Effects of Integrated Technology in Creative Writing

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Abstract

This experimental study investigates the effects of using integrated technology in creative writing through life oriented inquiry curriculum in the context of teaching and learning of English at middle stage students' achievement. Many schools in India, started to teach through modern digital technology. Qualitative research study was used to investigate teachers' readiness to integrate technology at Middle stage in Tamilnadu, India. An experimental method was found to be true most appropriate method for testing the hypothesis in the study. Technology based learning package deals with 2 sensory methods viz. appearance & sound, which helps learners to be confident, innovative, creative and informative. One group pre as Control Group (CG) and another group post test as Experimental Group (EG) design was used in the study. Control Group (CG) and Experimental Group (EG) will assigning the forty students at random for each group. The students of the control group will be asked to develop an imaginary design with paper based materials while those of the experimental group will be asked to do the same with the help of simple basic knowledge of computer technology. The scores of the students of CG and EG will be tabulated and analyzed using appropriate statistical techniques. Formulated hypotheses will also be tested with availing appropriate statistical tools. Based on the findings of the study, it is concluded that the integrated technology for creative writing techniques is effective in bringing about a holistic development of the linguistic skills of the students.

Keywords

Creative Writing, Integration, Language, Computer Technology, Writing skills.

I. INTRODUCTION

Creativity plays an important role in technological advance, in the social and behavioural sciences, and in the humanities and arts [16]. Creativity is 'the ability to come up with new ideas that are surprising yet intelligible, and also valuable in some way' [9]. The advancement in the field of IT and ICT, people are facing complexities and diversities thoughts and conflicts for proper adjustment. Information and Communication Technologies (ICTs) have spread extensively in everyday life in an unprecedented way [6]. Computer technology has changed every sphere of life [18]. It is useful not only for learners but also for teachers [24]. Recently, technology based teaching is an integral part of successful teaching [1]. In [12] examined some of the factors that affect the adoption and integration of Information Communication and Technologies (ICT) into teaching, the author concluded that teachers'

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feelings, knowledge and attitudes among other factors influence their use of technology within their classrooms. Mere examination oriented teaching is never going to produce calibre students and complex for getting jobs. Students are learning through creative skills and computer technology, could soon replace the present teaching learning process. Technology plays an important role in making connections for understanding [14]. New technologies are influencing students' learning skills especially reading and writing [7]. However the conventional methods could not be replace immediately so, in order to create a link between subject and enable them to integrate various subjects. Teachers' perceptions about integration of technology in teaching have not got enough attention of researchers [11]. Teachers' beliefs about using technology affect their attitude to use technology for teaching and learning [2].

Naturally humans are born with potential thought. To encourage the original thought into invention, is the great role of education. All of us are born with creative potential and if given proper environment with new technology, this potential can be recognized, nurtured and measured [23]. Human advancement comes through original thought and invention but the Individual have ideas but there reluctant to express them [10]. The reflection of creative aspects of students in school environment can be seen mostly in the texts they produce by using writing skill. For this reason, creativity and writing skill are very close together and identical [15]. Writing includes "creative thinking and relating new information with

