this research explores the application of stop-motion animation in teaching printmaking, demonstrating its potential to improve both understanding and creativity in students. The results underscore the value of incorporating innovative, technology-driven methods into traditional art education. By using stop-motion, students are better able to visualize and engage with the technical aspects of printmaking, leading to enhanced learning outcomes. This study contributes to the growing body of knowledge on integrating modern technologies in art education and opens new possibilities for future teaching methods.

4. Definition of printmaking and Its Educational Importance:

4.1. Definition of printmaking:

Printmaking is a process of creating images or designs by transferring ink or other materials from one surface to another. There are various types of

printmaking, such as engraving, screen printing, and block printing. This field is characterized by precision and innovation, enabling artists to produce multiple copies of the same artwork using different tools and techniques.

4.2. The Importance of Printmaking in Education:

Printmaking plays a vital role in fostering creativity among students. It is not merely a means of artistic expression but also offers opportunities to learn precise techniques, teamwork, and innovation. As a complex field, it requires a deep understanding of various processes that involve multiple stages and demand mastery of intricate techniques and attention to detail. This highlights the importance of using modern, interactive teaching methods to facilitate the learning process.

4.3. Challenges in Teaching Printmaking:

Teaching printmaking can face several challenges, including technical complexity. Processes like engraving and screen printing require precise tools and advanced manual skills, along with consistent practice to master. Some printing processes are time-consuming, and materials such as plates and solutions can be expensive. Additionally, certain details may be difficult to grasp through theoretical explanations alone, necessitating visual aids to clarify the processes more effectively.

5. Definition of Stop-Motion Technique and Its Evolution:

5.1. Definition of Stop-Motion Technique

Stop-motion is a cinematic technique used to animate physical objects by capturing still frames of objects that are slightly moved between each shot. It is a form of motion illusion, where these sequential frames are compiled to create the impression of

movement, making the objects appear as though they are animated. This technique relies on a sequence of images that give viewers a sense of natural motion when played in succession. Stop-motion is often used in animations, short films, and television programs.

5.2. History and Evolution of Stop-Motion Technique

Early Beginnings: The stop-motion technique originated with silent cinema in the late 19th century. Its first known use was in the film The Humpty Dumpty Circus (1898), where puppets were animated through sequential scenes (Figures 1 and 2).

With technological advancements and the emergence of digital cameras and video editing software, producing stop-motion videos has become easier. This has led to the widespread use of this technique in various fields, including documentaries and educational content.

(Figure 1) A shot from "The Humpty Dumpty Circus "

(Figure 2) Another shot from "The Humpty Dumpty Circus"

With technological advancements and the emergence of digital cameras and video editing software, producing stop-motion videos has become easier. This has led to the widespread use of this technique in various fields, including documentaries and educational content.

5.3. Different Types of Stop-Motion Techniques:

5.3.1. Claymation Stop-Motion:

This type relies on using clay figures that can be shaped and slowly moved,

capturing images between each movement to create scenes made of clay. It is widely used in animated films, such as in the Stories of the Prophets series (Figure 3).

(Figure 3) A shot from the story of Solomon from the series Stories of the Prophets

5.3.2 Object Animation:

Real objects such as bodies or specific items like toys and artistic tools are animated. This type is very suitable for teaching printmaking, as it allows for step-by-step documentation of the movement of the tools and equipment used in the printing process. (Figure 4)

(Figure 4) Demonstrating the technique of engraving linoleum in one of the time-lapse shots

5.3.3 Puppet Animation:

This involves using movable puppets with joints, where the puppet's positions are changed slowly between each shot to make it appear as if it is moving naturally. An example is the popular series Shaun The Sheep (Figure 5).

(Figure 5) Some Shaun The Sheep doll characters

5.3.4 Chalkboard Animation:

Scenes are drawn sequentially on a blackboard or wall, then erased and replaced with new scenes, with each stage being filmed to create a continuous motion, such as the film MUTO, a wall-painted animation by BLU (Figure 6).

