Efficacy of Language Experience Approach on Reading Performance of Dyslexic Students

Salar Faramarzi, Ali Reza Sadeghian, Ahmad Yar Mohammadian

Department of Psychology and Education of Children with Special needs, Faculty of Psychology, University of Isfahan, Isfahan, Iran

*E-mail: salarfaramarzi@yahoo.com

ABSTRACT

The aim of this research was investigating the efficacy of language experience approach on reading performance of dyslexic students in fourth grade elementary school in Esfahan. In order to administer this study, 30 students (boys) were selected via random cluster sampling method and assigned randomly to experimental and control groups (each group consists of 15 students). Reading and dyslexia test that its permanence and fluency was confirmed, is using to gather information, the data was analyzed by statistical method of MANCOVA and utilizing the SPSS software, and analyzed by Multivariate Covariance analysis of variance. Findings indicate that language experience approach can improve Reading performance of students with dyslexia. According to the findings, there is meaningful difference between two control and experimental groups on reading performance (P<0.001). Thus, this difference is showing that language experience approach influences improving reading performance of dyslexic students and this approach can be used to enhance reading skill of students.

Keywords: Language Experience Approach, Reading performance, student, Dyslexia

INTRODUCTION

Reading Skill is a substructure for educational learning and future improvements in person's life. Reading is one of those aspects of understanding, learning and as an amusing and pleasure factor. Reading as a gate of reaching to the knowledge of worlds, (Pajoohi, 2010; Hoghooghi, Chand Sharma, 2002; Rivers, 1981).

Reading must be considered as a language action and cognitive process which fluctuating in a spectrum between the perceptions and concept level. Researchers believe that reading is ability for extracting the Visual information from a paper and conceiving the meaning a text (Rayner and Pollatesk, 2000). Reading is a skill, which leads the people for independent learning at higher level (Rivers, 1981). Fluent reading and understanding the meaning of text are the results of reading skill. A good reader is able to code the writing message as conceives its meaning. Acquiring this skill is required. To know visual components of language at each level, from letter to sentence, and understanding their meaning and exploring their relationship (Richards and Renandya, 2002) . The child's conception of meaning from the writing subjects or texts is the most important aim of reading- two skills of listening and speaking are the beginning child's language interaction with environment. When a child has sufficient space and opportunity for playing and relation to his or her environment and may sense necessary responses and incentives, fries more for using language and promote its attempts for using these experiences (Chand Sharma, 2002; Van Allen and Allen, 1976).

Two other skills of language, which are known as instructional skills, are reading and writing skills. If we consider learning the speech language as breaking a code from the voices in environment that child is imitating them and he will be as a speaker, accessing to two reading and writing skills is requiring to get another system of language in the title of writing system or written system (Zandi, 2007), During reading and writing, the person is totaling and reviewing the aims, correction and reconstruction of meaning, identifying her or his expectations about what he (she) is reading or writing, forming the responses against the test and controlling the information who wants to transfer them (Daadsetaan, 2007).

In general, using the language for learning by a child has its origin in his or her experiences before school. The skills of learning language are varying intensively among the people (Curran, 2007). With beginning the school and informal education, the child brings these instructions, information, feelings, and experiences to the new space (school) and educational system is responsible for curriculum (Isenberg, Quotation from Shakiba, 2005).

Reading is defined the process of communicating between the new and ancient knowledge. What we are reading must be related to before person's information and knowledge about the word. Many researchers believe that writing skills at high levels require high skill in reading (Taylor, 1992, Richek et al., 1996). Tella (2007) believes those parents provide more opportunities for their children, are providing the best opportunity for their education. He accepts that the best children in education are from those families that used to reading.

Many social, cultural, physical, and psychic factors are effective on learning language (Meshkaatodini, 2001), including the related factors to family, such as cultural and economic factors, or the social class of parent's, their education level and job, the level of talking and non-talking (reading, listening the tapes or watching TV), The child family, related factors to consistency in family's education level, psychological factors related to the child's personality, such as endogenous and objectivism, exciting, and social factors related to interact with fellow and adults at school and home.

