



Investigating development of language skills of bilingual students by incorporating the management model of philosophy education to children

Monireh Mokhtarzadeh

Department of English Language and Literature, Birjand University, Birjand, Iran

Email: mokhtarzadehmonireh59@gamil.com

ABSTRACT

This study investigated the effect of implementing the concept of the Philosophy Education Management Model to Children with a focus on the research community on the development of language skills (listening, speaking, reading and writing) of Turkmen bilingual students in a semi-experimental method in experimental and control groups. The statistical population included 103 bilingual students in an elementary school in North Khorasan province, Iran, with a total of 52 male students in two experimental and control groups and 51 female students in two experimental and control groups selected by multi-stage random cluster sampling. Language skills data was collected by a researcher-made test. The validity of this test has been confirmed by experts and its reliability has been calculated by Cronbach's alpha coefficient, halving coefficient and retest coefficient. With the statistical confirmation of the equality of language skills of the two control and experimental groups at the beginning, the experimental group was trained in a 20-session based on the Pixie storybook. Classroom management in the experimental group was based on the management model of teaching philosophy for children with a focus on the Community of Research. The results of descriptive and inferential statistics through comparing the mean, standard deviation and analysis of covariance of both experimental and control groups showed a significant effect on the development of the four language skills. The increase in language skills of both genders was statistically equal. Therefore, the inclusion of the mentioned model in formal language curricula for bilingual students is recommended.

Original Article

PII: S232247701700003-7

Rec. 14 June, 2017

Acc. 12 September, 2017

Pub. 25 September, 2017

Keywords

Community of Enquiry,
Language Skills,
Bilingual Education,
Philosophy for Children,
Education Management
Model

INTRODUCTION

By mastering the language, people can acquire a special identity in addition to establishing social relations (Nercissians, 2003). Iran is the motherland of 99 ethnic groups with different languages; Persian, Turkmen, Arabic, Kurdish, Turkish, etc. which are the official tools for teaching Persian. It is often these teaching tools that underlie the problem of the duality of home and school language. Education is a communication process and the basis of this communication is language. Language is also the only effective tool in the process of transmitting human cultural heritage and civilization to future generations. Iran, a multicultural society, is home to a number of language communities speaking Turkish, Kurdish, and Arabic languages among others. Many children learn and speak their first language at home and study all of their courses in Persian throughout

their education (Kalantari, 2012). In the family-social environment, the child learns his or her own language with a diverse sociological dimension, with a lexical and grammatical richness related to the cultural and social characteristics of his or her developmental environment. The different language of the school from the family and the environment of the students in terms of form and content can have negative effects on their academic life.

The mother tongue is the first language learned by the child, with which he speaks, grows, finds, touches and identifies with the cultural and social elements of his environment. When the child reaches school age, he / she is taught in the official Persian language, which is foreign to bilingual students. These students have difficulty learning Persian in terms of speech and listening, as well as literacy and other subjects; if these issues do not concern Persian language students. These

conditions are due to the same books and teaching methods throughout the country that are presented without considering the linguistic differences of students (Tabatabaei and Bagheri, 2013, quoted by Adib et al., 2016). Evidence such as the results of Perls study (Karimi, 2008) which shows that the average of Iranian students in language learning is lower than the world average and also other studies (Bateni, 2006; Salsbili, 2009; Danaye Tous, 2011; Ghaderi Doost and Danaye Tous, 2010), shows the unfavorable conditions for teaching and learning Persian language in Iran, especially in bilingual children.

At the beginning of language learning at school, the non-Persian student does not find his / her mother tongue, which he / she has learned in a complex process and in direct connection with his / her environment. Organizing the content and conveying the curriculum to students is based on the Persian language with a weak emotional and experiential connection of concepts with previous experiences in the mother tongue. The disconnection between school language and mother tongue makes individuals difficult to communicate. The conflict between the communication circuit of the student's family social environment and the formal communication circuit of the school causes communication problems and consequently creates obstacles in the academic progress as well as social and emotional development of students (Nercissians, 2003).

Educational systems for bilingual education adopt patterns and methods such as transitional bilingual programs, maintenance bilinguals, immersive bilinguals, and two-way immersive bilinguals according to their goals (McGroarty, 2001). However, most educational models are unaware of dealing with the language itself, teaching its skills and using it in communication situations, and this issue, in addition to the negative impact on learning the official language (second), also can cause a decline in students' academic achievement.

In this situation, the "Philosophy for Children" program, invented by Matthew Lipman in 2013 with the main goal of teaching children thinking skills, is a suitable program for teaching language to children. "This program seeks a way to influence the basic skills of listening, speaking, reading and writing by strengthening the power of reasoning and judgment" (Ghaedi, 2009: 98). Classroom management in this training program is in the style of a Community of

Enquiry. Based on Vygotsky's research, Fisher says: "In collective and group situations, the child shows higher mental functions than expected" (Fisher, 2007: 269).

The Philosophy for Children program aims at social interaction and dialogue-oriented nature, critical reading and evaluation of the story, and observance of rules such as careful concentration and listening, development of intellectual skills. Additionally, by establishing a relationship between thought and language, the program emphasizes the interdependence of these two factors from each other, which Vygotsky calls "mutual dependence and cohesion" (Lund, 2012) and also their mutual influence.