(Figure 6) From the film "MUTO" by BLU

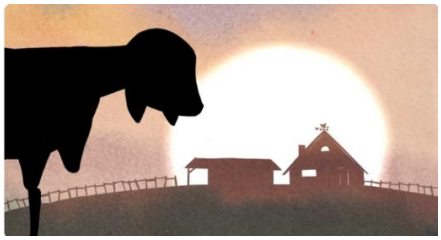
5.3.5 Digital Stop-motion:

Scenes are created using computer software, where design programs animate the characters and scenes with precision. This method is known for its high accuracy and time-saving advantages compared to traditional techniques, such as the film Balloons Over Broadway (Figure 7).

(Figure 7) From the film "Balloons Over Broadway"

5.3.6. Cutout Animation:

This technique involves moving flat pieces cut from paper or other materials, arranged in sequential shots to create flat cartoon images, such as the film Lost Sheep by Lukas Rooney (Figure 8).



(Figure 8) From the film "Lost Sheep" by Lukas Rooney

5.3.7. Animation sticky note stop-motion:

This is a type of animation in the style of a flipbook, where sticky notes are used to create animations frame by frame. The subject is drawn or ideas are written on a series of sticky notes, then each note is captured as an image. These images are then displayed in sequence (Figure 9).

(Figure 9) Animation using sticky notes

5.3.8. Human stop-motion :

Capturing photos throughout the day or using a focused photo session to make the subject perform small movements are two great ways to create human stop-motion animations. This mimics the appearance of animation (Figure 10).

(Figure 10) An image of a human stop-motion

6. The Role of Stop-motion Technique in Explaining and Teaching Printmaking Technique

6.1 Simplifying Complex Processes

Printmaking Technique is a multi-step process that requires precision and attention to detail. With stop-motion technique, each step can be filmed separately, helping to simplify the process. Students can see how tools such as plates, ink application, and printing the image on paper are set up in a smooth and slow manner.

6.2. Encouraging Self-Learning

Using stop-motion provides an opportunity for students to learn independently. They can watch educational videos consisting of short scenes that explain each step in detail, pausing the video when necessary to absorb the information. This enhances the student's ability to review and apply the steps correctly without relying entirely on the instructor.

6.3. Improve visual interaction

Stop-motion technology adds a strong visual dimension to the education process. Students can watch the artistic process in an animated form that allows them to see each step clearly. Through this visual interaction, students' understanding of materials and concepts that may be difficult to explain through traditional methods is improved.

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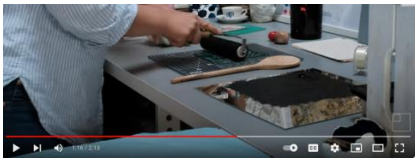
6.4. Using Stop-motion in Different Techniques of Printmaking

The stop-motion technique offers significant benefits in explaining and clarifying various techniques of Printmaking, including:

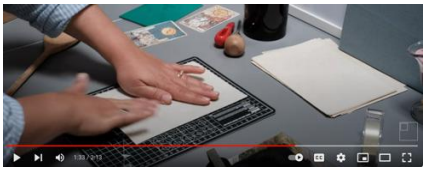
6.4.1. Relief Printing:

The process of carving the design onto the plate and applying ink can be demonstrated, followed by printing the image (Figures 11 to 15).

