IJCRT.ORG ISSN : 2320-2882

INTERNATIONAL JOURNAL OF CREATIVE RESEARCH THOUGHTS (IJCRT)

An International Open Access, Peer-reviewed, Refereed Journal

STUDYING ATTITUDES TOWARDS THE USE OF 3D ANIMATION

[1]Dr B. Senthil Kumar, [2]Dr. A. Jayanthiladevi, [3]R. Sathiamoorthy [4]P. Nagarajan, [5]A. Hariprasad

[1] Asst. Professor & PDF Research Scholar, VISTAS, Srinivas University, India

[2] Professor, CCIS, Srinivas University, India

[3] PhD Research Scholar, VISTAS, India

[4]HoD, Bharath Institute of Higher Education and Research

[5] PhD Research Scholar, VISTAS, India

Abstract: Examining the views of language and media teachers about the usage of 3D animation segments is the main goal of this study. The study's comparison of the views of the two different categories of educational specialists is another goal. An strategy known as a comparative case study is utilized to understand how the two different types of instructors interact with one another. In this study, the qualitative research method was employed to understand the similarities and differences. Two incidences involved the two private institutions in and around Tamil Nadu. The in-depth analysis method was employed to understand the changing perspectives and motivating factors behind the adoption of new technologies in the teaching and learning environment. The detailed responses were found utilizing a semi-structured interviewing strategy to understand the statistical importance. The study's findings unambiguously demonstrate the significance of the two sets of instructors' perspectives. It also demonstrates how the curriculum for the two separate professions necessitates the new teaching technique. Because they have been exposed to its usage and media literacy, media educators support the use of new media technology in their teaching and learning processes.

Index Terms **– Attitudes, 3D animation clips, language educators, media educator, Motivation**

I. INTRODUCTION

The term "3D animation" describes the process of using three-dimensional computer imagery to produce moving pictures or patterns. To mimic movement and give cartoons the appearance of depth and reality, this technique uses computer-generated models, objects, and settings. Typically, 3D animation goes through a number of phases, such as modeling, texturing, rigging, motion, lighting, and output.

The modelling step entails using specialised software to create three-dimensional models of various items or characters. These models are digital depictions of the animated items or figures.

Texturing is the process of giving 3D models their final aesthetic look by adding colors, patterns, and other elements to them. This can involve giving characters lifelike features like skin, fur, or attire, or adding textures to items and surroundings to make them appear more real.

Stage of rigging: rigging is the process of giving 3D models a digital framework or skeleton that artists can modify to add motion. For the models to be deformed and animated, a system of bones, joints, and controls must be created.

The method of generating motion and movements for 3D models is known as animation. The rigged models are manipulated by animators to produce a variety of motions, including strolling, sprinting, leaping, and even different facial expressions.

The lighting stage is where virtual lights and shadows are placed in a 3D scenario to produce a lifelike lighting atmosphere. The general look and tone of the animation may be significantly affected by this.

Stage of rendering: Rendering is the process of creating the ultimate picture or animation from the 3D scenario. To create the desired aesthetic result, the 3D data must be processed and various effects, such as lighting, backgrounds, and others, must be applied. Film, television, video games, advertising, education, and virtual reality are just a few of the sectors that frequently use 3D animation. It has the ability to produce dynamic and aesthetically appealing animations that can tell tales, explain complicated ideas, and captivate audiences in a variety of contexts.

In educational environments, there has been a substantial increase in interest in the use of 3D animation for learning. The research on the use of 3D graphics for learning is reviewed here. Improvement of Conceptual Understanding Learning complicated ideas that are challenging to visualise or comprehend using conventional methods can be made easier for students by using 3D animation. The visual appeal and interactivity of 3D animations can help students understand and remember difficult ideas, science procedures, historical events, and other demanding subjects. Experiential and active learning can be encouraged by using 3D animation, which can provide chances for learning in these ways. Interactive 3D animations allow students to actively engage with items, investigate settings, and take part in simulations, which can support practical learning experiences. Compared to passive learning techniques, this can result in greater idea comprehension and information retention.

- The main aim of the research:

This case study on attitudinal similarities and differences among the two different area of educational specialists. The study emphasizes on the motivational and attitudinal differences among the media and a language educator belongs to higher education.

- Objectives of the research:

1) To understand the attitudinal differences
2) To study the need and background of course and new media related syllabus

This research paper is drafted with the following contents in the chronological order.

1. Introduction: Introduction of the topic
2. Review of literature: To study the background works and relevant literature findings.
3. Methodology: It discusses about the quantitative and qualitative method to study the solution
4. Findings of the research: Solution of the problems are discussed in this section.
5. Conclusion: It discusses the overall findings suggestions and conclusions of the research

II REVIEW OF LITERATURE

3d animation had the potential to enhance various aspects of education. According to the study of Mustafa (2022), virtual reality and 3d animation enhanced the learning experience.

According to Baglama, (2018), animation helped the differently abled learners. According to her research findings 3d animation had many benefits. Baglama's research showed the related research findings on the effective use of 3d animation among the learners.

According to Senthil kuar et al. (2016), 3d animation was used as a new tool in the teaching learning process. Vrius methods like e-learning, online learning and web learning used the 3d animated clips to enhance the learning experience. It helped to enhance the Visual literacy which involved interpreting, analyzing, and critically evaluating visual media, such as images, videos, and animations.

