

A Comparative Study to Analyze the Efficiency of Accelerated Learning to Facilitate the Understanding of English Language at Secondary Level

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Abstract

An experimental research study was designed to analyze the efficiency of accelerated learning to facilitate the understanding of the English language at secondary level. The population of the present study consists of all students of grade 9 who were enrolled in Government High School Heir, Bedian Road Lahore in academic year 2018-2019. By applying simple random sampling technique, sixty-four (64) students were preferred as a sample. Data were collected by conducting pre-test and post-test and analyzed by SPSS software version 21. The analysis pointed out that the students taught through accelerated learning perform better as compared to the students taught via traditional method. Furthermore, it was also found that the students who were taught via accelerated learning method of teaching can perform maximum learning levels of domains as compared to others. The study recommended that subject English should be taught with accelerated learning method of teaching at secondary level.

Key Words

Accelerated Learning,
Cognitive Domain,
Efficiency, Learning,
Teaching Methods.

Introduction

The individuals tend to have preference in their access to learning assignment. Some people desire to make causal affiliations and others are more conducive with structured organizational interpretations. Some put forward intellectual interactions with beliefs and clues, while others consider a particular experience to boot a concept and understanding of the subjects. The researchers advocate that many learned best when information is explained in a way that harmonizes our preferred learning styles and also commends that our learning approaches and styles preferences can be broadened in scope (Shukla, 2014). The people like parents, family members, elders, primary caregivers, teachers, and other volunteers that associate with learners both in and out of the school are known as the learning partners. The teacher who uses accelerated learning is the learning facilitator. Teaching is an act to tell something formally or informally by a teacher to a student. It is basically an attempt to transfer knowledge or some specific behavior by any individual who is called the teacher to the individuals of the society, students. This attempt may be tried by formal way, where everything is pre-decided or informally where everything will be decided on the spot (Ladson-Billings, 2017). The teachers spend most of their time in selecting and organizing activities for the students.

The learning procedure is specific function, attitudes, series of steps, or procedures and discussion channel to enhance the learning and knowledge of learners (Murcia, 2001; Hardley, 2001). In learning process, students mostly experience memorize and then understand. They needed data and materials essential for focuses while thinking to interact with lessons in order to analyze and to process information. A teacher is always actively participated and involved while directing and supervising the students' to analyze the information. Active problem-solving methods by students towards finding ways through their own attempt and analysis are effective ways. With practice in these processes, students learn the contents of the lesson and also develop their ability and other skills those can help them to think critically (Smith, & Piele, Eds. 2016; Wlodkowski, 2003; Boyd, 2007; Imel, 2002).

Accelerated learning introduces a configuration and standard to chalk out learning programs which facilitate in such a way that assures each individual achievement. Meanwhile, it acts as an

open system tries to adapt and transform as learn more about learning and personal development. These processes have been made better or improve in quality and have learned from neuroscience, learning styles theories, multiple intelligences, cognitive psychology, constructivism, and many various techniques to learning and human development such as experiential education, holistic education theory and practice, and drama in education approaches.

Considering traditional educational policies, outdated syllabus and learning method, there has been no understanding of language at secondary level other than remembering specific paragraphs and pronunciations to go through exams. On the contrary, every advanced subject being taught is in English language and requires strong understanding of language to learn at any level after secondary classes. If the gap of language is bridged through assisted learning then learning will become much easier as large pool of knowledge will be available to anyone who desires to learn in accordance with passion.

Learning something new stimulating interest, discussion and torment emotionally. The stimulation with which we start something decline over a short period of time, making the assignment functions at hand shown to be unattainable. The process of learning a new language or a new competence, acquiring new expertise need not be always complicated affair. Appropriate strategy attached to the right behavior can help you overcome barriers with more conveniently. Accelerated learning approaches are obtaining much reputation among students of all age's level. These approaches widely committed to making learning an advantageous process (The Peak Performer Center, 2019). The learning can be classified into four different parameters on the basis of information intake. First category visual learning is the "learning via seeing pictures, images, and spatial understanding". Secondly the aural learning is the "learning through hearing sound and music". Thirdly verbal learning is the "learning through saying, writing and speech", and the last is physical learning that "learning through doing using body and sense of touch".

The increase in the ability of mathematical representation of students taught through accelerated learning method with the submission of problems from students accelerated learning method with the submission of problems from teachers and conventional methods. The criteria of gain value for the class using accelerated learning method with the application of problems from students and accelerated learning method with the submission of problems from the teacher included into the middle category, where the gain for the class using the accelerated learning method with the application of problems from students is 0.56 and gain value for the class that used the conventional method is 0.17 which fall into the lower category (Amelia, Susilawati, Saf, Ariany, Supian, & Subiyanto, 2018).