The first basis of the Philosophy Program for Children is teaching of language and words; for this purpose, in expanding the range of words and concepts, they use the tools of "story" (Ghaedi and Soltani, 2011). Features and capabilities of the Philosophy Program for Children (Community of Enquiry method, child-centered emphasis on effective communication, form of conversation, educational content, etc.) as well as the growing acceptance of this program as an effective approach to increase students' learning based on the results of researches such as Haynes et al. (2010), Fisher (2007), Topping and Trickey (2007), Khatibi Moghaddam (2009) and Effati Kalateh (2014) emphasize the positive effect of this program in promoting speaking, listening, and literacy skills, in an unfavorable language learning situation, especially for bilingual children. This study examines the effects of this program on the development of basic language skills like listening and speaking, reading and writing in bilingual students.

What is a philosophy program for children?

Philosophy Program does not mean the direct expression of great philosophers' theories in children's classes, but the understanding of ideas and concepts such as beauty, truth, justice, freedom and children's rights. In philosophy for children, the focus is on forming a Community of Enquiry, using stories with philosophical ideas and concepts through introducing philosophy to children in an interesting and profound way, and asking multiple questions related to general concepts leading to the development of important cognitive and thinking skills. And it becomes an argument in children (Ghaedi, 2003). The program of teaching philosophy to children with emphasis on basic skills of reading, writing, speaking and listening is

looking for a way to achieve these basic skills by strengthening the power of reasoning and judgment (Marashi et al., 2012). In this way, the child sees the educational space as a place to explore his or her mental questions and test his or her thoughts and beliefs. "Teaching philosophy to children can create authoritative atmosphere in the classroom and help philosophical intellectual exploration circles to promote democracy and intellectual independence in students" (Esmaeilzadeh and Allah Karami, 2015).

"Philosophy program uses the Community of Enquiry to try to implement philosophical, social, moral, scientific and artistic-literary exploration in the education system and grow as a result of critical, creative and caring thinking" (Ghaedi, 2016: 23). Global experience with evidence of more than 20 countries shows that philosophy for children has helped to develop children's intellectual and reading skills (Fisher, 1992).

Emphasizing on social nature of language, Wittgenstein believes that individuals gain an understanding of language concepts and their application in practice and through interaction with others in various social situations and language games (Maggie, 2007). Haynes (2002) categorizes the implementation of the Philosophy for Children Program into nine stages:

- Forming Community of Enquiry by changing the physical conditions of the classroom (circular arrangement) and proposing rules by students and approving them with the guidance of the teacher as instructor as a facilitator,
 - Providing a stimulus for children to stimulate research and story reading,
 - Stopping for thinking,
 - Asking questions; asking questions about the presented stimulus, and writing the questions on the board next to each child's name,
 - Classifying and relating the questions posed,
 - Choosing a question to continue the discussion and thinking,
 - Students answer the questions and come up with an idea for the chosen question with a reason,
 - Recording topics by writing answers and discussions on the board next to each child's name,
 - Browsing, discussing and summarizing.

Review of literature

Messer et al. (2004) in his research on childhood language with deaf parents who has learned language by watching TV until the age of three, states that television exposes the child to language, but cannot teach it well because no action or interaction has taken place. In their study of bilingualism, Peal and Lambert (1962) found that a lack of learners' skills in a second language reduces their test scores. Gohari (2009) stated that teaching in non-native language has a negative effect on educational, emotional and identity issues of bilingual (Kurdish language) students and causes linguistic death and gradual disappearance of their mother tongue.

Trickey and Topping (2004) in their study of ten philosophical studies for children, from 1970 to 2002, showed its positive effects in the areas of reading, critical thinking, reasoning skill, self-esteem, and cognitive and mathematical ability. Ghaedi (2003) examined the historical roots of philosophy for children, introduced philosophy for children and the possibility of teaching philosophy to children according to three concepts of philosophy of the position of the child and the curriculum, and concluded that a child has the ability to learn philosophy in the sense of philosophers. In general, conducted researches related to the subject are categorized as follows;

A) Researches that have dealt with the issue of language: (Hedayati, 2014; Ghaedi and Soltani, 2011; Ghaderi Doost and Danaye Tous, 2010).

1. Researches on the effects of education, type of assessment, and language skills on each other have made it possible to compare and demonstrate the importance of using this "pattern".

2. Studies related to language and thinking and their influence on each other highlight the importance of this model in the development and strengthening of thinking, because "the main goal and the main effect of the philosophy program for children is to develop and strengthen thinking."

3. Researches that enumerate the problems and shortcomings of the national language curriculum and language learning show the importance of a "management model for teaching philosophy centered on the Community of Enquiry".

B) Research related to the importance of the mentioned model in solving bilingual problems: (Adib et

al., 2016; Modarress, 1993; Siguan and Mackey, 1990; Eliassy, 2012, O'Grady et al., 2015).

1) Studies comparing bilingual and monolingual children.

2) Reviewing of the educational status of bilingual children.

