Review of Related Literature

Chapter - 2 : Review of Related Literature

2.1 Introduction

Students take their mobile devices with them wherever they go, including school. Students of this generation have become so accustomed to technology that they cannot go anywhere without it. They use technologies such as cell phones, iPods, or iPhones to play games, and communicate with friends and family. for entertainment purposes and information. Smartphones are used to send text messages, take pictures. and access the Internet. Google is a common term used not only to refer to an Internet search engine but also as a verb to refer to finding answers to a particular query. Facebook is a popular online social networking site. A truly different world in which we live today. If students are so skilled at using these portable devices, why not impart the same knowledge and skill to achieve the goals they set for themselves in their academic endeavors? This is part of the reason why I started this career

A literature review is a comprehensive summary of previous research on the topic. Literature reviews examine scholarly articles, books, and other sources relevant to a particular field of study. Reviews should read, describe, summarize, purposefully evaluate and clarify this previous study. It should provide the basis for research theory and help you (the author) determine the nature of your research. A book review acknowledges the work of previous researchers, and in doing so, assures the reader that your work is well thought out. It is thought that according to previous work in the field of reading, the author had read, evaluated, and integrated that work into the work being done. A book review creates a student's "space", which gives him or her a complete understanding of the development in the field. This state of the world informs the reader that the author has covered all (or most of all) previous important works in the field in his research.

The text review quote contains two words Review and Literature. The word review means to review or edit information for a specific research area. The term literature in the research method refers to the knowledge of a particular field of research in a field that includes theory, practical. and its research subjects or books as a mirror that reflects the vision of the past and presents a vision of the future. A review of related literature should precede any well-planned research. Reviewers are unable to avoid work, recognition of what has already been done in problems directly or indirectly with the research proposed by the researcher. In a systematic study, the literature review plays an active role. Any research project is born out of a combination of household information, which has been collected by various researchers in a particular field.

The terms of the update were to provide a better understanding of research therapy, research forgiveness. flexibility building of research, and establish a research concept framework. Updates have it all included by selecting a sample of relevant activities. They were mentally organized and appropriate. The activities are presented based on their relationship with the

(a) Educational maths game topics,

(b) A review of textbooks and research studies on the effect of mathematical teaching games, and

(c) A conceptual framework for conducting research studies on educational games. This review provides insight into the vast audience of teachers, researchers, and designers in the field of educational games.

A review of related literature leads the researcher to the construction of a hypothesis. The theoretical framework for all research was created using related documents. Helps the detective to identify dependent and independent variables. Although the review of the related auditor can select the appropriate tools that will be used in the data collection and appropriate methods for the interpretation of the results.

Related literature review means finding, guiding, and evaluating past and present research literature related to systematic research. Such publications offer books on foot for former travelers who travel the same route.

2.2 Reviews of related literature

Mandurah (2008). "Effects of a Computer Game on Mathematics Achievement and Class Motivation" - An Experimental Study This study examined the effects of a series of mathematics computer games on mathematics achievement and motivation of high school students. The data were collected through the school district benchmark exams, the game mathematics performance tests, and the motivation surveys. The results indicated significant improvement in the mathematics achievement of the students who played the games as compared to the ones who did not play the games. Several reasons for the positive learning effects of the games were reported by the participated teachers and students. The games were effective because they combined learning and fun, offered mathematics in an adventurous and exploration context, and challenged students to learn mathematics.

Wright (2011). "The effects of video game play on academic performance" - The findings from the present study are relevant in today's world, as video games have an ever-increasing penetration level across the globe. Knowing that game players tend to have lower CPAs than non-players, should parents ban the playing of games? The study did not account for other extracurricular activities, employment, or course load. Time spent playing video games had no significant effect on academic performance, but the results of this study indicate the true need for the setting of limits on the amount of time spent playing. The survey itself could have been revised to better indicate that if the participant indicated that they did not play video games, the rest of the questions were to be left blank.

Almeida (2012). "The Effect of an Educational Computer Game for the Achievement of Factual and Simple Conceptual Knowledge Acquisition" - Using educational games seems to be an effective way to design instruction for factual knowledge. This study concurs with Almeida's post hoc results and Sicart's that when games are used against the control group, significant increases in factual knowledge occur. It also advances the findings proposed by Hwang et al. where they found that personalized education game approaches promoted learning but also motivation as the subjects of this study advanced learning acquisition.

Masalegoo (2013). "Project-based learning in relation to thinking abilities and creativity among undergraduate students" - In the first section of this chapter, we stated the relations of PBL parameters in experimental and control groups in comparison with related studies, and tested the hypotheses of this research. According to obtained results from data of experimental and control groups, we can concretely state that which degree of our dependent variable variance is determined by the independent variable. According to obtained results of experimental and control data show high Mean scores in the experimental groups which have a significant level. To investigate this hypothesis, we conducted the t-test, for girls and boys groups. There is no significant difference in the development of thinking skills among girl & boy students for the experimental group.

