

Performance Evaluation of Montessori Instruction to Teach English as a Second Language: An Experimental Research

Qais Faryadi

ABSTRACT: The problem investigated in this research was that students can master English Language effectively by utilizing the Montessori instructional intervention. [1]. The prime objective of this research was to critically examine Montessori Paradigm of learning and teaching English as a second Language in Malaysian Kindergarten. In this research the researcher applied a mixed method approach of qualitative, quantitative and observation to evaluate the fidelity of Montessori approach in the classroom. The independent variable in this research was the methodology of learning and teaching developed by Dr. Maria Montessori. The dependant variable was that of students' satisfaction, final grade and motivation. Instruments to collect data were pre-test, post-test, questionnaires, observation, interviews and checklists. Results indicated that Montessori instruction statistically increased students' motivation and most noticeably their final grade in the exam.

Index Terms: Montessori teaching, Sensory learning, learning method and teaching method

1. INTRODUCTION

The Montessori Method of learning was developed by Dr. Maria Montessori. She was a medical doctor from Italy. As a medical doctor, her interest was to help the mentally ill and retarded children learn better. Maria always cherished one naked perception in her mind that, *children teach themselves*. As a result, she developed the Montessori methods of learning. Her methodology of teaching was unique, effective and efficient. Maria always emphasized that adult's too much intervention does not help children to learn

[2]. Dr. Maria Montessori believed that each learner is a unique being, and he/she can surprise us with unique and unseen potential. In order to fully develop that unseen, Dr. Maria insists that instructors must give learners freedom of choice to explore their environment. Teachers can assist them with sensory-based teaching methodology.

The Montessori Method of teaching concentrates on quality rather than quantity. Maria Montessori insisted that children must enjoy while reading. In other words, in the Montessori approach children are given a holistic approach status and they are engaged in every steps of learning. Study indicated that the success of the Montessori methodology is based on respect and individualistic attention given to the learners. Instructors in Montessori teaching help learners within prepared learning conditions and let learners to strive for excellence through their own phase. Study also examined that the Montessori methodology emphasizes that students should be given an opportunity to choose their own material for reading and learning. This personal autonomy ameliorates them in the problem solving process [3].

11. PROBLEM STATEMENT

The problem investigated in this research was that by applying our senses into one intervention student can learn English Language effectively and efficiently [4]. Study has found that Montessori children performed well compared to those studying in public and private schools [5]. According to

Montessori, the role of the hands plays an important contribution in children's education [6]. [7]. The theoretical framework of this research is based on the Montessori paradigm of learning and teaching. The Montessori methodology of learning emphasizes on the developmental needs of learners. One of the most outstanding objectives of the Montessori teaching is to foster competency and a sense of responsibility in the minds of the young learners. In the Montessori classroom everybody has a role to play. Teacher's commitment is to create an astonishing instruction and to prepare students for the learning environment. Learners' prerequisite is to be engaged in a meaningful activity that straightens them physically and intellectually [8].

111. LITERATURE REVIEW

In Montessori learning there is a sense of direction rather than forcing children to learn. According to the Montessori Method, effective learning happens when the learner's senses are inspired. Study has found that 75 % of learning occurs through visual, while 13% occurs through hearing and touching. Smell and taste count for 12 %. If multi senses are stimulated, greater learning takes place [4]. The sensory learning program is an innovative approach in developing learning that unites three modalities (visual, auditory and vestibular) into one intervention allowing individuals to merge sensory messages for perfect learning outcomes. Thus, we all learn differently using our dynamic characteristics.

We all have certain values attached to our learning styles. If we combine all these attached values such as cognitive and sensory learning styles, they help us in our learning process. Our mind is like a locked playground. We have to unlock that playground to achieve learning outcomes. So by applying all our senses, it is possible to acquire the necessary skills to achieve academic excellence. *"Montessori method can be recast as a viable contemporary, constructivist program for early childhood education.*

Montessori believed that children in the crucial years from birth to age six possess extraordinary, innate mental powers to absorb the environment" [9]. The Montessori approach is a unique methodology of teaching. In order to learn effectively, Maria Montessori insisted that children, teachers and parents must have a link with each other for the smooth running of the learning process [10].