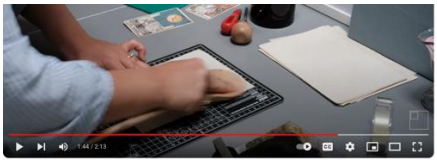
(Figure 11) A shot showing Cutting on Lino



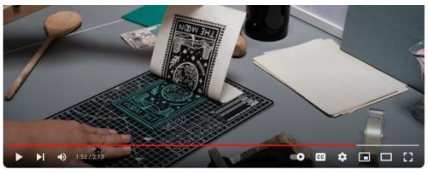
(Figure 12) A shot showing Inking Plate



(Figure 13) A shot showing placing the paper and pressing it gently



(Figure 14) A shot showing rubbing the plate to get the best ink transfer



(Figure 15) A shot showing lifting the print from the surface of the printing press

6.4.2 Silkscreen Printing:

This technique explains step by step the process of preparing the silkscreen, applying the ink, and using a squeegee to pull the ink across the screen, similar to the short video created using stop-motion technique, which demonstrates how to prepare the silkscreen and print on fabric (Figures 16-20)

(Figure 16) A shot showing isolation stage of the drawing to be printed with the filler substance

(Figure 17) A shot showing covering the silkscreen with the resistant substance

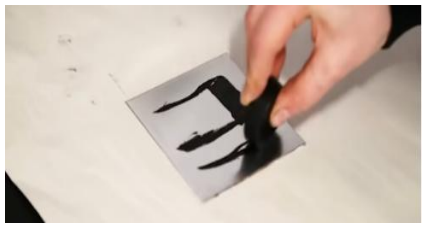
(Figure 18) A shot showing the screen after washing

(Figure 19)A shot from screen printing

(Figure 20) The fabric after printing

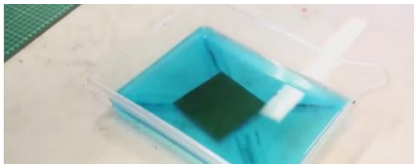
6.4.3 Etching:

The process of etching on a metal surface can be depicted using specialized tools, followed by a demonstration of how to prepare and ink the printing plate and print the image. (Figures 21 to 30)

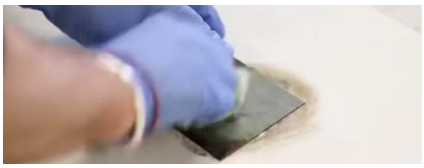


(Figure 21) Placing a wax resistor on zinc

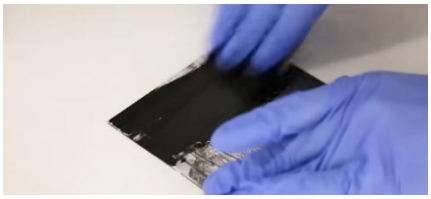
(Figure 22) Using tools in the drawing to remove the resistor



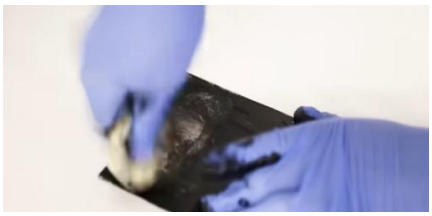
(Figure 23) Placing the plate in acid to etch the areas where the resistor was removed



(Figure 24) Wiping the resistor using metal solvent



(Figure 25) Inking the plate



(Figure 26) Wiping excess ink from the plate

(Figure 27) Inked plate

(Figure 28) Wetting the paper

(Figure 29) Placing the paper and the plate in the printing machine

(Figure 30) The final print

7. Comparison between Traditional Teaching Methods and Stop-Motion Technique:

There are several strategies that can be used to facilitate the learner's acquisition of the required knowledge and skills, whether through self-

learning, which the learner does independently through personal efforts, practice, and experience, or teaching methods employed by the faculty member to achieve the desired learning outcomes. This is done through a variety of activities.

7.1 Traditional Teaching in Printmaking Technique:

Traditional teaching in Printmaking Technique typically relies on practical workshops where students watch the instructor perform the steps, then attempt to carry them out themselves.

7.2 Advantages of Using Stop-Motion Technique Compared to Traditional Teaching:

Repetition and Review: Unlike direct methods that may not be repeatable, students can watch stop-motion videos multiple times, helping them review each step carefully.

Accuracy and Clarity: This technique allows focusing on each step individually, giving students the opportunity to understand the finer details.

