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# Attitude of Elementary Stage Students Towards Animation Software as Innovative Strategy to Ensure Learning Outcomes in Mathematics

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**Abstract:** Over the period of years, there has been a much emphasis on the attainment of minimum levels of learning by the students. The act ( RTE- 2009) emphasises on child friendly learning activities without fear and anxiety. Learning outcomes at elementary stage is a document having list of grade wise learning outcomes. Researchers and policy makers across the globe are interested in improving learning outcomes in fear free environment, with aid of technology and digital innovative. The present paper is an attempt to create Pawtoon (animation software) as innovative strategy to ensure learning outcomes on basis of identifying types of triangle in mathematics at elementary stage. The purpose of this paper is to study the attitude of students towards Pawtoon as improving the learning outcomes. The sample of the study include 31 VII grade students (15 boys 16 girls) selected in random manner. Findings of the study revealed that both boys and girls showed positive response for pawtoon on basis of identifying types of triangle in mathematics. Further, response towards animation software among students is positive. Based on results, conclusions has been drawn that animation software as innovative strategies can ensure learning outcomes in overall holistic and comprehensive manner.

## I. INTRODUCTION

Keeping global competitiveness in mind, internationally many educational researchers have expressed high expectations on the computers and other technology in improving teaching and learning of mathematics.(Kaput & Roschelles, 1997). The present paper focuses on animation software as innovative strategy for ensuring learning outcomes at elementary stage,specifically Pawtoon are used in this study.

### A. Need And Significance Of Study

The utilization of technology and innovative software available online can help in mathematics and can have diverse range from simple information delivery and drill exercise to overhead projector images.(Papert , 1992).

### B. Definition of Key Term Used.

- 1) Learning Outcomes at the elementary stage The document prepared by NCERT contains class-wise learning indicators and stage wise curricular expectations up to the elementary stage.
- 2) Animation Software Software which provide illusion of motion created through series of still drawings, images ,poses etc.
- 3) Attitude According To Merriam Webster Dictionary capacity to produce strong logical effects or a mental position with respect to a fact/programme or any instruction.

Here, Attitude of students towards animation software in mathematics is applied to students

### C. Objective of the study

The objective of the present study is:

To create Pawtoon (animation software) as innovative strategy to ensure learning outcomes in terms of identifying types of triangle in mathematics at elementary stage.

To compare the attitude of students towards Pawtoon as ensuring the learning outcomes.

### D. Hypothesis

There is no significant difference between attitude of boys and girls towards powtoon as ensuring learning outcomes.

## II. METHODOLOGY

The sample comprises of 31 VII grade students chosen **randomly** from three sections of one English medium (CBSE) school. Single school is opted in order to keep locality, socio economic status same. Attitude scale was prepared consulting experts in the subject matters.

Pawtoon contents were prepared using NCERT text, Swayam- platform and TELMOOCS. There were 9 Items respectively in the attitude scale (3 Point Scale).dimensions –user friendly, entertaining, conducive presentation style.

## III. RESULTS AND DISCUSSIONS

In the present study,

### A. Reliability Statistics

Table. 1 cronbach’s alpha is .881 which is almost excellent (.90) for items.

Cronbach’s Alpha	Cronbach’s Alpha Based On Standardised Items			NO. OF ITEMS		
.880	.881			9		
Attitude towards Animation software Pawtoon	Girls			boys		
	A	D	I	A	D	I
Pawtoon is fun, User friendly, and interactive	45%	36%	19%	40%	20%	40%
Pawtoon helps me in maths	44%	28%	28%	36%	40%	24%
PAWTOON distracts problem solving	11%	80%	9%	24%	60%	16%

TABLE 2: Students report of their attitude towards use of animation software pawtoon in mathematics.

From the above table

- 1) Out of the 31(16 girls,15 boys) students chosen 45% of the girls have shown positive attitude. However,40% boys have shown positive attitude towards animation software.
- 2) Out of the 31(16 girls,15 boys) students chosen 44% of the girls have shown positive attitude. However,36% boys have shown positive attitude towards animation software.
- 3) Out of the 31(16 girls,15 boys) students chosen 11% of the girls have shown positive attitude. However,24% boys have shown positive attitude towards animation software.

#### IV. DISCUSSIONS

Out of 16 girls 45% have shown positive attitude towards animation software and considered that pawtoon is fun based interactive platform. Out of 15 boys 40% have shown positive attitude towards animation software and considered that pawtoon is fun based interactive platform. Out of 16 girls 44% have shown positive attitude towards animation software and considered that pawtoon is helpful in maths. Out of 15 boys 40% have shown positive attitude towards animation software and considered that pawtoon is helpful in maths... Out of 16 girls 11% agreed to the statement that pawtoon distracts problem solving and have shown positive attitude towards animation software Out of 15 boys 24% agreed to the statement that pawtoon distracts problem solving and which is more than the percentage of girls i.e. 11% hence clearly ,have shown less positive attitude towards animation software have shown less positive attitude towards animation software, that PAWTOON distracts problem solving. Out of 16 only 9% of girls were indifferent towards the statement PAWTOON distracts problem solving . however, 16% of boys were indifferent for the matter. hence null hypothesis is rejected on the results clearly from the table so there is significant difference between the attitude.

##### A. Limitations

- 1) Sample Size Is Small.
- 2) Animated software environment utilization is less.

##### B. Implications

The implications of the present study are that integrating Animation software in mathematics teaching at elementary stage can increase students mathematics learning outcomes and foster positive students attitude towards use of technology in mathematics teaching. Results obtained by (Chikering and Gamson, 1999) also revealed that girl students respond to amination mode course in more positive response to deal with tough subjects. Results obtained are similar to other studies that indicate the use of technologies in teaching. (Adams, 2007; Milheim, 2012). Animation software can be made more productive when students are given well organised content and more spaces and time are being utilised. benefit more with such interactive platforms. With point of constructivist and learner centered atmosphere, Animation Software are one of the best source as innovative strategy to ensure learning outcomes in tough subject area. They are easily applicable and any teacher can apply skills complimented with better designing and better presentations.

#### V. CONCLUSION

The present study aimed to determine Attitude of elementary Stage students towards animation software as Innovative Strategy to Ensure Learning Outcomes in Mathematics

The objective focused on Creating Pawtoon (animation software) as innovative strategy to ensure learning outcomes in terms of identifying types of triangle in mathematics at elementary stage.

To compare the attitude of students towards Pawtoon as ensuring the learning outcomes. The results obtained indicated that introduction of animation software pawtoon , have resulted in positive attitude of students of class VII mathematics learning. Pawtoon can make tough subject like mathematics easier and hence appear as innovative strategy to ensure learning outcomes at elementary stage. Students should be encouraged to use technology in learning , technology can empower students to take ownership of their learning. Subjects which require high analytical skills can be made more easy with technology implementations.

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