3) Investigating effective education in increasing students' academic success (education one month before primary school).

4) A review of theoretical and epistemological foundations and the effects of different methods of teaching bilingualism in bilingual classes.

C) The researches in this category show the various angles of the dependent variable of this research;

1) Research related to the Philosophy Program for Children: (Ghaedi, 2003; Akbari, 2012; Topping and Tricky, 2007)

2) Researches that have examined the effects of a Philosophy Program for Children on a variety of issues.

This "pattern" can have a positive effect on children's social, emotional, moral dimensions of questioning and thinking in contrast to existing teaching methods.

1) Researches explaining the theoretical foundations of children's ability in philosophizing related to the implementation of the model as an independent variable.

2) Researches dealing with educational content of the philosophy curriculum for children, the "story". The "pattern" can benefit from the results of the application of the story content in relation to its implementation stages.

None of these studies specifically as the main hypothesis has addressed the possibility of a positive effect of the stages of the learning community on the management model of teaching philosophy to children in the development of language skills of bilingual students. Research on this model is original, important and noteworthy because it makes it possible to apply the findings of the above research in the educational process and the desired effects on the development of language skills of bilingual students and other ancillary research skills.

Research hypothesis

Philosophy education management model for children with a focus on the Community of Enquiry

strengthens and develops the language skills of bilingual students.

■ MATERIAL AND METHODS

The statistical population of the study included bilingual students in the third grade of elementary school in North Khorasan province, of which a total of 52 male students in two experimental and control groups (26 each) and 51 female students in two experimental and control groups (one consisting of 26 students and the other 25 students) (a total of 103 students) were selected by multi-stage random cluster sampling. They were chosen from four languages and dialects of Kurdish, Turkish, Turkmen and Tati Turkmen and from two cities with Turkmen population, Raz and Jargalan city and from two regions of Gholaman and Jargalan region of Jargalan and from among two primary schools for boys' and girls' elementary school, one as the experimental group and the other as the control groups. In total, two classes of both genders were in the experimental group and two classes were in the control group.

The data collection tool was a researcher-made language skills test. Language learning objectives in teaching four language skills (listening, speaking, reading, and writing) were identified and selected based on theories in language, language skills, and bilingual resources. It is then analyzed based on the theory of social interaction, which emphasizes the influence of social contexts and communication on language learning, and its complementary evidence in the cognitive theory of Bruner, Vygotsky, and Luria, which emphasizes learning from others and social interactions; and the cultural perspective and Wittgenstein, which has a dialogue and socio-cultural view of thought on language and human communication, as well as educational ideas, production and communication strategies of language learning and language evaluation theories (Jafarpour et al., 1996).

Actions were taken to prepare a question bank for the specific purposes of this study. Twenty-five questions out of the first ninety questions were removed by reviewing the visual validity and viewing by five professors in this field and fifteen third grade teachers, due to duplication, age disproportion, not evaluating the intended purpose and the large number of questions. In the pre-test and final test phase, the

other eight questions were removed for the same reasons and the majority of students did not answer and were not in line with other questions. Finally, fifty-seven questions remained.

The validity of this questionnaire was calculated and evaluated using a one-month retest, Cronbach's alpha coefficient and Spearman-Brown halving coefficient (Table 1). Table 1 shows if the Cronbach's alpha coefficient is 0.70 or more, the questionnaire has a good reliability (Sharifi, 2010); it can be said that the language skills questionnaire and its domains have a very good credit.

Table 1. Validity of the language skills questionnaire and its areas

Variable	Cronbach's Alpha Coefficient	Refractive Index	Retest Coefficient
Language Skills	0.98	0.93	0.88**
Listening Skills	0.92	0.92	0.79**
Speaking Skills	0.94	0.91	0.85**
Reading Skills	0.95	0.95	0.89**
Writing Skills	0.96	0.93	0.82**

In this study, considering the statistical population of third grade elementary students, in line with the philosophy curriculum for children in different grades, the *Pixie* storybook and its educational guide were used as educational content. The lesson plan and classroom planning in the experimental group sessions were done according to the language skills program of bilingual students with the focus on the mentioned model. *Pixie Fiction* is a fiction / philosophical book written by Matthew Lipman for third and fourth graders. This book focuses on language skills and topics such as real and unreal names, the use of words and phrases, mystery, reason and excuse, relationships, meanings, stories and legends, friendship and thinking. This quasi-experimental study was conducted with a pre-test / post-test design and a control group with the assumption that the stages of the education management model (Behrangi, 2015) include the stages of teaching philosophy to children with emphasis on the research community to increase the effects of teaching philosophy to children. This assumption emerged based on the results of numerous studies confirming the

effectiveness of the education management model (Behrangi and Rahimzadeh, 2015) on high-level skills in the stages of thinking, i.e. judgment and arbitration, critique and review, the internalization of the value-seeking of science and knowledge, strengthening the ability to think, conceptual perception, exploratory thinking in problem solving, semantics, self-belief, sense of self-efficacy, social responsibility, etc. that was in line with the goals and achievements of the philosophy program for children. In implementing this educational program, an attempt was made to use lesson topics with the aim of exploring and using students' identities of lesson concepts to improve learning in both the educational and upbringing sections; therefore, the process and stages of the philosophy education program for children in the form of a Community of Enquiry were adapted to ten stages of the education management model, and a form of education was implemented to improve the quality of the native model.