Although Maria Montessori has devoted much of her life in educating children, needless to say that her theory of Montessori has created many problems among the young. Montessori has given too much freedom to children and left them without proper supervision in the classroom. In the process, naturally, there is more war among the children rather than work in the classroom. Older children naturally suppress the younger one for the supremacy and above all for the possession of the favorite toys. In a Montessori classroom, children are more hostile rather than friendly or rule abiding learners. They break every rule to be the winner in the class. In fact, the effectiveness of the Montessori theory is not really proven by the researchers and studies suggest that the measurement of sensory approach on children's learning outcome is insufficient [11], [12].

Montessori teaching materials are very expensive and highly specialized and cannot be used at home as most parents cannot purchase it. The Montessori concept of child evaluation is poor and not systematic. Montessori evaluates children's progress through report cards which makes it very difficult to assess a child's success or failure. An eye witness has expressed shock at the way children roam around in a Montessori compound: *"Everything about it seems a little off. I mean, they got kids playing out on the playground at all times of the day. And scraping away on those weird Mexican gourds. What kind of school is that?" Kramarczyk asked. "And the teachers have always got the kids doing these weird little puppet shows. That's gotta tell you something right there"* [13].

Regardless of its chilling critics, Dr. Maria Montessori remains as a living example for many generations to come. The promise of Montessori is simple, children learn in a unique way distinct from the adults. Instructors should not ignore the *absorbent mind* of these unique individuals. Educators can not attempt to flout the importance of sensory learning as an effective and efficient means of educating their young. Although the Montessori methodology has come under painful critics from many outspoken oppositions about the success and failure of children under their care, educators cannot ignore Montessori's most spontaneous and life supporting learning conditions. However, without doubt there are still rooms for improvement.

IV. RESEARCH QUESTIONS

- A. Do learners' in Montessori classroom significantly increase their final grade in the exam?
- B. What is the level of satisfaction and motivation among the students in the Montessori learning environment?

V. SIGNIFICANCE OF THE RESEARCH

- A. The results of this research are a guideline for future researchers on the methodology of acquiring English as a second Language. The finding of this study is a contribution for the development of a methodology of educational instruction such as Montessori Paradigm of learning. Further it extends knowledge to the existing research methodology of learning and teaching English as a second/foreign language.
- B. The finding of this research can be prototyped for other languages. This research also assists educators with an effective and efficient methodology of teaching in the classroom.
- C. Data collection such as Post-test and pre-test, interviews, questionnaires and observations are valuable guideline for future researchers in selecting

a viable and workable instructional design for their classroom.

V1. METHODOLOGY

In this research a triangulation method of (Qualitative, Quantitative and Observation) was used in carrying out the investigation. Qualitative method was used to collect and analyze data while quantitative method utilized to further support and strengthen the qualitative data. Research shows that quantitative data reinforces the qualitative data. In research it is better to use both eyes rather than one. Research further indicates that the qualitative methodology is very naturalistic and is conducted in real time allowing the investigator to be in control [14].

Study has also indicated that mixed methodology design leads the researcher to a better understanding of the research problem [15]. Instruments used to collect data were pre-test, post test, questionnaires, observation, interviews and checklists. One day ahead of investigation the researcher administered a pre-test to find out the existing or prior knowledge of the students about the English Language. A sample of 42 students was experimented using Montessori aid and teaching instruction.

V11. POPULATION AND SAMPLE

This research was carried out in a kindergarten class (Tadika Hidayah Bistari) Kuala Lumpur Malaysia. In this Kindergarten currently six classes are taught the English Language using Montessori methodology of education. In this study 3 classes with the population of 45 students were combined to evaluate the effectiveness of Montessori Methodology. The mean age of the students is 6 years in all three classes.

V111. RESULTS

Results indicated that Montessori instruction statistically increased students' motivation, satisfaction and most noticeably their final grade in the exam. Observation indicated that teacher utilized Montessori aids by uniting

(visual, auditory and vestibular) into one intervention. This methodology of teaching assisted the learners to increase their final grade in the exam as well as helped them to be motivated in learning the English language effectively. Observation also pointed out that the teacher treated children as a whole being with a minimum of interruption in the classroom. As such, learners enjoyed the learning environment meaningfully. Through teachers' assistance children developed concentration, motivation, persistence, and discipline in the classroom. Results from the post-test indicated that Montessori methodology of education indeed helped students to achieve excellence in their final score in the exam. Results indicate that the mean score of the learners in pre-test was 50% while their mean score increased in the final exam to that of 75%. Questionnaires and interviews with parents also indicated that parents are overall happy with the progress of their children.