As the reading ability is a capacity for language which has direct relation to the level and quality of person's experiences in different areas and cognitive a wares (Nuel, 1995), utilizing the approaches that recommend using such experience in educational instruction cause to promote the success of students. One of the general works is using artistry forms, like painting and language forms, like show and story (Shaaygaan, 2006, Sheykholeslaam, 2007). The most learnings in human are formed on the base of learnings in elementary cones and choosing the approaches and methods are effective in latter learning (Bakhtyaar, Nasr Aabadi and Nowroozy, 2007), and it is necessary to consider personal differences in planning an educational system (Curran, 2007).

Choosing a sufficient approach in the educations related to language learning, is choosing the frameworks that used on the base of theoretical logic and applicable to Psychological and linguistic findings and affects all events in class. The interaction between the teacher and issues in the class is the key of dynamism in teaching. A proper approach has less limitations and by various activities such as communicational plays, playing a role, singing and anthems, group work can prevail over the children fear of learning and reinforce the motivation in students and help them to use their internal forces for learning and record their verbal language mistakes, finally they will be encourage to express their aims (Stoodley, 1994). Learning Experience approach (LEA) is one of the suggested approaches in teaching language Zemelman and Daniels (1999) have confirmed that this approach has helped to the students to learn reading more than 60 years, they emphasized that investigations about this approach have remained unknown (Millner and Grant, 2008). The base of language experience approach is supposed that whatever is expressed can be written; read (Nessel and Jones, 1981, Hall, 1981). According to Sears (1999), LEA is a text for reading that students tell, teachers write, and then students read.

The classes use LEA as a general approach; provide an opportunity for a child. Students produce these texts by creative modification and the teacher writes them on the paper, student can have ideas to modify the texts or talk about them in other words, they read the language in its generality. This approach make the students read what they can express. This approach can be used in different styles. Bun, when the individual education is suggested, choosing the best approach for the learning style is important (Snowling, 2002). The main process of this approach by many researchers (Curran, 2007; Nessel and Johns, 1981) includes the following steps:

1) A discussion about a common experience as travel, examination and etc.
2) To dictate ideas and lead the students to create a tent and to record a spelled tent.
3) Reading the tent by teacher in order to teach the students, and reading in by students repeatedly.
4) Student read the tent by teacher and by lean on structures and vocabulary.

If the learners are able to record the ideas, recording the talks is assigned to the students is some parts of research (Taylor, 1992). The produced texts are modified and used to teach some skills (knowing the voices, the form of letters, making worlds, to complement the sentences and comprehension. These recorded texts can be used as big books for students to read comprehension (Van Allen, Allen, 1976).

Necessity for teacher for common experiences, opportunities for getting experience, adjusting the learning environment with before experiences and to present related motives to language experiences for accessing the determined aims, are some pre hypothesis that educational system needs them to meet the successful approaches in reading skill. LEA is the only approach that in compare to other approaches, considers individual experiences, mind to individual differences among the students and attempts to prepare a proper curriculum to the needs, attitudes and desires (Curran, 2007).

These approaches provide opportunity for interaction the thoughts during the talks.

As, there is not any obvious control for severity about the worlds, sentences or the talks contents, and only some components are selected for reading and writing, This method is considered ad an axial-student (Zandi, 2006; Dixon and Nessel, 1983; Curran, 2007; Van Allen and Allen, 1976). Hall (1981) enumerates some basic features of this approach:

1) Organizing the educational materials by the learners.
2) Interfering all communication skills, listening, speaking, reading and writing
3) To solve the difficulties in grammar by using the language of students
4) Individualism and creativity in teaching (Taylor, 1992).

Lerner (1997) describes that the readers by changing the writer's message into their own language, make meaning and the writers make new thoughts during writing a message (Daadsetaan, 2006). Although there are similarities between verbal writing languages, some differentiate the language and writing functions (Vygotsky, 1963). Wurr (2002) in an introduction about using language experience approach for learning English language to adults points to the almost one hundred history of this approach for learning, and sag that this approach was successful in teaching English language to the low students linguistically in eighty and ninety decades. After that, this approach was accepted as a proper and useful method for different educational Programs in high schools such as communicational education and Learning (Steel, 2004).