According to the knowledge gained from participating in the philosophy coaching workshop for children and the model of education management during the classroom, the stages of teaching philosophy to children and the stages of the Community of Enquiry were combined with the ten stages of the model of education management and implemented as follows:

1. Provide a pre-organizer (guide students to list the key points of each session and draw a link diagram of the main concepts and bring them with themselves, conduct a pre-test, change the physical space of the classroom - circular arrangement - suggest rules by the student and pass in class);
2. Illustrate the concepts using the word-picture pattern for the part of presenting the *Pixie* story text;
3. Participate in the process of discussion, self-correction and aggregation;
4. Self-assessment and expression of students' criticisms and suggestions when rejecting or accepting the opinions of other members and correcting their opinions in the conversation process;
5. Using students 'creativity in the process of dialogue, discussion and reflection of students' perceptions in the mental drawing and diagram of the connection of concepts;
6. Comparing the diagram of the connection of student concepts and the diagram of the desired connection of concepts in the process of comparing the

attitude and students' thinking and the instructor at the beginning and end of the discussion and also the beginning and end of the course with student-instructor self-assessment;

7. Designing a new diagram in accordance with the concepts and materials learned based on the change and evolution of ideas, opinions and mental imaginations according to the result of the discussion process;

8. Developing a scenario for teaching new content adapted to the content of the lesson, time, etc., and write the program implementation process by researching the content -the Pixie storybook-, the target community of bilingual third grade elementary students, the venue, and so on;

9. Student-centered social-research teaching with the implementation of all groups and using appropriate teaching models, especially the pre-organizing model, receiving the concept and scientific induction and group research;

10. Evaluation of the final results by the students' reviewing, discussing and summarizing at the end of each session and post-test at the end of the course.

These steps were performed based on the management model of teaching and teaching philosophy to children for 20 sessions of 50 minutes in the experimental group (two sessions per week). Table 2 shows the process of these twenty sessions.

Table 2. Protocol of twenty sessions of teaching philosophy to children in the experimental group

Session	Subject and the Process of Sessions
1 st	Justification and introduction a) Introduction of philosophy program for children b) Discussion of laws c) Adoption of laws
2 nd	A) Discussing real and unreal names b) Self-assessment by comparing one's attitude at the beginning and end of the discussion (this task was repeated in all subsequent sessions) c) Presenting the task: Identifying real and unreal names by naming them and name some real and unreal Turkmen names
3 rd	A) Discussion about friendship / similarities b) Presentation of homework: Friendship practice table and cognition table of others and drawing diagrams for the topics discussed (this task was repeated in all subsequent sessions)
4 th	A) Discussion about fear b) Presenting a task: Identifying and distinguishing real fears from unreal and preparing a list of names of scary things in both Persian and Turkmen languages
5 th	A) Discussion about writing a fictional story / mystery b) Presenting a task: a multi-faceted vocabulary table and extracting conceptual identifiers (this task was repeated in all subsequent sessions)
6 th	A) Discuss important things / things that have happened b) Presenting a task: Prepare a list of important and unimportant things and compare and correct the charts in the specified groups (this task was repeated in all subsequent sessions)
7 th	A) Discussion about cognition b) Presenting a task: completing the table of questions and answers of cognition and introducing oneself in both Persian and Turkmen languages
8 th	A) Discuss the values b) Presenting a task: Which table is more valuable, why?
9 th	A) Discuss desires / invisibility b) Presenting a task: Prepare a list of things we do and do not do in the presence of others by giving a reason
10 th	A) Discussion about freedom and law b) Presenting a task: Laying out the law for each of the given cases and stating some Turkmen laws
11 th	A) Discussion about family / family relationships b) Presenting a task: Writing the similarities and differences of family members
12 th	A) Discussion about the excuse or reason b) Presenting a task: Completing the table of meaning and concept of Persian and Turkmen expressions
13 th	A) Discussion about jokes and serious b) Presenting a task: Write a few jokes and serious with providing a reason

14 th	A) Discussion about temporal and spatial relations b) Presenting a task: Write your own interpretation of today's discussion and read it in both Persian and Turkmen languages
15 th	A) Discussion about relationships and ratios b) Presenting of the task: Completing the table of which relationship is right and which is wrong? Why?
16 th	A) Discussion of analogies b) Presenting a task: Exercise table of accurate comparisons and preparation of a comparison table of commonly used everyday words in both Persian and Turkmen languages
17 th	A) Discussion about the secret b) Presenting a task: Defining the secret and writing a few examples of the secret according to the said definition
18 th	A) Discussion of the law or principle b) Presenting a task: Write a law or a principle for the given cases
19 th	A) Discussion about the story / legend b) Presenting a task: Defining the story and legend and writing an example for each and telling a Turkmen legend
20 th	A) Discuss the sessions held and express students' opinions about the philosophy program for children b) Present a homework

