

Available at https://edupediapublications.org/journals

e-ISSN: 2348-6848 p-ISSN: 2348-795X Volume 05 Issue 07 March 2018

Educational Animation: An Alternative Teaching Learning Aid for English

Jayana Sohanraj Nagar & Dr. M. K. Yagnik

Research Scholar, Department of Education, Sardar Patel University, Vallabh Vidya Nagar, Anand, Gujarat, India.Email Id: jyananagar@gmail.com

Former Head, Department of Education, Sardar Patel University, Vallabh Vidya Nagar, Anand, Gujarat, India.

1. Animation

Animation is to give life to a still thing. Animation means to give motion to still images. It is described as to change the image at such a pace that changing of images is observed as a video in motion. It can also be described as a sequential motion given to images with addition to text and sound.

The search engine, *Wikipedia the Free Encyclopedia* (2010) states **Animation** is a dynamic medium in which images or objects are manipulated to appear as moving images. (www.wikipedia.com).

According to Gagne (1968) states that animation is moving text and pictures or simply interesting transitions between visual tableaus which can be an effective attention grabber that lays the necessary foundation for learning.

2. Education Animation

Educational animations are animations prepared with an objective of increase an interest in learning and helpful in teaching. Computer Generated Imagery (CGI) has made animations

such an interesting aid to help learners to understand and remember the taught information or knowledge for a longer period with better understanding.

Animation is good for describing a dynamic typical academic content because animations aid to show changes over time (temporal changes) which is very useful for teaching processes. Animations can present both the changes in position (translations), and the changes in form (transformation) that are fundamental to learning this type of subject matter.

3. Introduction of Animation in Education

Traditional Learning had so many drawbacks which act as barriers in the students' learning process. Due to it, often it was found that it was not students' centered teaching. Students were not able to grab the content as per their pace. Students were not able to focus on the content due to lack of interest. Students were not



Available at https://edupediapublications.org/journals

e-ISSN: 2348-6848 p-ISSN: 2348-795X Volume 05 Issue 07 March 2018

able to understand due to lack of relationship between imagination and reality.

There were so many lacunas observed in Traditional Learning so introduction of Blended Learning fulfills the requirement for a students' centered teaching process. Animation in education is introduced because the entire complex subject can be taught easily with the help animation as learners can be amazed by animations due to better visual perception and cognition in information human adequately. Students can understand the content even after routine classes as animations can be replayed. Even, the learners have control over how the animation plays such as the playing direction, labels and audio speed and commentary. Teachers are always looking for better ways to educate the students. If they are having fun, they learn better. Computer animation can be used to make very exciting and fun animations into which education and training can easily be incorporated. It is much more interesting to learn math for example when the letters are nice and colorful and flying around your TV screen instead of solving problems on plain black and white paper. Other subjects such as science, English, foreign language, music, and art can also be thought by using computer animation. Computer animation is the perfect tool for those things because instructors can create realistic models of those things like atoms and molecules from the data they have and look

at the way these molecules will interact with each other. Therefore, they can make an animation experiment exactly like the realistic in the lab with regard to materials and results. Therefore, computer animation also allows instructors to do things that would be extremely hard to do in real life.

4. Animation in Literature Learning

Teachers are always looking for new and better ways to educate literature to the youngsters. Researchers observed that when children are having fun, they tend to learn better which is scientifically proven also that retention information is higher when it communicated using both visual and verbal communication. So, animation is a better alternative for literature learning as it offers exciting possibilities for meeting the needs of 21st century learners. The use of animation instruction can significantly enhance student literature learning if properly designed and implemented.

Today, Teachers can use the benefits of animation and bring up the standards from old traditional boredom classroom to interesting active classroom. Although evidence about the effectiveness of classroom animation is mixed (Ainsworth, 2008). It was observed students are motivated, engaged and interacting in the lesson which is considered as positive impact of animation for both teachers and students.