Reading verbal language and using it as a base for learning institutional skills (Reading & writing) during long-term activity of language experience approach has been remained stable, despite some variations, this approximate stability has led to present the principles for using this approach that Dixon and Nessel(1983) have indicated them in a process with some phases. At first, the student and teacher start a discussion about a subject. Observations and ideas are expressed and the skills of oral language are reinforced and supported. Then the students spell and answer or a story for the teacher who records it and use it a base for teaching to read. In the second step, the student real the tent with the teacher several to improve reading . Single worlds of story will be educated and other reading skills are reinforced by teacher. In the test phase, the students are being leaded to real other writers' texts, by reading those texts that they spell them. It is done while they have learnt the reading skill. Therefore, regarding the history of this approach, it can be inferred that educational intervention based on language experience approach affects positively on reading skills in students.

Therefore, there is a question that, Do as the intervention based on learning experience approach, effect on reading performance of dyslexic students in grade fourth?

METHODOLOGY

In this study, the experimental method and the plan of pretest and posttest with control group has been used (Table 1) that is one of the valid plans in experimental (empirical) investigations (Sarmad et al., 2007). The plan Diagram is presented in Table 1.

Table 1. Pre- test and post – test plan with control group				
Experimental	T2	X	T1	R
Control	T1	-	T1	R

Participants

Statistical Population in this study consists of the boy students in grade fourth of elementary school in Esfahan in 91-22 educational year. The sample was consisted of 30 boys (15) boys in experimental group and 15 boys in control group) that were chosen by multi-steps method. From six regions in Esfahan, two regions (2-4) were selected via random cluster sampling method, and then between these two regions, four schools were selected via random cluster sampling method.

In each school, two classroom were chosen. Randomly and dyslexia test and Raven test was done for all students, then 30 students who had less scores were selected and randomly, 15 students in test group and 15 students in control group were substituted.

Instruments

In order to recognize the students with dyslexia, researcher's inventory for dyslexia was used. This inventory is a screen tool of which the apparent merit was confirmed by specialists and its stability was obtained via Cronbach's Alpha method (0. 85)

Which shows the acceptable stability for measuring instrument (tools) . The form is complemented by the teacher of class and includes some questions about various current difficulties. The teacher must mark some problems on inventory that those have been observed in student performance frequently the inventory consists of 14 eases. If more than five cases in each on have been worked, the student is suspected to dyslexia and he will be referred to the next steps for more precise. Reading and dyslexia test is also used. This test was made by Karami Noori & Moraadi (2004) has been done for 1614 students (770 boy and 844 girls) in five grades in Tehran, Sanandaj and Tabriz and it have been customized After gathering the data and statistical operations for each grade in each city, the raw and custom scores were calculated. Micro- scales in dyslexia test includes reading words test, comprehension test, words chain test, omitting voices test, reading meaningless words test, naming pictures test, letters sign test, and words sign test.

For studying the intelligence level of students, Raven's progressive matrices test was used. This test is used to measure the intelligence in all ability levels. This test has two forms that the children's from has been used here. In this test, the student must explore the logic of patterns for questions and then choose the complementary picture Raven's test has been customized by Baraheni for Tehran children. Retesting coefficients range of this test has been 0.69 to 0.91 and the stability coefficients have been 0.81 to 0. 83. In general, Raven's test is valid and stable sufficiently.

Procedure

In this study, after administering the Raven intelligence test by a special inventory, dyslexic children were recognized. Pretest was performed for two experimental and control groups and the scores were recorded. Then, the students in experimental group were instructed s during 10 meetings with the principles of 5- step of language experience approach. In tens meetings, it is tried that this instruction has a close relation to the student's experience and in other words, each meeting provides a background for the next meetings. Short descriptions of the aims of these meetings are following:

The first meeting: Emphasis on considering the details, using language knowledge of students to describe and understand the relation among the components, sensible details and observable actions in the pictures.