the prior knowledge and this make new information sense" [15]. It is directly associated with creativity, creative writing which means one's putting his or her ideas and feelings about a particular topic on paper by using his or her imagination freely. Creative writing aids language development at all levels: grammar, vocabulary, phonology and discourse. Today children are not made to fit into a set educational mould. There is much individual instruction, which is highly motivated, and allow in depth study [13], individual initiative and self-education in the new school. Creativity as a process of becoming sensitive to problems, deficiencies, gaps in knowledge, missing elements, disharmonies, identifying the difficulty, searching for solutions, making guesses or formulating hypotheses and possibly modifying and re-testing them and finally communicating the results [25]. Modern schools encourage students in creative expression through arts, music, paint, crafts rhythmic and dramatics. Our students are high achiever but very poor communication skills so this study help them to improve their communication skills. Teachers are an integral part of any educational systems [8]. English language teachers play very important role in teaching and learning [21]. The research study [17] found that Teachers were willing to use technology in order to benefit from it and to help their students, [22] found that teachers were familiar with technology, [1] found that teachers were integrating technology in their class activities. Creative writing help the students to express through integrated language skills and to give them an opportunity to express their own capacity, whatever the route, medium and the material matters. Educational leaders and policy makers claim that computers and related internet technologies represent important educational innovations [19]. Recent studies have shown that the successful implementation of educational technologies depends largely on the attitudes of educators, who eventually determine how they are used in the classroom [3]. Hence the following objectives were formulated : 1. to study the effectiveness of the creative writing through integrating subject and the use of computer technology, 2. to find out the impact of simulation on the imagination of the students' creativity through the use of computer technology, and 3. to evaluate the writing skills of the children through computer technology, and 4. to verify whether students are able to integrate subjects through integration of skills.

II. THE STUDY

The hypotheses were set for the study as follows: 1.There is no significant difference between the mean scores of the control group and the experimental group in exhibiting their language skills through integrating subject and the use of computer technology 2. There is no significant difference between the means of the scores of the control group and the experimental group in the impact of simulation on the imagination of the students' Creativity through the use of Computer Technology, 3. There is no significant difference between the mean scores of the control group and the Experimental Group in exhibiting their writing skills through the use of Computer Technology, 4. There is no significant difference between the mean scores of the control group and the Experimental Group in exhibiting their creative skills in creating the Dreamland, Advertisements and Designing the Front page of the Newspaper through the use of Computer Technology. The random replication design has been adopted by the investigator to highlight the effectiveness of integration of subjects, language skills and integration of computer technology to develop creativity of the students at middle stage in the experimentation. The control group was allowed to do the activity with paper-based materials whereas the experimental group did the same project work with the help of simple basic knowledge of computer. The students were able to create a new dream city of their own with necessary ideas obtained from integrating all the subjects like History, Geography, Science, Trade & Commerce, Economics and Language which they have already learnt in separate compartments. The investigator has particularly chosen the random replication design rather than the other design in order to repeatedly test one skill at a time and also comparing with the experimental group and the control group.

III. RESULT AND FINDINGS

A detailed discussion has been made to test the hypothesis based on the identity of the experimental groups. This study draws a conclusion based on the findings. From the first hypothesis, there is no significant difference between the mean scores of the control group and the Experimental Group (EG) in exhibiting their language skills through integrating subject and the use of computer technology**.** To test the null hypothesis 't' test were attempted between the means of the experimental group and the Control Group (CG) in realizing the instructional objectives in creative writing to improve the language skills through computer technology. The mean and S.D. of the scores were already computed. The results are given in Figure. 1.
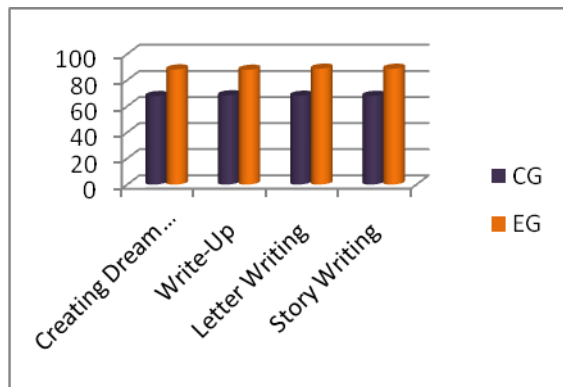
Fig.1. Relative Effectiveness between the Mean Scores of the Control Groups and the Experimental Groups in exhibiting their Language Skills through the use of Computer Technology.
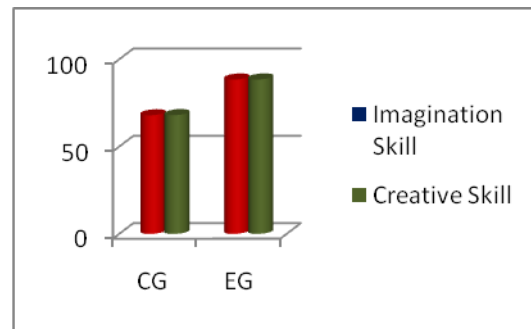

Fig. 2. Comparison of the Effectiveness between the mean scores of the Control Group and the experimental group in the impact of simulation on the imagination of the students' creativity through the use of Computer Technology.