Table 3. Descriptive statistics of research variables

Group	Variables	Test	Mean	Median	Standard Deviation	Prominence	Skewness	Minimum	Maximum	
Experiment	Speaking	Pre-test	15.08	15.00	7.778	0.589	-0.436	5.00	33.00	
		Post-test	25.13	22.00	10.277	0.271	-0.535	7.00	44.00	
	Reading	Pre-test	21.88	20.50	11.306	0.745	-0.172	9.00	49.00	
		Post-test	25.65	22.00	10.377	0.129	-0.671	5.00	43.00	
	Listening	Pre-test	15.31	11.50	7.845	0.755	-.455	6.00	33.00	
		Post-test	24.29	22.50	10.237	0.298	-0.478	6.00	43.00	
	Writing	Pre-test	33.02	29.00	16.793	0.805	0.007	10.00	74.00	
		Post-test	55.35	48.50	23.165	-0.91	-0.559	11.00	96.00	
	Language Skills	Pre-test	85.29	65.00	42.116	0.841	0.49	33.00	188.00	
		Post-test	130.42	114.50	51.742	0.137	-0.654	39.00	224.00	
	Control	Speaking	Pre-test	14.69	11.00	8.905	0.416	-0.930	3.00	34.00
			Post-test	15.71	18.00	8.615	0.355	-0.988	4.00	35.00
Reading		Pre-test	21.31	15.00	12.812	0.504	-0.879	6.00	50.00	
		Post-test	16.61	20.00	9.067	0.405	-0.293	3.00	41.00	
Listening		Pre-test	15.59	20.00	8.798	0.279	-1.192	5.00	34.00	
		Post-test	17.00	20.00	9.712	0.684	0.082	4.00	43.00	
Writing		Pre-test	31.51	24.00	18.632	0.475	-0.855	8.00	77.00	
		Post-test	33.57	44.00	19.748	0.363	-0.690	8.00	87.00	
Language Skills		Pre-test	83.10	57.00	48.237	0.499	-0.916	29.00	194.00	
		Post-test	82.88	84.00	43.788	0.519	-0.234	29.00	205.00	

■ RESULTS

Descriptive findings

Based on the descriptive findings, the mean scores of language skills and its four forms in the experimental group in the post-test stage compared to the pre-test stage showed a significant increase that did not occur in the control group (Table 3).

Inferential findings

In the present study, the analysis of covariance was used to test the hypotheses and to determine the significance of the difference between the scores of the experimental and control groups in the dependent variable, namely language skills and its four forms. Table 4 shows the assumption of homogeneity of regression slopes of pre-test and post-test scores at the operating levels (experimental and control groups), so the analysis of covariance can be used to examine research questions.

Then, the variance or non-variance and the mean of the research variables in the pre-test were examined. In Table 5, the lowest level of significance of F-test to examine the homogeneity of variances in the components of listening and language skills in the pre-test is less than 0.05 which indicates the inequality of the variances of the pre-test of the two groups and in the components of speaking, reading and writing greater than 0.05; providing homogeneity of variances in these components. The values of t-test show the lowest level of significance in all components more than 0.05, which means that the mean of language skills components between the two groups in the pre-test is equal. It can now be concluded that any possible change will be the result of the effect of an independent variable of the pattern.

The main hypothesis that "the implementation of the stages of the management model of teaching philosophy for children, based on the Community of Enquiry has a positive effect on the development of language skills of bilingual students", under the test of the analysis of covariance (Table 6) was attested. To do this, the post-test score in each of the components of language skills as a dependent variable, group variable (control and experiment) as a fixed factor and to eliminate the effect of pre-test scores as a covariate entered into the model. The value of the minimum

significance level of F-test related to pre-test is less than 0.05; therefore, the pre-test had a significant effect on the total score of the post-test, which in this model has been eliminated. In addition, the lowest significance level of the F-test related to the effect of the independent variable of the model is less than 0.05; therefore, it can be concluded that this focus is effective on the development and strengthening of language skills. Also, according to the ETA coefficient, the effect of the difference between the groups in the score of the general language skills index in the post-test is related to the effect of the trained language skills, which indicates the high intensity of the effect, because a size higher than 0.14 is considered a high effect size. Therefore, the experimental group received a higher language skills score in the post-test than the control group.

Table 4. Investigation of the assumption of homogeneity of regression slopes to perform analysis of covariance

Source of Change	Sum of the Squares	Degree of Freedom	Mean of the Squares	F	p-Value
Listening	67.164	1	67.164	1.942	0.167
Speaking	1.043	1	1.043	0.028	0.868
Reading	55.482	1	55.482	1.689	0.197
Writing	186.810	1	186.810	1.028	0.313
Language Skills	1515.915	1	1515.915	2.510	0.116

Table 5. Mean difference and variance homogeneity study in pre-test

Variable	F	p-Value	T	p-Value
Listening	4.177	0.044	-.171	.865
Speaking	3.913	.051	.237	.813
Reading	3.807	.054	.811	.5709
Writing	2.866	.094	.432	.667
Language Skills	4.726	.032	.246	.806

Table 6. Results of analysis of covariance comparison of general language skills index variable in experimental and control groups