Visual Interaction: The technique makes it easy to display the movement of tools and materials in a quick and organized manner, enhancing student comprehension compared to practical demonstrations.

Time Efficiency: The desired step can be reached directly, instead of spending time on preparations required for explaining the entire experience.

To measure the effectiveness of the stop-motion technique in enhancing students' information retention, a practical demonstration of the linoleum block printmaking process was conducted for a sample of 29 second-year graphic design students at the Faculty of Arts and Design, Pharos University.

The experiment was filmed in two ways: a full video and a stop-motion video. The impact of the explanation using the three methods was assessed by administering a questionnaire

comparing the three teaching methods. The statistical analysis results were as follows, according to table 1.

(Table 1): Distribution of the questionnaire sample by gender

Gender	Number	Percentage
Male	5	18.5%
Female	22	81.5%
Total	27	100%

Table 1 shows the percentages of the sample's gender, where it is evident that 81.5% of the sample are females, with a count of 22, and 18.5% are males, with a count of 5. It can be concluded that the majority of the sample are females.

The researcher analyzed the research hypotheses using a questionnaire method, which was distributed to the study samples. The distributed, received, valid questionnaires for analysis, and the missing questionnaires are shown in the following table:

(Table 2) Distributed questionnaire data

Questioners	Number	Percentage
Distributed questioners	29	100%
Received questioners	27	93%
Valid questioners for study	27	93%
Questioners that are not valid for the study	0	0%
Missing questioners	2	7%
Total questioners	29	100%

Table 2 shows that the total number of questionnaires distributed was 29, representing 100%, with 27 questionnaires received, representing 93%, which were valid for analysis. There were 2 questionnaires that were not returned, representing 7%.

(Table 3) Results of the questionnaire analysis

Question		Stop-motion video	Full Video	Practical explanation
What are the three teaching methods that achieve visual interaction the most?	Number	11	3	13
	%	40.7%	11.1%	48.1%
What are the most obvious approaches to any of the individual steps?	Number	3	10	14
	%	11.1%	37%	51.9%
Which method did you find most enjoyable?	Number	4	3	20
	%	14.8%	11.1%	74.1%
What are the methods that most influenced your enthusiasm for printmaking?	Number	2	5	20
	%	7.4%	18.5%	74.1%
What is the easiest way to repeat the steps and repeat the explanation?	Number	22	2	3
	%	81.5%	7.4%	11.1%
What methods allow you to focus most on each step alone?	Number	21	3	3
	%	77.8%	11.1%	11.1%
What are the fastest methods of delivering information?	Number	25	1	1
	%	92.6%	3.7%	3.7

Analysis of the results from the questionnaire questions shows that 81.5% of participants prefer the stop-motion technique in terms of ease of step repetition and explanation, 77.8% prefer it for allowing focus on each step, and 92.6% indicated that it is the fastest method for conveying information.

Meanwhile, 51.9% prefer full practical explanation in terms of step clarity, 48.1% prefer it for achieving visual interaction, 74.1% find it more enjoyable, and 74.1% consider it the

most effective method in motivating them to execute the tasks.

The researcher used the same sample to compare both the short video with stop-motion technique and the full practical explanation video to determine which is more effective and suitable for self-learning, as shown in (Table 4).

(Table 4): Results of the questionnaire analysis comparing the effectiveness of each stop-motion video and the full video for self-learning.

Question		Stop-motion video	Full Video
Which is more effective and suitable for self-learning short video with stop-motion technique or the full practical explanation video?	Number	19	8
	Percentage	70.4	29.6%

The analysis results showed that 70.4% prefer stop-motion videos over full instructional videos due to reasons such as ease of self-learning, faster loading times, quicker understanding in the shortest possible time, and the ability to replay. On the other hand, 29.6% prefer full instructional videos because they allow more time to complete the experiment without pausing the video and to follow the step-by-step process for those who did not see the practical explanation.