Kumar (2014). "Developing instructional models for the teaching of biology using the theory of multiple intelligences" - The Pre-Test data reveals that there is no significant difference between the Pre-test achievement scores in the Biology of Experimental group and Control group before intervention. It indicates

that the developed Instructional Models were more effective than the Activity Based Learning Method applied to the Control group. The greater mean score is associated with the Experimental group, which means that the two groups are equivalent in terms of their achievement in Biology. There is a significant difference between the means of Pre-Test and Post-Test achievement scores for the Experimental group (t-value = 25.15) and the Control group. It means that there is a significant difference between the different groups of students in various schools on the Post-test that there is no significant difference among the three groups concerning their achievement in Biology.

Mahmoudi (2014). "The effect of computer games on speed, attention, and consistency of learning mathematics among students." - Computer games can be effective in increasing the level of motivation and emotional stimulation of students. Considering that RAS is responsible for the brain in response to external stimuli, it increases the student's awareness and interest in solving mathematical problems. Some researchers believe that there is no clear causal relationship between mathematics achievement of students and using computer games. This lack of effect is because of: (1) the complexity of computer games which prevents the student from having a clear understanding of the objectives and content, and (2) irrelevant parts of a computer game which unnecessarily prolong the time of learning, (3) the game may not be interesting for all students to the same degree; thus motivation may decrease and the learning may fail.

Ajmeri (2015). "Effectiveness of language games in learning English for standard viii" proved that teaching the subject of English through language games is very effective. Students of Standard - VIII from the urban and rural areas have high, medium, and low IQs in the Anand district.

Cicchino (2015). also concluded that game-based learning benefits in the same way as the conventional method do to foster critical thinking. Game based learning creates interest and makes class more engaging. It is more effective than traditional lecture method as it is student centred.

Thomas (2015). in "Effectiveness of developed multisensory strategy on academic achievement of children with learning disability at primary level" – expressed that the multi-Sensory Strategy is found to be more effective than the Conventional Activity Oriented Method on Academic Achievement among children with a Learning disability at primary level. Multi-Sensory Strategy does not vary in its effect either on academic Achievement as a whole or on Achievement in various subjects-English, Malayalam, and Mathematics. Achievement in Reading comprehension (English) will influence the Achievement in Graham (Malayalam) of a learning disabled student when taught using Multisensory Strategy.

Köse at.el (2015). "A Research on the contribution of a Compute game-based Learning Environments to student's motivation. " - A study has examined the effects of computer game-based learning on students' motivation and results mostly came to positive findings, although some students had negative ideas about the process. Results show that gender plays a crucial role in the choice of computer games played as well as the type chosen for this study. It has been determined that most girls prefer simulation games and do not like having their teacher ask them questions about subjects they do not understand but are somewhat reserved in presence of classmates.

Vivekanandhan (2016). in "The study of the effectiveness of E-learning in the functional literacy program among the illiterates" - The content analysis of the literacy-based e-learning module presented in this study proves to be an effective stepping stone in the process of imparting literacy. The lessons are well-knit in the content. The pace of the instruction, feedback and the content structure of the exercises given for the lessons have been deeply analyzed and presented with improvements.

Bincy (2016). "Effectiveness of synectics model and gaming strategy on achievement and creativity in Mathematics among secondary school students" - The effectiveness of Synaptic Model and Gaming Strategy over Activity Oriented Method on Achievement in Mathematics among Secondary School Students differ significantly by the Gender of Students. They are equally effective for the objectives – Applying and Analysing Students at the Secondary level and Evaluating and Creating Achievement in Mathematical. The results do not differ significantly based on the type of Management of the School. Gaming Strategy is more effective than Synaptic Model on the objectives –Remembering, Understanding, Applying and Creating of Achievement in Mathematics among Secondary School Students. They are equally effective for all other objectives – Analysing and Evaluating Mathematical Achievement in Mathematics.

Activity Oriented Method is more effective than Gaming Strategy on Retention of the objective – Understanding of achievement in mathematics among secondary school students. The effectiveness of the Gaming Strategy over Activity Oriented Method differs significantly by the Gender of Students except for the objectives -Evaluating and creating achievements in mathematics.

Shukla (2020). in "Effectiveness of Games Based Learning in Teaching of Mathematics at Elementary Level" stated that game-based learning strategy was found to be significantly more effective in developing attitudes towards the mathematics of elementary level students than the traditional method of teaching mathematics. In the experimental group, the investigator had tried to create and present joyful circumstances to learn mathematics. During the experiment, the students had shown their keen interest and confidence in tackling new mathematical situations and problems. The control group, associated with the traditional teaching method, got minimum chances to interact with their teachers and peer groups.

Vijaylakshmi (2020). In "A lab view based stand-alone system to monitor the EEG and EMG of video gaming kids" - describes the DGSG and BCOTNN methods to analyze the electrical activities of the brain signals for recognizing video game playing kids' abnormality. Initially, the physiological signals are recorded; the time domain and frequency domain related to noise is removed by the frequency normalization principal component method. Various spectral and statistical features are derived and optimized features are selected depending on the spike genetic operators such as initialization, selection, crossover, and mutation. Finally, the bee colony-based trained features are compared by computing the probability value, and the recognition process is done by BCOTNN.

Dandawate (2021). In "The effect of game-based instructional modules for German language on student's interest and classroom atmosphere" expressed that Teachers are being sought for their help to develop and implement game-based instructional modules in German language for students preparing for the Higher Secondary Certificate (HSC) Exam in Pune.