Source of changes	Sum of the Squares	Degree of Freedom	Mean of the Squares	F	p-Value	ETA Coefficient
Pre-test	171099.515	1	171099.515	279.071	0.0001	
Group Intervention	53385.315	1	53385.315	87.04	0.0001	0.465
Error	613110.471	100	613.105			

Table 7. Results of analysis of covariance comparing the variables of listening skills in experimental and control groups

Sources of changes	The sum of the squares	Degree of freedom	Mean of the squares	F	p-Value	ETA coefficient
Pre-test	6570.437	1	6570.437	188.252	0.000	
Group Intervention	1471.171	1	1471.171	42.151	0.000	0.297
Error	3490.236	100	34.902			

The first sub-hypothesis that "the implementation of the management model of teaching philosophy to children has a positive effect on the development and development of language skills of listening bilingual students" was also tested for analysis of covariance. In Table 7, the value of the lowest significance level of the F test related to the pre-test is less than 0.05; therefore, pre-test had a significant effect on the total score of post-test, which in this model, its effect has been eliminated. In addition, the lowest significance level of the F test related to the effect of the independent variable (the mentioned pattern) is less than 0.05; therefore, it can be concluded that the management model of teaching philosophy to children is effective on the development and strengthening of listening skills.

The second sub-hypothesis that "the positive effect of implementing the management model of teaching philosophy to children in strengthening and developing the language skills of bilingual students" was tested using analysis of covariance. In Table 8, the value of the lowest significance level of F-test related to the pre-test is less than 0.05, so the pre-test had a significant effect on the total score of the post-test, which was eliminated in this model. In addition, the lowest significance level of the F-test related to the effect of the independent variable (the mentioned axis) is less than 0.05, so the management model of teaching philosophy to children is effective on the development and strengthening of

speaking skills. The Eta coefficient shows the intensity of this effect as 0.364.

The third sub-hypothesis that "the implementation of the philosophy management model for children has a positive effect on the development and growth of bilingual students' reading language skills" was also tested by analysis of covariance.

In Table 9, the lowest significance level of the F test for the pre-test is less than 0.05; therefore, pre-test had a significant effect on the total score of post-test, which was eliminated in this model. In addition, the lowest significance level of the F test for the effect of the independent variable is less than 0.05. Therefore, the management model of teaching philosophy to children is effective in developing and strengthening reading skills. Based on the ETA coefficient of 0.369, the effect of group differences on the overall language skills index score in the post-test was related to reading skills training.

The fourth sub-hypothesis on "the positive effect of implementing the management model of teaching philosophy for children in strengthening and developing the language skills of writing of bilingual students" was examined by the analysis of covariance. In Table 10, the value of the lowest significance level of the F test related to the pre-test is less than 0.05, so the pre-test had a significant effect on the total score of the post-test and in this model this effect was eliminated. In

addition, the lowest significance level of the F-test related to the effect of the independent variable (the mentioned pattern) is less than 0.05, which indicates the effect of the philosophy teaching management model for children on the development and

strengthening of effective writing skills. Also, according to the ETA coefficient, 0.364, the effect of the difference between the groups on the writing skill score in the post-test was related to the effect of the pattern.

Table 8. Results of analysis of covariance comparing the variables of speaking skills in experimental and control groups

Sources of changes	Sum of squares	Degree of freedom	Mean of squares	F	p-Value	ETA Coefficient
Pre-test	5377.920	1	5377.920	144.617	0.000	
Group Intervention	2125.145	1	2125.145	57.147	0.000	0.364
Error	3718.726	100	37.187			

Table 9. Results of analysis of covariance comparing the variables of reading skills in experimental and control groups

Sources of changes	Sum of squares	Degree of freedom	Mean of squares	F	p-Value	ETA Coefficient
Pre-test	6293.706	1	6293.706	190.245	0.000	
Group Intervention	1935.559	1	1935.559	58.508	0.000	0.369
Error	3308.220	100	33.084			

Table 10. Results of analysis of covariance comparing the variables of writing skills in experimental and control groups

Sources of changes	Sum of squares	Degree of freedom	Mean of squares	F	p-Value	ETA Coefficient
Pre-test	28681.461	1	28681.461	157.722	0.000	
Group Intervention	10635.303	1	10635.303	58.485	0.000	0.369
Error	18184.818	100	181.848			

DISCUSSION AND CONCLUSION

This study explained language as a social and essential phenomenon in communication between people in society. Most theories of language learning (behavioral, cognitive, and social) emphasize the role of the environment, the experience of social relationships, and imitation. Learning Persian as a second language for a child who has to learn it in the process of entering the community is no exception to this rule. Teaching methods in the field of second language are intended to increase the child's ability to communicate in collective situations (O'Grady et al., 2011). This approach which

seeks to nurture students' intellectual talents in dynamic collective situations is reflected in recent innovations in education and the curriculum. The mentioned emphasis is on basic reading, writing, speaking and listening skills desired by Marashi et al. (2012) and one of the ways to achieve these basic skills is to strengthen the power of reasoning and judgment.