The accelerated learning approach enables the students to learn better, quick, and concise, was advantaged to adapt and preferred approaches applied in the classroom are presentations and debates using an LCD projector. The learning facilitator or teacher expressed that mapping out the intelligence for each learning approaches permits one to be more aware of the differences among the learners related to their learning styles. If a teaching strategy attributes most of the learners' intelligence, then they learn much more within span of time. So, this is a practical experience that the adoption of accelerated learning facilitates in his pursuit of enhanced effectiveness. Without applying assisted learning approaches, learning facilitators could still be effective as long as they are capable to pick out the attention of the learners through appreciation, amusing, entertaining and enjoyable exciting activities and the use of multimedia. The teacher should be advance to learning from the learners and must retrieve a sense of surprise that could be applied to the learners. Professional commitment becomes more fruitful through accelerated learning because it was more exciting and enjoyable (Ganiron, 2013).

According to Emunah, (2013), in the educational process dramatization is a specialized technique that always enabled the students to make and believe in play as a significant learning activity. In this method, students can easily be able to role-play certain situations, can act out invented situations, or establish fictitious images related to the purposes of understanding and growth. This method can be shaped by a commitment to three processes (a) action (b) reflection, and (c) transformation. Teachers always engage students towards required curriculum and related skills. This opportunity of process-oriented method can be used effectively and efficiently at the Secondary, Undergraduate and postgraduate levels. By using this method, students can be able to become leaders in the association known as drama, which can be non-scripted cooperative illustration under the supervision of an experienced mentor. In educational process with the help of drama, teaches can clear its concepts, can raise awareness, can assists students with skill development, can promote collaboration in learning, can build awareness to community and can generate aesthetic skills or knowledge.

Discussion is as an action or process to talk about a particular topic in to reach on the decision or to share ideas, a discussion or debate about a specific topic or comprehensive management of a topic in speech or in writing (Ten Have, 2017). In extended role plying method, students can be able to create an act that can be taken place in advance or after a story or any kind of scene. With the help of this strategy, students can be helped to envisage and can be able to theorize the main cause and effect happening after (Mishra, & Koehler, 2016).

According to Yoon (2008) students participate actively in teaching practices conducted through activities. Where a teacher's role is passive guidance? A teacher must be present in the activity area (classroom), having a close eye, but will remain passive and only to guide the students where they feel difficulty. The ways to which teachers guide the student must not be authoritative. They only gave guideline and ask students to perform it according to their convenience.

Kirschner, Sweller, & Clark, (2016) stated that activity-based method is a way of teaching that most of the teacher adopts to improve their teaching. Most of them have a focus on activity-based teaching in order to teach through activities because they know that activity-based teaching is most effective method. It is an approach in which child is the center of every activity. In this method, child takes part actively and due to active participation, he is active mentally and physically. So, the learning takes place in the result of this approach has long-lasting effect on child's learning. A child learns by doing that creates better understanding and is the method from which rote learning method is reduced from teaching and learning process. Due to this method success ratio of student can be improved as students' focus in this method is to clear their concepts and learn things by practicability. It is proved that activity-based teaching stimulates all five senses.

Finn, (2010) believed that activities based accelerated learning students' take part with having interest and learn willingly. It means a teacher does not impose knowledge on students. They learn with enthusiasm and implement most of the concepts according to their need. So, understanding got through the activity-based method by can be understand as any learning that is carried out with the aim in a social circle, involving student physically and mentally by stimulating their senses for creative work, action or expression.

Information and communication technology (ICT) has brought revolutionary changes in the teaching-learning process. At present several ICT related instructional devices like computers, smartphones, laptops, tablets, LCD, multimedia and projectors are used in classrooms for making more attractive and productive teaching and learning process. ICT effects on delivery of instruction, evaluation and assessment system for the effective teaching-learning process (Ahmed, Arshad & Tayyab, 2019). Wolfe (2001) find out that music-based activities stimulate our intellectual, visible, auditory, imaginary, and motor systems to different degrees as we listen, see, sing, play, accent, rhythm, read, or construct music and that our cognitive level is inspired to search for channels in music. These activities facilitate the learning process.

Akbiyik & Simsek (2009) portrayed that accelerated learning activities and environments had a significant effect on academic performance. Radler & Bocianu (2017) concluded that both the students and learning facilitator enjoyed and felt the strain of an enhanced technological for study and individual profession. According to Schomack (1996), traditional learning tends to be emphasizing one best way, competitive, restrict and hard work while accelerated learning tends to be dynamic, flexible, geodesic, mutual, multi-pathed, natural, multi-sensory, state of mind and be joyful.