The second meeting: Recalling the exercise of last meeting by painting, changing the painting into a text and reading it the third meeting: Using the previous experience for verbal reconstructing the text on base of experience.

The fourth meeting: Considering and being curious to explore the environment via five senses and presenting a verbal and writing report.

The fifth meeting: Using the hearing focus by listening to music and changing in into a text and reading it in class.

The sixth meeting: Recalling the previous experiences with details in form of writing and a verbal report of text.

The seventh meeting: To explore the ability for story making with persons, writing a group story and performing it.

The eighth meeting: Using show stories (films) for preparing a big book via painting, to exercise   the oral and written summarizing of story.

The ninth meeting: Using the writing and listening skills in class and making a short text form the heard story and reading it in the classroom. The tenth meeting: Using visual, listening, writing skills and recalling the memory by watching a video film, writing the message and performing group show according to the written content by students.

By ending 10 meetings, the first test was done as a posttest. The results of pretest and posttest were analyzed to study the efficacy of using language experience approach on reading performance. For analyzing the data, descriptive statistics indexes, including the average and deviation standard and covariance analysis at inferential statistics by using the SPSS software were used. All data after coding and editing were presented to the software for analyzing.

RESULTS AND DISCUSSION

As it was expressed, the most important question is that weather the educational intervention based on language experience approach affects reading performance of dyslexia students in primary schools. As it is presented in table 2, the average scores of reading in test and control groups in pretest step has been 82.00, while the final average in experimental group in posttest step is higher than control group. The difference in performance of the two control and examine groups in terms of reading. According to these results; there is meaningful difference between two groups in reading performance (P< 0.001). In other words, this difference implied that language experience approach has affected on improving the reading performance in dyslexia students. Considering the Eta square, it is said that 97% variations are due to the efficacy of intervention. As the table 4 shows, there is no significant difference in the overage scone in pretest of control and experimental groups in micro skills of reading.

Regarding the results in Table 5, F, by considering the group, show a significant different between test and control groups (P<0.001). Then, it can be said that language experience approach effects positively on student's final scores in micro skills of reading, and regarding the square of Eta (83 % reading words, 78% chain of words, 87 % equal rime words) 18% text comprehension, 97% word comprehension, 87% omitting voice, 83% letter sign, 89 % f class sign) these variations are and to the effects of language experience approach.

The language experience approach had no significant effect on micro skills (Naming pictures & reading non-words) Discussion and conclusion. The aim of this study was to investigate the efficacy of language experience approach on reading performance of Isfahanian dyslexic students in fourth grade elementary school in Isfahan. By using the pretest-posttest plan with control group and using covariance analysis, the results showed a significant difference between two control and experimental groups. In addition, this difference is meaningful at 0.001 level. It shows the efficacy of language experience approach on reading skill.

Table 2. The average and deviation standard of student's scores in reading skill

Step	Group	Number	The average	Deviations standard
Pretest	Control	15	82.00	4.34
	experimental	15	82.00	4.19
Post – test	Control	15	82.60	3.90
	experimental	15	97.60	3.90

Table 3. The results of lambda Wilks multivariable variance forward hypothesis (MANCOVA)

Statistics index Source	Lambda Wilks'	F	Meaningful level	Eta	Power
Group	0.02	38.77	0.001	0.97	1

Table 4: the average and deviation standard values of pretest and posttest scores of students in micro skills of reading.

Variable	Group	Deviation standard		The average	
		Post-test	Pre-test	Post-test	Pre-test
Reading words	Experimental	3.90	4.19	97.60	82.00
	Control	3.90	4.34	82.60	82.00
Words chain	Experimental	1.89	5.44	86.80	69.93
	Control	2.89	4.42	75.33	72.46
Equal rime words	Experimental	4.42	4.39	101.86	92.93
	Control	4.48	3.87	93.86	93.86
Naming pictures	Experimental	6.72	7.71	8.00	77.46
	Control	6.72	7.26	79.13	77.00
Text comprehension	Experimental	8.69	9.54	60.06	51.20
	Control	10.32	9.74	53.53	48.80
Word comprehension	Experimental	5.02	11.08	89.33	61.00
	Control	10.05	11.80	63.20	61.00
Omitting voice	Experimental	4.94	4.39	92.06	71.06
	Control	4.89	4.74	72.93	72.13
reading non- word	Experimental	8.12	9.34	87.33	8.33
	Control	8.59	8.63	83.63	84.66
Letter sing	Experimental	3.30	3.31	96.93	84.66
	Control	1.97	2.66	85.20	83.63
Class sing	Experimental	2.18	2.77	95.06	84.60
	Control	1.99	2.40	85.40	84.93