Available at https://edupediapublications.org/journals

e-ISSN: 2348-6848 p-ISSN: 2348-795X Volume 05 Issue 07 March 2018

Have you ever wondered why children learn particular habits, some good some bad, from cartoons? Similarly, students learn a lot more from a teacher who moves around, keeps the class interactive by different techniques and demonstration. It is the same effect with banners because they contain moving objects (Geert, 2009). Animation is "beneficial to learning especially when the learning material demands visual movement" (Rias&Zaman, 2011, p. 582).

5. Effectiveness of Educational Animation

Research evidence about the educational effectiveness of animations is mixed. Researchers have compared the educational effectiveness of static and animated displays. In many studies, findings showpositive effects of animations on learning whereas other studies have found less or no effects. In general, it can be concluded that animations are not intrinsically more effective than static graphics. Rather, the specific animations and how they are used play a key role in the effects that they have on learning.

6. Points to be Adhere in Educational Animation

Students are always attractive towards colours and famous sounds. So, it is necessary that animations should have colourful characters and renowned voice should be used for

commentary and explanation. Students formulate imagination in their mind to grab the knowledge which they are getting through animated videos so it is necessary that pace should be in tune so that students can have better understanding. If typical topic or subject is under discussion, subtitles can also be used for better understanding of the content.

7. Advantages of Educational Animation

(a) Imagination comes to Reality

The content of many subject are very typical and complex that it is a very cumbrous job to teach about those specific content without any demonstration or visualization. For all these types of content, animations plays as a boon for teachers as it facilitate them with a practical visualization of anything to teach to students.

(b) Replay for Reiterate

One of the important benefits of animations that students can study by the lesson taught by teacher repeatedly if they have any doubt even after the teaching session by replaying the video. Animations provide a pleasant and calm environment for students to learn.

(c) Online/ Offline Availability

In the digital era, teacher can use social media or other mobile application to upload the videos taught so that whether



Available at https://edupediapublications.org/journals

e-ISSN: 2348-6848 p-ISSN: 2348-795X Volume 05 Issue 07 March 2018

students are in class, in the library or at home, students will be having easy access to effective animated videos. This also allows them flexibility to progress at their own pace.

(d) Interactive

Interactivity is a mutual action between the learner, learning system, and learning material. Animations are very helpful for students to learn with interactive animations and it helps Learners to learn faster and have better attitudes toward animation especially with audio techniques like synced audio commentary.

(e) Fit for All Ages of Students

Another benefit of animation video is that it is suitable for all ages of students starting from Kindergarten to Intermediate. It just needs to change the language used and the complexity of the content.

(f) Easily Correlated Factor

Sometimes, content of the curriculum is so much typical that students are not able to understand the content. For such typical subject, teacher can very well use animation and make students to understand the subject very easily and in much better manner by animation video.

(g) Easy Communicating Tool

Animation is a new innovative way which acts a good qualitative communicating tool between teacher and student

to present the concepts in a creative and original way. This enables students to realize their imagination through animation and have a logical answer for the content taught.

(h) All Subject Suitability

Due to its creativity and massive scope of drawing images, it is suitable for all subjects for eg. Chemistry, Yoga, Mathematics.

(i) Development of Skill/Abilities

The students takes very less time to understand complex topics, if they are taught with interactive animation and in turn it makes them to enjoy more while learning difficult things. Because the students do not have any risk while learning complex topic by animation, the learners' skills and abilities are improved.

(j) Motivation

Since the animations are interactive and understandable tool for flexible education and training, learners are more motivated to learn more and more. Learners will be interested to learn new chapter due to teaching with interactive animation videos.

(k) Multi-Sensory Teaching Tool

By animated films learning, students can SEE the colourful interesting favourite characters in complex topics, HEAR some interesting voices and responding respectfully to other characters, and TALK about the viewing



Available at https://edupediapublications.org/journals

e-ISSN: 2348-6848 p-ISSN: 2348-795X Volume 05 Issue 07 March 2018

experience with peers and teachers. So, using a multi-sensory tool like animation to teach subject like English, History, Mathematics etc. and critical thinking is highly effective.