Noreen (2018) found in her comparative study that the activities developed an interest of the students and have proved to be of great significance in teaching and learning method. Instructions and education provided via activities are speedy and accelerated. The teaching-learning process through activities stimulate a high-level interest in the students and also make the concept clear. Shahzadi (2019) in her study showed that deductive method of teaching was more effective for overcrowded class in public schools. The students learn more and give better result in subjects as compared to traditional teaching method (Kamran, Munir & Wattoo, 2019). Taking into account the fact that "teaching is more important than knowledge", the study is designed to know the effectiveness of accelerated learning to facilitate the application of concepts of English language at secondary level.

Objectives of the Study

1. To determine the difference in the achievement of students taught via accelerated learning and traditional teaching English at secondary level.
2. To find out achievement in all learning levels of the cognitive domain who are taught English via accelerated learning and traditional teaching.
3. To highlight the efficiency of accelerated learning in teaching English at the secondary level.

Hypotheses of the Study

- H₀:** The mean achievement score of students of control and experimental groups do not significantly differ in the knowledge of English on pre-test.
- H₁:** The mean achievement score of students of control and experimental groups do not significantly differ on all learning levels of a cognitive domain in pre-test.
- H₂:** The mean achievement score of students of control and experimental groups do not significantly differ in the knowledge of English in post-test.

H₃: The mean achievement score of students of control and experimental groups do not significantly differ on all learning levels of the cognitive domain for post-test.

Methods and Procedures of the Study

It was experimental research study based on “pre test, post test control group design” The researchers developed two instruments one is “pre-test” and second is “post-test” from 9th class English textbook for collection of data. The researcher selected Government High School Heir Bedian Road located in Lahore for study. Population of the study was consisted of 128 students of grade 9th from Government High School Heir Bedian Road Lahore. For sample selection, 64 students of class 9th were selected randomly. Panda (2016) presented that simple random sample is a “sample selected such that each possible sample combination has equal probability of being chosen”.

The both research instruments were shared with the experts of English of School Education Department (SED) and were updated in the opinions of their comments. The updated instruments were administered as pilot study on 10 students of 9th class which are not included in the sample. The tools were reframed and updated in terms of complication level on the footing of pilot study. Both research instruments comprised of 100 items chalk out from the first five (1-5) units of 9th class English subject and each item had equal one mark. The total marks of pre test and post test were 100 credits separately. The table of specification for a 100 items is given as.

Table 1: Specification of 100 Items

Lesson	Knowledge	Comprehension	Application	Analysis	Synthesis	Total	%
1-3	12	14	14	12	8	60	60
4-5	8	6	6	8	12	40	40
Total	20	20	20	20	20	100	100
Total %	20	20	20	20	20	100	100

It was a multiple choice questions tests. Out of 100 questions, twenty (20) of knowledge, twenty (20) of comprehension, twenty (20) of application, twenty (20) of analysis and twenty (20) of synthesis were followed. Different types of statements were used for both types of instruments, which were selected from the same content, therefore the effectiveness of assisted based teaching will be checked inefficient way. All statements were selected keeping in view Blooms taxonomy and cognitive domains. The proportions of statements were same in both instruments with reference to cognitive domains. Items of all levels from knowledge to synthesis were included in tests because students learn more effectively from easy to difficult and concrete to abstract way would be used for better understanding. A pre-test was conducted on the sample of sixty-four (64) students and the mean values of both groups were almost the same in the start.

The experimental units of English topic-wise were taught and discussed daily for forty (40) minutes till two months by using large number of accelerated learning activities. A post-test was prepared on completion of units with accelerated and without accelerated learning methods. The test consists of items selected from all levels in order to analyze the efficiency of accelerated learning and was administered to experimental and control groups.

Analysis and Interpretation of Data

Null Hypothesis states that “The mean achievement score of students of control and experimental groups do not significantly differ in the knowledge of English on pre-test”

Table 2: Compare Performance of Students in Pre-Test

Test	Group	N	Mean	Std. Dev.	t	df	Sig.
Pre-Test	Control	32	42.031	7.6263	-1.378	62	.178
	Experimental	32	44.844	11.4077			

It is indicated in the above table that the mean score of all students (control group and experimental group) pre-test score is 42.031 to 44.844, and standard deviation is 7.6263 to 11.4077 which indicates that the data points are spread out over a wide range of values. The computed t-value for df=62 (degree of freedom) is -1.378, value from the table is 1.980 which is greater than t-value at 0.05 level of significance. Therefore the null hypothesis stating that “The mean achievement score of students of control and experimental groups do not significantly differ in the knowledge of English on pre-test” is accepted, and concluded that all students have almost same knowledge in pre-test regarding English.