Tables 5. The results of covariance analysis using language experience approach on the final f scores of experimental and control groups in reading skills.

Micro skill	Source of variation	Totals quires	FD	Awe rage of squares	F	Meanings Level	T-squares	Test power
Reading words	Pretest	176 . 37	1	176.37	11.41	0.003	0.38	0.891
	Group	1393 .50	1	13931.50	90 .19	0.001	0.83	1
Chain of words	Pretest	62. 00	1	62.00	9.10	0.007	0.33	0.814
	Group	893 .40	1	893.40	123 .22	0.001	0.87	1
Equal vim words	Pretest	138.79	1	138.79	4.87	0.040	0.21	0.551
	Group	3719.90	1	3719.90	130.60	0.001	0.87	1
Vamping pictures	Pretest	103.06	1	103.06	1.87	0.18	0.094	0.254
	Group	0.65	1	0.65	0.012	0.914	0.001	0.051
Text comprehension	Pretest	7.297	1	7.297	0.115	0.738	0.006	0.062
	Group	259.55	1	259.55	4.10	0.05	0.18	0.84
Comprehension words	Pretest	220.01	1	220.01	3.53	0.077	0.164	0.428
	Group	4240.07	1	4240.07	68.05	0.001	0.79	1
Omitting voice	Pretest	199.87	1	199.87	11.39	0.003	0.37	0.89
	Group	2463.62	1	2463.62	149.48	0.001	0.88	1
Reading non words	Pretest	38.93	1	38.93	0.83	0.374	0.04	0.139
	Group	99.89	1	99.89	2.13	0.16	0.10	0.28
Lettering	Pretest	136.41	1	136.41	16.18	0.001	0.47	0.96
	Group	750.35	1	750.35	89.04	0.001	0.83	1
Class sing	Pretest	106.38	1	106.38	26.54	0.001	0.59	0.99
	Group	605.34	1	605.34	151.05	0.001	0.89	1

CONCLUSION

The results in this study are in accordance with other findings, including Curran's study (2007) that believes the language experience approach for the relation to the previous experiences is in high significant. He founded that this approach has positive effects on reading skill Labbo et al. (2002) in study on children 5-11 years showed the language experience approach has significant effect on vocabulary, ability for description, ability to narrate and self-expression among the students.

Holdson (1981, 1989), believes the language experience approach for regarding to learning and previous knowledge is effective in teaching the reading and writing skills. This study has some limitations including that it has been done only on boys students in grade fourth, so in generalizing the results to other ages and grades or sex, precautions must be considered. In addition, a following up test is necessary for assessing the effect of

long – term interventions. This study is useful for primary teachers to aware of using the students' experiences in reading and writing.

REFERENCES

Bakhtyaar Nasr Aabadi, H. A., Nowroozy, R. A. (2007). New education strategies in the third millennium, Qom, samaa publications

Chand Sharma, T. (2002). Modern methods of language teaching. Delhi: Sarup & Sons.

Curran, S. (2007). Using the language experience approach as a part of differentiated literacy instruction. US: Saint Paul, Minnesota: Hamline University.

Cohen J. et al. (1981). A reading and writing program using Language Experience Methodology among adult ESL student in a basic education program: administrators/ instructors manual. Salt Lake City: Utah State Board of Education.

Daadsetaan, P. (2006). Language disorders. Tehran: Samt.

Daniels, H., Zemelman, S. & Bizar, M. (2000). Whole Language Works: Sixty Years of Research. Journal of Educational Leadership, 57(2): 32-37.