From the above Figure 1, it is found that there is significant difference at 0.05 level between the mean scores of the Control Group(CG) and the Experimental Group(EG) on the whole in the creativity of the students to acquire language skills. It is also found that the mean value of the Experimental Group is higher than that of the Control Groups which can be because of the use of Computer Technology in the experimentation to enhance creativity among students. Hence, the null hypothesis is rejected and the alternative hypothesis is accepted. It is concluded that the language skills through integrating subject and the use of computer technology that was effective in realizing the instructional objective writing the creative writing to improve the language skills. A research study [5] also found that teachers' concerns have a significant influence on the use of computers in the classroom.

From the Second Hypothesis, there is no significant difference between the mean scores of the control group and the experimental group in the impact of simulation on the imagination of the students' creativity through the use of computer technology,. To test the null hypothesis 't' test were attempted between the means of the Experimental Groups and the Control Group in bringing out the in the impact of simulation on the imagination of the students' creativity through the use of computer technology. The mean and S.D. of the scores were already computed. The result are given in Figure: 2

From the Figure 2, it is found that there is significant difference at 0.05 level between the mean scores of the Control Group and the Experimental Group in the Creativity of the students. It is also found that the mean value of the Experimental Group is higher than that of the Control Group which can be because of the impact of Simulation on the imagination of the students' Creativity through the use of Computer Technology in the experimentation.

Creation of the dreamland using the Computer Technology, the students of the experimental Group were able to create a simulation of a dreamland. A miniature world of their own (their House, Industry, Transport, etc.) was created with colourful display of pictures using Microsoft Pain Brush and Clip Art using cut / copy / paste and flip rotate options and write up of the dreamland using the technology is surprisingly all pupils showed extraordinary interests in making use of Microsoft word where they were amused giving a write up of a dreamland making use of a variety of options like Fonts / colour / cut and paste / alignment / grammar / spell check / inserting pictures / borders / etc. There was no boredom or monotony in writing.

From the third hypothesis, there is no significant difference between the mean scores of the control group and the experimental group in exhibiting their writing skills through the use of Computer Technology. To test the null hypothesis 't' test were attempted between the means of the experimental group and the control group in exhibiting their writing skills through the use of Computer Technology. The mean and S.D. of the scores were already computed. The results are given in Figure 4.
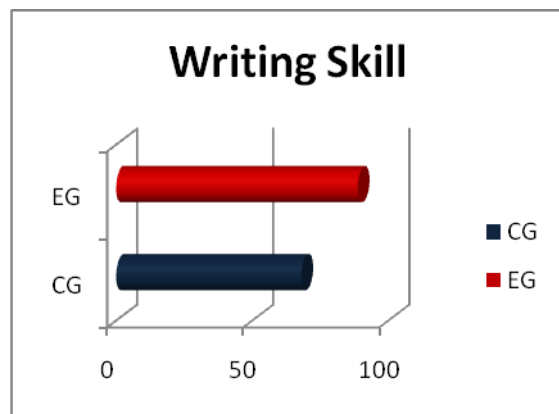
Fig. 4. Comparison of the Effectiveness between the Mean Scores of the Control Group and the Experimental Group in exhibiting their Writing Skills through the use of Computer Technology.