A question was also posed to the same sample about using the stop-motion technique alone, combining it with practical explanations, or relying solely on practical explanations, as shown in (Table 5).

The analysis results indicate that 77.8% of students prefer a combination of practical explanations and stop-motion videos because both methods achieve educational goals.

(Table 5) Results of the questionnaire analysis about using stop motion alone, practical explanation alone, or a combination of both.

Question		Stop-motion video	Full Video	Practical explanation
Do you prefer to use the stop-motion method alone, or combine it with practical explanation, or be satisfied with practical explanation only?	Number	4	2	21
	%	14.8 %	7.4 %	77.8 %

8. Future Developments in Stop-Motion Technology in Education:

Stop-motion technology can be integrated with virtual reality or augmented reality technologies to provide an interactive learning experience. Students could use these tools to view processes from multiple angles or even participate directly in the artistic process.

9. Conclusion

1. Stop-motion technology represents an effective and innovative educational tool that helps simplify complex artistic processes, particularly in the field of printmaking.
2. Stop-motion enhances visual interaction, and through its use, students can gain a deeper understanding of artistic concepts.
3. Stop-motion promotes self-learning and exploration, making it an innovative way to improve the quality of teaching methods in the artistic field and expand its applications in the future.

4. Stop-motion improves students' understanding by breaking down complex processes into manageable steps.
5. The technique boosts student engagement, creativity, and satisfaction.
6. Stop-motion can be a valuable addition to traditional art education, offering a modern approach to learning.
7. The research highlights the potential of integrating technology into art education to improve both learning outcomes and student experience.

10. Recommendations

1. Integrate stop-motion technology as part of the curriculum in art colleges.
2. Develop training programs for teachers on using stop-motion technology in education.
3. Explore the possibility of combining stop-motion technology with other technologies, such as virtual reality, to enhance the learning experience.
4. Conduct further studies to measure the impact of this technology on various types of visual arts.

References:

Allworth, D. (2019). Stop-motion Animation: A Complete Guide to the Technique. Focal Press.

Wells, P. (2014). Animation: Genre and Authorship. Wallflower Press.

Ellis, R. & Wittenbaum, G. (2020). Art of Printmaking: History, Techniques, and Materials. Thames & Hudson.

Harrison, S. (2021). Multimedia Tools in Art Education. Oxford University Press.

Lewis, H. (2016). Innovative Methods in Teaching Art and Design. Routledge.

الجبوري، أحمد. (٢٠٢٠). التكنولوجيا في التعليم: تقنيات مبتكرة لتحسين التعلم. دار الفكر العربي.

مصطفى، نادية. (٢٠٢١). إيقاف الحركة واستخدامها في التعليم: دراسة حالة. مجلة التعليم الحديث، العدد ١٢.

سميث، جون. (٢٠١٩). التعليم الرقمي: أدوات وطرق جديدة. دار النشر الأكاديمية.

إبراهيم، عيسى. الحصري، كامل (2023). المعلم واستراتيجيات التدريس: دار المسيرة

Websites:

https://www.youtube.com/playlist?list=PL3KdDTDF6kFcvzw67gJeFWQekuC-my6cn

https://www.gettyimages.com/detail/video/close-up-humpty-dumpty-sitting-on-wall-and-stock-video-footage/723-35

https://www.youtube.com/watch?v=omoJxf4BPXw

https://www.youtube.com/playlist?app=desktop&list=PL-mUVqqcE5JlV4gW8egPYeTza4CJn9VYx

https://www.rottentomatoes.com/m/shaun_the_sheep_movie

https://www.youtube.com/watch?v=uuGaqLT-gO4

https://momgineer.blogspot.com/2020/11/create-digital-stop-motion-animation.html

https://www.youtube.com/watch?v=P8KYElivUu4

https://www.youtube.com/watch?v=RijhbbbvbLiQ

https://www.youtube.com/watch?v=52gD_Y8bJms