Dixon, C. N., Nessel, D. D.,(1983). Language experience approach to reading and writing: Language experience reading for second language learners. Hayward, CA: Alemany press.

Feyz Sheykh-al-eslaam, F. (2007). Introduction for show creative in children: patterns, Methods, samples. Tehran.

Hall, N., Shepherd, J. (1991). The anti-grammar grammar book. Longman.

Hall, M. (1981). Teaching reading as a language experience (3rd Ed). Columbus, OH: Charles E. Merrill Publishing Company.

Hodgson, J. (1992). The status of metalinguistic skills in reading development. Journal of Learning Disabilities,25, 96-101.

Isenberg, J.P. & Quisenberry, N. (2002). Play is essential for all children, Association for childhood education international, Retrieved from the World Wide Web. http://www. AltaVista. Com

Joanisse, M., Manis, F., Keating, P. & Seidenberg M.(2002). Language deficits in dyslexic children: speech perception, phonology and morphology. Journal of Experimental child Psychology, 77: 30-60.

Karami Noori, R., Moraadi A. (2004). Dyslexia and Reading test. Jahaad Daaneshgaahi.

Labbo, D.L, Eakle, A.J, & Montero, MK. (2002), Digital language experience approach: using digital photographs and software as a language experience approach innovation, reading online.

Lerner, J. W. (2003). Children with learning disabilities: theories, diagnosis and teaching strategies. Boston: Houghton Mifflin.

Meshkaatodini, M. (2001). Teaching Farsi language. Mashhad: Mashhad University.

Milner. J, Grant. J, (2008), the language experience approach in second grade reading. Mace,Jane,2004,Language experience approach: what`s going on?,

Nessel, D. D., Jones, M. B. (1981). The language experience approach to reading. New York: Teachers College Press.

Pajhuhi, K. (2010). Studying Fernald's multisensory approach on reading skill of students with Gilaki accent and non-Gilaki accent.

Richards, J. C. Renandya, W. A. (2002). Methodology in language teaching: an anthology of current practice. Cambridge University Press.

Rivers, W. M. (1981). Teaching Foreign Language Skills. Chicago: The University of Chicago Press.

Rayner, K., Pollatesk, A. (1989). The Psychology of Reading. Englewood Cliffs, NJ: Prentice Hall.

Sarmad, Z., Baazargaan, A. & Hejaazi, E. (2007). Investigation methods in behavioral sciences. Tehran: Aagah.

Shaaygaan, F. (2006). Preparing Methods of children for creative writing. Tehran.

Shakibaa, M. (2005). Analyzing the Farsi books in elementary according to communication skills. Psychology faculty.

Sears, S. (1999). The development of reading strategies in a whole language classroom. Journal of Reading Psychology, 20(2): 91-105.

Stoodly, J,Steoin, J.F.(2008).A Processing speed deficit in dyslexic adults? Evidence From a peg- Moving task. Available: WWW.Progust.com.

Snowling, M. (2002).Dyslexia. Oxford. Blackwell, Publisher

Steele, M. (2004). Making the Case for Early Identification and Intervention for Young Children at Risk for Learning Disabilities. Children Education Journal, 32 (2), 75-79 .

Taylor, M. (1992). The language experience approach and adult learners, National Clearinghouse on Literacy Education Washington. (Retrieved from http://www.cat.org/caela/eslres/SOURCEES/digest/ELA. Html)

Tella. A, (2007). Children reading habits and availability of books in Botswana primary schools: implications for achieving quality education, The reading Matrix.

Van Allen, R & Allen, C. 1. (1976). Language experience in reading. New York: Houghton Mifflin Company

Vygotsky, L. S. (1978). Mind in society. Cambridge, MA: Harvard University Press.

Wurr, A. (2002). Language Experience Approach Revisited: The Use of Personal Narrative in Adult L2 Literacy Instruction, Journal of The Reading Matrix, 2(1): 45-47.

Zandi, B. (2006). Teaching Methodology of Farsi language in primary school. Tehran: Samt publication.

Zarghaamiaan, M. (2004). Linguistic and education. Tehran: Madreseh.