(I) 3D Animations Technique

3D animations gives a extra edge in teaching as it gives access to understand 3D model view of imaginary content in subject like Science, English etc. For example, teacher can use 3D Model of any molecule, atmosphere layers, climatic changes, he ocean floor based, different word used for home constructions.

8. Disadvantages of Educational Animation

The following are some possible limitations of using animation in education and training:

- (a) Students will not be able to familiar with Real-time learning experience due to animation program.
- (b) Experienced teachers are required who are well versed with the multimedia equipment, sound control and for certain programming. So it is not easy for every subject teachers.
- (c) It is costly to prepare animated video for all topics of all subjects.
- (d) it Cannot depict actuality like video
- (e) It can be an alternative to reality but cannot take place while teachers are teaching content related to reality for eg. Real places and

monuments such as TajMahal or Great Wall of China.

- (f) Keeping videos in CDs or DVD is not safe as they become unserviceable after some uses or time due to environmental and DVD player conditions. So, it is difficult to store animated content in DVD/CD.
- (g) Teacher have to store the data in Hard Disk to avoid risk of CD/DVD serviceability but hard disk have their own limitations of data storage, malware attack and getting corrupted due to any reason. So again storage of animated video is a big question.

9. Conclusion

Computer animation has many advantages than the traditional way of education and training. The motivation and skill improvement are the main benefits. The main goal of computer animation is to reduce learners' time and useless effort of learning, and to make it more practical and task-oriented. Nevertheless, it also has some limitations that create some of disadvantages.

References

- [1] Bancroft, T. & Keane, G. (2006). Creating characters with personality: For film, TV, animation, video games, and graphic novels. Watson: Guptill.
- [2] Chanlin, L.(2000). Attributes of Animation for Learning Scientific

Available at https://edupediapublications.org/journals

e-ISSN: 2348-6848 p-ISSN: 2348-795X Volume 05 Issue 07 March 2018

knowledge. Journal of Instructional Psychology, vol.2, no. 4, pp.228.

- [3] Deborah, J.(2004). The Use of Flash Animation within a Webct Environment: Enhancing Comprehension of Experimental Procedures in Biotechnology Laboratory. International Journal of Instructional Media, Vol.31, no.4, p.355.
- [4] Gagne, R. M. (1970). Learning Theory, Educational Media, and Individualized Instruction. (6RIC Document Reproduction service no. ED039752.
- [5] Hegarty, M., & Sims, V.K. (1994). Individual Differences in Mental Animation during Mechanical Reasoning. Memory & Cognition. Vol.22, Pp.411-430
- [6] King, S.(2000). Animations as Learning Tools in Authentic Science Materials. Boston, Mass.: Heinle and Heinle.
- [7] Kit, L. (1998). *The Animation*. Retrieved on, 14 Jan 2018, Available: https://openlibrary.org/works/OL2708724W/The _animation_book
- [8] Lan, K. & Kun, H.(2006). Story Animation: Helping Students Build Connection between Words and Pictures in Multimedia Learning. ELT Weekly, vol.99, no.2411, p.18-40.

- [9] Lin, H. Chen, T. Dwyer, M.(2004). Effect of Static Visuals and Computer Generated Animations in Facilitating Immediate and Delayed Achievement in EFL Classroom. Foreign Languages Annals, vol.39, no.2, p.203-207.
- [10] Prasad, U. (2003). *Animations for Education*. The Modern Language Journal, vol.65, no.5, pp.43-53.
- [11] Lowe, R. K. (2004, December). *Animation and Learning: Value for Money.* In Beyond the comfort zone: Proceedings of the 21st ASCILITE Conference (pp. 558-561).
- [12] Richard, C. & Sherman, G. (1999). Visualizations on Technology in Medical Education. The Journal.26 (6), p.66.
- [13] Rieber&Kini, J. (1991).Computer Animation Production Process on Distance Education Programs through Television. Childhood Education Journal, vol.25, no.2, p.107-112.