According to Esmailzadeh and Allah Karami (2015), teaching philosophy to children causes the authoritative atmosphere of the classroom to become philosophical intellectual exploration circles to promote democracy and intellectual independence in students. In

this pattern of storytelling, discussion among students about what they have read, along with teacher guidance, is the mainstay of philosophical thinking. Problem-solving is a discussion of how to get answers. Practical consideration of the pattern accomplishes many of Fisher's intended goals in language learning, such as searching carefully, developing and explaining concepts, listening carefully, evaluating what is heard, asking questions to clarify meaning and expanding concepts, correcting one's own ideas by listening to others and reading challenging and questionable texts makes sense.

The results of the present study showed that the management model of teaching philosophy for children based on the research community has a positive effect on the development of language skills of third grade bilingual students. In addition, the research hypothesis is consistent with the views of many stakeholders in the field of language teaching and thinking to children, such as Wittgenstein (1958), who emphasized its relationship and application in language learning processes. Wittgenstein (quoted by Maggie, 2007) emphasizes the social nature of language and believes that individuals gain an understanding of the concepts of language and their application in practice and through interaction with others in various social situations and language games.

Here, not only the learning process takes place through the social environment, but also its modification and formation through this environment is achievable. In the introduced model, the process of language learning is growing and according to Medina, it goes from the other - regulation (teacher or adults) to itself - regulation.

In this view, skill in a linguistic practice requires the active participation of the learner in it (Medina, 2010). By participating in social interactions, the child learns the language and learns its uses. The findings of Johnson (2004) that learning a second language requires the active participation of teachers and students are consistent with the present study.

The results of Luria (2002), Topping and Trickey (2007), Messer (2000), Fisher (2005) and Effati Kalateh (2014) can confirm the effect of management model of teaching philosophy for children based on Community

of Enquiry on strengthening and developing knowledge language skills of bilingual students.

Suggestions

1. Since the main goal of Iran's transformation and development programs is knowledge-based and achieving knowledge without development and growth of reading and general literacy, mastery of language skills and of course thinking and reasoning is not possible. It is suggested that the characteristics of the philosophy management model for children based on the Community of Research be adapted and included in the official curricula of the country in an effort to localize this education in our country.

2. According to the capabilities of the model in which the classroom is out of the traditional mode and students with active participation, interact, communicate and agree with other students and in the lesson plan (twenty-session protocol for teaching philosophy to children) and in the implementation phase, they use self-assessment by comparing their attitudes at the beginning and end of the discussion, extracting conceptual identifiers, drawing diagrams for the issues raised, comparing and correcting diagrams in specific groups, which are the basic steps of the educational management model. This model should be used in combination with teaching the philosophy program for children at the same time as accurately understanding its process in teaching various topics.

3. Extracting conceptual identities, which is one of the main steps of the educational management model, helps student to achieve the meaning of words and sentences in the language, and this understanding of the meaning of words and sentences can be raised by participating in group activities and modifying their work. The "self-correction" that is emphasized in the philosophy program for children deepens the student's learning.

The combined application of the philosophy program for children with this model deepens learning. For this reason, it is suggested that the educational management model be used simultaneously with the philosophy program for children in the language teaching process, especially for bilingual children. It is also suggested that researchers specifically study the effects of this educational model on the development of

language skills of Persian-speaking and bilingual children.