IX. CONCLUSION

This research found that learners in Montessori classroom significantly improved their final grade in the exam. Observation indicated that students in the Montessori classroom were much excited to learn the English Language in a fun way using Montessori equipments. Result from this research clearly indicates that educational learning environment such as Montessori classroom using sensory methods statistically improved students' performance as well as motivated them to learn and continue learning the English Language. Therefore, the finding of this research signifies that students fully benefited from the Montessori methodology of education in the classroom.

X. FURTHER RESEARCH

This research investigated the effectiveness of Montessori methodology of teaching English as a second language to a population of 45 students in the kindergarten level. Similar investigation should be conducted utilizing different age, grade and population in order to determine the

effectiveness of Montessori learning method in more comprehensive manner.

REFERENCES

- [1] Patullo, B. Sixth Senses. *Australian Sciences*, 28 (1), 31. 2007.
- [2] Daungvan, B. *Classroom Adaptation: A Case study of a Montessori School. Issues in Early Childhood Education: Curriculum, Teacher Education & Dissemination of Information*. Proceedings of the Lilian Katez Symposium Champaign, IL, PS 030-740. 2000.
- [3] Linda, C.& Jean, A *Literature based Language Curriculum in Public Montessori*.1990.Dissertation, Texas A&M University, USA.
- [4] Laird, D. *Approaches to Training and Development*, Reading, Mass: Addison- 1985.
- [5] Bower. B. Montessori Learning Aid. *Science News*; Vol. 170, Iss. 14, pgs.212- 213. 2006.
- [6] Dennis, Smith, R. The Egg Man and The Empress. *Montessori Life: A Publication of the American Montessori Society*, 17(3), 50-54. 2005.
- [7] Kevin, R. Mihali.C. Middle School Student's Motivation and Quality of Experience: A Comparison of Montessori and Traditional School Environments. *American Journal of Education*, 111 (3), 341. 2005.
- [8] Martin, R. Ann. *Alternatives in Education: An Exploration of Learner-Centered, Progressive and Holistic Education*. Paper Presented at the Annual Meeting of the American Educational Research Association. 2002. New Orleans, LA.
- [9] Ian, M. Towards a Constructivist Montessori Education. *Perspective in Education*, 22 (2), 37- 50. 2004.
- [10] Goren, Dorothy, E. *Preschool Second-Language Acquisition: A Parent Involvement Program to Reinforce Classroom Learning*. Montessori Center of Nyack, NY. 2005. Retrieved March 25, 2008 from http://findarticles.com/p/articles/mi_qa4097/is_/ai_n9235369
- [11] Humphries, T. Wright, M. McDougall, B. Verites & J. The Efficacy of Sensory Integration Therapy for Children with Learning Disability. *Physical and Occupational Therapy in Pediatrics*, 10 (3), 1-17. 1990.
- [12] Kratzig, Gregory. P. Arbuthnott, Katherine D. Perceptual Learning Style and Learning Proficiency: A Test of the Hypothesis. *Journal of Education Psychology*. V98, n1 p238-248. 2006.
- [13] The Onion. America's Finest News Source. Volume 36, Issue 39. 2000. USA. Retrieved from: <http://www.theonion.com/content/node/38677>
- [14] Faryadi. Q. Performance Evaluation of the Arabic Language Multimedia Instruction: Malaysian Perspective. *MASAUM*

Journal of Basic and Applied Sciences Vol. 1, No. 2. pp.155-163. 2009.

- 15] Faryadi, Q. Developing an Effective Interactive Multimedia Courseware to Teach Arabic Language: Theoretical-Empirical Based Instructional Design Approach. Ph.D. Thesis. UiTM, 2009.

BIO DATA OF THE AUTHOR:

Dr. Qais Faryadi is the President of Al-Mehrab e-Publisher and Instructional Design Researcher. He has obtained his PhD in Computer Science from UiTM Malaysia 2009. He earned his masters degree in Information Science from the International Islamic University Malaysia. He also obtained LL.B (Hons) in Civil Law and LL.B (Hons) in Shariah Law from the same University in Malaysia. He has contributed many Articles and Multimedia educational instructions and presented many papers at the international conferences.

His research interest is: Curriculum and Instructional Design, Courseware Design, Educational Psychology, Multimedia Instruction, Criminal Law, Civil Law, Shariah Law, Information needs of the users, Courseware evaluation and design, Research methodology, Technology applications in libraries (Concepts, theories and models), Information resource development, Information Technology, Human computer interaction, Creative design techniques, IT and Islam
Cyber Law and Ethics