Liang (2010), discussed about the quality of 3d animated materials in the teaching and learning environment. Furthermore, Liang studied about the effects of multimedia teaching and multimedia course ware among the young learners.

Advantages of 3d animation:

3D animation develops collaboration and teamwork skills among students. Creating 3D animations often involves interdisciplinary collaboration, where students may work in teams to conceptualize, design, and produce animations. Students can learn how to collaborate effectively, communicate ideas, provide feedback, and solve problems together, which are valuable skills in media production and team-based work environments.

The use of 3D animation clips in language teaching has gained increasing attention in recent years due to their potential to enhance language learning experiences. Here is a review of the literature on the application of 3D animation clips for language teachers.

Several studies have shown that 3D animation clips can be effective in teaching vocabulary to language learners. These clips provide visual context, making abstract words more concrete and memorable. The use of 3D animation clips can also help learners associate words with their corresponding visual images, which can aid in retention and recall.

Fostering Listening and Speaking Skills: 3D animation clips can be used to improve listening and speaking skills in language learners. By watching and listening to animated characters interact in various situations, learners can develop their listening skills and learn how to respond appropriately in different communicative contexts. .

III RESEARCH METHODOLOGY

Comparative case study:

A comparative case study is a research design that involves examining and comparing multiple cases or instances to draw conclusions or identify patterns or differences. This approach allows researchers to investigate similarities and differences between cases, which can provide valuable insights and generate new knowledge in various fields, such as social sciences, education, business, and health, among others.

In a comparative case study, researchers typically select two or more cases that are similar in some ways but differ in others, and analyze them in-depth to understand the similarities and differences in their characteristics, processes, outcomes, or impacts. This can be done using qualitative or quantitative methods or a combination of both, depending on the research questions and objectives.

The comparative case study is a research approach that involves comparing multiple cases to gain insights, identify patterns, and generate new knowledge. It offers several benefits, including contextual understanding, identification of patterns and differences, richness and depth of analysis, rigor and validity, and practical implications. However, careful attention to research design and methodology is needed to address potential limitations and ensure the rigor of findings.

Case 1:

.Language Educator:

To comprehend how to use the 3D animated instructional materials, a language instructor from a 'A' Grade private university in Chennai was chosen. 34 was the trainer's age. In the field of teaching languages, specifically English, he had ten years of

expertise. He was evaluated on the mood gauge that had been created. The use of a 3D animated movie measured the attitude and drive, demonstrating an absence of attitude.

Case 2:

Media Educator:
To comprehend how to use the 3D animated instructional materials, a media teacher from a 'A' Grade private university in Chennai was chosen. The fitness instructor was 32 years old. He had 12 years of expertise instructing students in media subjects, specifically visual communication. The attitude scale that was created was used to gauge his disposition. The mindset and reason behind the use of 3D animated clips were assessed. It revealed the attitude's degree

Findings and Suggestions

1. There is a significant relationship found between the attitude difference among the language and media educators.
2. The learning pattern is changed among the learners because of the new media technology.
3. Due to the development on information technology the awareness level needs to be improved among the educators.
4. The media educators belong to private universities have better media production knowledge.
5. The usage of 3d animation and graphics developed among the media educators.
6. There is no proper awareness found among the language educators regarding the use of 3d animation tools.

Suggestions:

The private Universities should use the new media technologies in language teaching to attract the learners. It would help them to retain their language course needs.

IV CONCLUSION

The findings of this study reveal both patterns and distinctions in the attitudes and motivations of language and media instructors. Animations in 2D and 3D are an instructional tool used by media instructors. since media education includes animation as one of its topics. Since the advent of the digital age, demand for 3D animation has increased. It aids in achieving unrestricted access to media pupils. Nevertheless, the drive and mindset of language teachers fall short of expectations. Regarding the use of graphics, 2D animation, 3D animation, etc., language instructors are not sufficiently informed. According to this study's findings, there are significant attitudinal and motivational differences between the two types of instructors. Even though the media instructors use graphics, the materials are of poor quality. The instructional methods available to media instructors are varied. The latest advancements in new media create a demand for 3D visuals and immersive technologies to improve the learning environment. To reach the younger generations, language instructors need to be informed of and knowledgeable about new media production technology. To please the new generation of tech-savvy young learners, technological expertise and understanding of tool applications are urgently needed

REFERENCES

[1] Mustafa, Bahaa. (2022). Using 3D Animation and Virtual Reality in Educations. Technium Social Sciences Journal. 27. 269-289. 10.47577/tssj.v27i1.5393.

[2]. Baglama, Basak & Yücesoy, Yücehan & Yıkmış, Ahmet. (2018). Using Animation as a Means of Enhancing Learning of Individuals with Special Needs. TEM Journal. 7. 670-677. 10.18421/TEM73-26.

[3]. B. Senthil Kumar et al. (2016) "3d Animation as an effective tool", IRJET, Volue: 3, Issue 11.

[4]. Liang Yu-bao (2010), "How to improve the quality and effect of CAI application in classroom teaching in institute of higher learning", IEEE Xplore publications, 2ndInternational workshop ETCS, Page No. 658-661.ISBNNo. 978-1-4244-6388-6.

[5]. Li Chengbiao (2009), "Evaluation control on the quality of multimedia teaching in higher educational institutions", IEEE XPlore publications, International symposium CNMT, Page No. 1- 3.ISBN No. 978-1- 4244-5272-9

[6] Chang et al. (2018), "Attitudes of Taiwanese higher education instructors towards using 3D printing technology in teaching".