From the Figure 4, it is found that there is significant difference at 0.05 level between the mean scores of the Control Group and the Experimental in exhibiting their writing skills through the use of Computer Technology. It is also found that the mean value of the Experimental Group is higher than that of the Control Group which can be because of the impact of Computer Technology in the experimentation in exhibiting their writing skills. The same tasks were carried out by the Control Groups on paper – based materials without the aid of Computer Technology. Hence the null hypothesis is rejected and the alternative hypothesis is accepted. It is concluded that Computer Technology was effective in exhibiting their writing skills This is clearly seen in Figure 4.

There is no significant difference between the mean scores of the control group and the Experimental Group in exhibiting their creative skills in creating the Dreamland, Advertisements and Designing the Front page of the Newspaper through the use of Computer Technology.

From the fourth hypothesis there is no significant difference between the means of the scores of the control group and the experimental group in exhibiting their creative skills in creating the Dreamland, Advertisements and Designing the Front page of the Newspaper through the use of Computer Technology. To test the null hypothesis 't' test were attempted between the means of the experimental groups and the control group in exhibiting their creative skills in creating the Dreamland, Advertisements and Designing the Front – Page of the Newspaper through the use of Computer Technology. The mean and S.D. of the scores were already computed. The results are given in Figure 5.
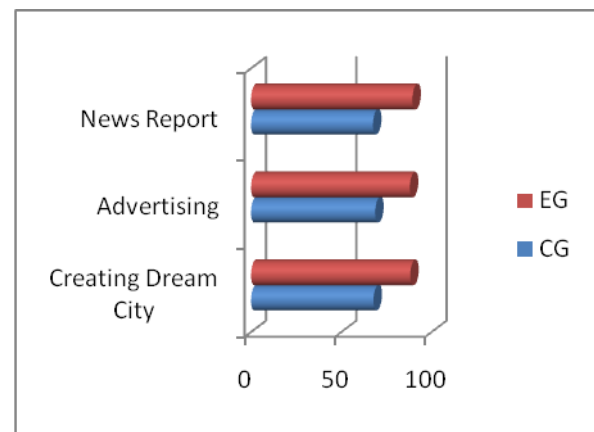

Fig. 5. Comparison of the Effectiveness between the Means of the Scores of the Control Group and the Experimental Group in Exhibiting their Creative Skills in Creating the dream city, advertisements and designing the Front-Page of the Newspaper through the use of Computer Technology.

From Figure 5, it is found that there is significant difference at 0.01 level between the mean scores of the Control Group and the Experimental Group in all the tasks on Creative Skills because of the impact of Computer Technology in the experimentation in exhibiting their creative skills. A [20] study showed an improvement of their English Language indicating that computers plays a major role in fulfilling for individualizing instruction at different level.

IV CONCLUSION

As we know, the creativity forms the basis of all skills and hence, if it were incorporated with technology then there would appear a better chance of self – expression. To go with the growing world, one has to keep pace with the rapid changes that are taking place in the field of technology. The power of technology is turned into teaching tools that will captivate students, motivate them and ultimately urge them towards greater learning. Students were found confident, creative and genuine in their expression and learnt to relate all, what they have been studying with a better readiness to learn something new. A research study [21] also recommends that pre-service and in-service teacher are willing to integrate technology into their classes but they need technology and proper training to use it.

REFERENCES

[1] Almekhlafi, A. G. & Almeqdadi, F. A., Teachers' Perceptions of Technology Integration in the United Arab Emirates School Classrooms, Educational Technology & Society, 13 (1), 165–175, 2010.

[2] Almekhlafi, A. G., The effect of instructional media on learning second language teaching strategies by preservice teachers,. Unpublished doctoral dissertation, Arizona State University, Tempe, 1999.

[3] Albirini, A., Cultural perceptions: The missing element in the implementation of ICT in developing countries. International Journal of Education and Development using ICT [Online], 2(1). Retrieved from http://ijedict.dec.uwi.edu/viewarticle.php?id=146, 2006.