Null Hypothesis was, “The mean achievement score of students of control and experimental groups do not significantly differ on all learning levels of cognitive domain for pre-test”

Table 3: Compare Performance of Students in All Learning Levels of Cognitive Domain in Pre-Test

Areas/Domain	Group	N	Mean	Std. Dev.	t	df	Sig.
Knowledge	Control	32	8.375	2.4197	-.311	62	.758
	Experimental	32	8.563	1.9990			
Comprehension	Control	32	7.688	1.9746	1.097	62	.281
	Experimental	32	7.188	1.3060			
Application	Control	32	8.344	1.9611	-1.573	62	.104
	Experimental	32	9.188	2.2207			
Analysis	Control	32	8.156	1.8856	.414	62	.682
	Experimental	32	7.938	1.8826			
Synthesis	Control	32	7.813	2.0231	.840	62	.407
	Experimental	32	7.438	1.4128			

The above table 3 showed that the computed t-values for df=62 (degree of freedom) and value from the table is 1.980 which is greater than t-value at 0.05 level of significance. Therefore the null hypothesis stating that “The mean achievement score of students of control and experimental groups do not significantly differ on all learning levels of cognitive domain for pre-test” is accepted, and concluded that “results of control and experimental groups were the same in all learning levels of cognitive domain in pre-test”

Null Hypothesis states that “The mean achievement score of students of control and experimental groups do not significantly differ in the knowledge of English on post-test”

Table 4: Compare Performance of Students in Post-Test

Test	Group	N	Mean	Std. Dev.	t	df	Sig.
Post-Test	Control	32	66.219	7.2545	-11.275	62	.000
	Experimental	32	87.281	10.2744			

It is indicated in the above table that the mean score of control group post-test score is 66.219 and standard deviation is 7.2545 which indicates that the data points are spread out over a wide range of values. The mean score of experimental group post-test score is 87.281 and standard deviation is 10.2744 which indicate that the data points are spread out over a wide range of values. The computed t-value for df=62 (degree of freedom) is -11.275, value from the table is 1.980 which is less than t-value at 0.05 level of significance. Therefore the null hypothesis stating that “The mean achievement score of students of control and experimental groups do not significantly differ in the knowledge of English on post-test” is rejected. Therefore, concluded that “students of experimental group get high score in the post test than the control group which indicates that the students who were taught via accelerated learning method had high level of knowledge of English subject”

Null Hypothesis states that “The mean achievement score of students of control and experimental groups do not significantly differ on all learning levels of cognitive domain for post-test”

Table 5: Compare Performance of Students in All Learning Levels of Cognitive Domain in Post-Test

Areas/Domain	Group	N	Mean	Std. Dev.	t	df	Sig.
Knowledge	Control	32	13.063	1.7027	-9.863	62	.000
	Experimental	32	17.188	1.8039			
Comprehension	Control	32	12.094	1.6136	-5.294	62	.000
	Experimental	32	15.188	2.8106			
Application	Control	32	11.750	1.4142	-17.590	62	.000
	Experimental	32	17.500	1.6848			
Analysis	Control	32	11.906	1.4449	-8.904	62	.000
	Experimental	32	16.281	2.1588			
Synthesis	Control	32	11.656	1.3346	-13.052	62	.000
	Experimental	32	16.469	1.6653			
Evaluation	Control	32	2.719	1.6507	-18.026	62	.000
	Experimental	32	8.906	1.9069			

The table 5 portrayed that calculated value for df 62 in the area of knowledge is -9.863 whereas table value is 1.980. The calculated value is greater than table value at 0.05 level of significance. The t-value in the area of comprehension is -5.294, greater than table value. The t-value for df 62 in the area of application is -17.590 which is greater than table value. The t-value in the area of analysis, synthesis and evaluation are -8.904, -13.052 and -18.026 respectively whereas table value is 1.980. The t-values for all learning levels of cognitive domain are greater than table value. Therefore the null hypothesis stating that "The mean achievement score of students of control and experimental groups do not significantly differ on knowledge level of cognitive domain for pre-test" is rejected, and concluded that "students of experimental groups got higher marks in the all learning levels of cognitive domains/areas in post-test than the students of control group"

Conclusion

1. Before the treatment, there was no statistical variance among mean scores of both groups.
2. A significant change among the mean achievement score of both control and experimental group was found after the treatment.
3. The students of the experimental group got higher marks in English at secondary level than the students of control group.
4. The results of those students have shown small change before and after the treatment that were taught without accelerated learning method of teaching.
5. The students who were taught via accelerated learning method of teaching had high level of knowledge and are able to solve question of the all levels of cognitive learning domain from knowledge level to evaluation level of the subject of English as compared to other students.
6. The students take more interest by accelerated learning method of teaching.

Recommendations

1. The subject English should be taught with accelerated learning by incorporating various accelerated learning activities at secondary level.
2. The teachers not familiar with the accelerated method of teaching, it is responsibility of school education department to organize seminars, workshops, trainings and refresher courses for the teachers so that they can get accustomed with the use of accelerated learning method of teaching.
3. The teachers may teach every subject with accelerated learning method of teaching for the betterment of the results.

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