[4] Albirini, A., Teachers' attitudes toward information and communication technologies: the case of Syrian EFL teachers. Computers & Education, 47(4), 373–398, 2006

[5] Atkins, N., & Vasu, E., Measuring knowledge of technology usage and stages of concern about computing: a study of middle school teachers. Journal of Technology and Teacher Education, 8(4), 279-302,2000.

[6] Ayat Ayman, Abdel-Aziz, Hassan Abdel-Salam, and Zeyad El-Sayad, The role of ICTs in creating the new social public place of the digital era, Alexandria Engineering Journal, 55(1), p487-493, 2016.

[7] Barrell, B., Technology and change in Atlantic Canada's new secondary English language arts curriculum. English Education, 31(3),231-247,1999.

[8] Bill, M., The role of a teacher. Canadian Musician, 19(5), 1-31,1997.

[9] Boden, M. A. (2001). Creativity and knowledge in A. Craft, B. Jeffrey, and M. Leibling (eds.). Creativity in Education. London: Continuum.

[10] Bowers, K.S., "Sex and Susceptibility and Moderator Variables in the Relationship of Creativity and Hypnotic Suggestibility", Journal of Abnormal Psychology, 78(1), 93-100, 1971.

[11] Bruce, B.C., Critical issues. Literacy technologies: What stance should we take? Journal of Literacy Research, 29(2), 289-309,1997.

[12] Buabeng-Andoh, C., Factors influencing teachers' adoption and integration of information and communication technology into teaching: A review of the literature. International Journal of Education and Development using Information and Communication Technology (IJEDICT), 8(1), 136-155, 2012.

[13] Cleary. A., Mayers, T., Packhan, D., "Educational Technology Implications for Early and Special Education", New Delhi: John Wiley and Sons Ltd, 1976.

[14] Crandall, J., Jaramillo, A., Olsen, L and Peyton, JK, "Using Cognitive Strategies to Develop English Language and Literacy", ERIC clearinghouse on Languages and Linguistics, 2002.

[15] Demir, T. (2013). Effects of creative writing activities on students' achievement in writing, writing dispositions and attitude to English. International Journal of Turkish Literature Culture Education, 2(1), 84-114.

[16] Dudek, 2003, Perspectives on creativity in aging adults. American Psychological Association, San Francisco, 1991

[17] Ewa, M., Teachers, technology and change: English teachers' perspectives. Journal of Technology and Teacher Education, 13(1), 5-24, 2005.

[18] Hill, J.R., & Hannafin, MJ., Teaching and learning in digital environments: The resurgence of resource-based learning. Educational Technology Research and Development, 49(3), 37-52, 2001.

[19] Howley, A., Wood, L., & Hough, B., Rural elementary school teachers' technology integration, Journal of Research in Rural Education (Online), 26(9), 1-13, 2011.

[20] Kitao, K.., "English Teaching: Theory Research and Practice", Individualizing English Instruction using Computers, Tokyo: Eichosho, 545-567,1995.

[21] Khan, I. A., The teacher of English: Pedagogic relevance in Saudi Arabia. English Language Teaching, 4(2), 112-120, 2011.

[22] Odabasi, F. H., Faculty use of technological resources in Turkey. Innovations in Education and Training International, 37(2), 103 – 107, 2000.

[23] Rasool.G, A study of Divergent Thinking of School-going Children, Creativity Newsletter, 6(2), 23-26,1977.

[24] Saglam, A.L.G., and Sert,S., Perceptions of in-service teachers regarding technology integrated English language teaching. Turkish Journal of Qualitative Inquiry, 3(3), 1-14, 2012.

[25] Torrance, E.P., Torrance Tests of Creative Thinking, :Norms technical manual Princeton NJ : Personal Press, 1966.

[26] Runco, M. A. (2004). Creativity, Annual Review of Psychology, 55, 657-687.