■ REFERENCES

- Adib Y, Sharifi Z and Mahmoudi N (2016). A Comparison in Reading Ability and Achievement between Mono-Lingual and Bilingual Fifth Graders. *Quarterly Journal of Education*, 32 (4): 67-83.
- Akbari A (2012). *Philosophy for Children (P4C): Philosophical themes in the stories of classical texts of Persian literature*. PhD thesis, Faculty of Educational Sciences and Psychology, Ferdowsi University of Mashhad.
- Bateni M R (2006). *Language and thinking*. Tehran: Agah Publishing.
- Behrangi M R (2015). The educational effects of the education management model in teaching marine science topics. *Journal of Marine Science Education*, 2 (1): 25-39.
- Behrangi M R and Rahimzadeh L (2015). Comparing the role of managing education model and traditional education in improving children philosophical mindedness. *The International Organization for Science and Technology Education (IOSTE)*, II. 24-26 April 2015. Istanbul, Turkey.
- Danaye Tous M (2011). Speaking is a neglected skill in the Persian language curriculum. *Quarterly Journal of Educational Innovation*, 9 (37): 121-150.
- Effati Kalateh M (2014). Investigating the effect of implementing a philosophy program for children on the development of language skills of third grade elementary students in Bojnourd. *Master Thesis in Children and Adolescent Literature*, Imam Reza International University, Mashhad.
- Esmailzadeh T and Allah Karami A (2015). Multimedia implementation of Philosophy for Children (P4C) and its effect on elementary school students' reasoning. *Bi-Quarterly Journal of Thought and Child*, 6(2): 1-21.
- Fisher R (1988). *Teaching thinking: Philosophical enquiry in the classroom* (1st ed.). London: Continuum.
- Fisher E P (1992). The impact of play on development: A meta-analysis. *Play and Culture*, 5, 159-181.
- Fisher R (2007). *Teaching thinking to children*, translated by Masoud Safaei Moghadam and Afsaneh Najarian. Ahwaz: Rasesh.
- Fisher R (2009). *Education and Thought*, translated by Forough Kianzadeh. Ahwaz: Rasesh.
- Fisher R (2005). *Teaching children to learn* (2nd ed.). Cheltenham: Nelson Thornes.
- Ghaedi Y (2003). *Critique of the basics, views and methods of teaching philosophy to children*. PhD Thesis, Faculty of Educational Sciences and Psychology, Tehran Teacher Training University.
- Ghaedi Y (2009). Curriculum for teaching philosophy to children in middle and high school. *Culture Quarterly*, 22 (1): 83-108.
- Ghaedi Y (2016). *Theoretical foundations of philosophy for children*. Tehran: Meraat Publishing.
- Ghaderi Doost E and Danaye Tous M (2010). Study of the objectives and components of language skills training (reading, writing, listening and speaking) in the Persian language curriculum of Iranian high school. *Quarterly Journal of Educational Innovations*, 9 (35): 23-65.
- Ghaedi Y and Soltani S (2011). Wittgenstein Philosophy and the Philosophy for Children Program (P4C). *Quarterly Journal of Thought and Child*, 2 (3): 91-107.
- Gohari L (2009). Investigating the educational issues of bilingual students from the perspective of Kurdish language students of Ilam University and presenting its solutions (2008-2009). *Master Thesis*, Faculty of Literature and Humanities, Kashan University.
- Haynes J (2002). *Children as philosophers: Learning through enquiry and dialogue in the primary classroom*. London and New York: Routledge.
- Haynes J (2008). *Children as philosophers: Learning through enquiry and dialogue in the primary classroom*. Routledge. [Google Scholar](#)
- Haynes J, Kennedy D and White D (2010). *Little Philosophers: Children as Philosophers*, translated by Yahya Ghaedi. Tehran: Ayizh.
- Hedayati M (2014). *Trust the children*. Tehran: Institute of Humanities and Cultural Studies.
- Jafarpour A J (1996). *Introduction to Language Testing*. Shiraz: Shiraz University Press.
- Johnson M (2008). *A philosophy of second language acquisition*. Yale University Press. [Google Scholar](#)
- Kalantari R (2012). The dilemma of multilingualism in Iran. *English Review: Journal of English Education*, 1(1): 6-16.
- Karimi A A (2008). *Overview of Perls 2006 National and International Results Compared to Perls 2001*. Tehran: Institute for Educational Studies.
- Khatibi Moghaddam S (2009). Investigating the effect of philosophical exploratory community method on students' conversational skills. *Master Thesis in Youth Studies*, University of Tehran.
- Lund N (2012). *Language and Thought*, translated by Mojtaba Pordel. Mashhad: Taraneh Publications.
- Lipman M (2013). *Pixie is a philosophical story for elementary school children*, translated by Yahya Ghaedi and Esfandiar Teymouri. Tehran: Institute of Humanities and Cultural Studies.
- Luria A R (2002). *The language and mind of the child*, translated by Behrooz Gharb Daftari. Tabriz: Foroozesh Publications.

- Maggie B (2007). *History of Philosophy*, translated by Hassan Kamshad. Tehran: Ney Publishing.
- Marashi S M, Hashemi S J and Moghimi Gask A (2012). Textbook content analysis Read and Write and elementary school Sky Gifts based on philosophy curriculum criteria for children. *Bi-Quarterly Journal of Thought and Child* 3 (1): 69-89.
- Messer D, Dockrell J E and Murphy N (2004). The relationship between naming and literacy in children with word-finding difficulties. *Journal of Educational Psychology*, 96, 462-470.
- McGroarty M (2001). Bilingual approaches to language learning. In M. Celce-Murcia (Ed.), *Teaching English as a second or foreign language* (3rd ed. pp. 345-356). Boston, MA: Heinle & Heinle.
- Medina J (2010). *Language: Fundamental Concepts in Philosophy*, translated by Mahmoud Karimi. Tehran: Research Institute for Cultural and Social Studies Publications.
- Messer D (2000). State of the art: Language acquisition. *The Psychologist* 13(3): 138- 143.
- Modarress S (1993). Investigating the educational issues of bilingual children in East Azerbaijan. Master Thesis in General Linguistics, University of Tehran.
- Nercissians E (2003). *Issues in bilingualism from a social science perspective*. Tehran: Ministry of Culture and Islamic Guidance Publications, Cultural Heritage Organization.
- Peal E and Lambert W E (1962). The relation of bilingualism to intelligence. *Psychological Monographs: general and applied*, 76(27): 1. [Google Scholar, https://doi.org/10.1037/h0093840](https://doi.org/10.1037/h0093840)
- O' Grady W, Dobrovolsky M, and Aronoff M (2015). *An Introduction to Contemporary Linguistics*, translated by Ali Darzi. Tehran: Organization for the Study and Compilation of University Humanities Books (Samt).
- O'Grady W, Kwak H Y, Lee O S and Lee M (2011). An emergentist perspective on heritage language acquisition. *Studies in second language acquisition*, 223-245. [Google Scholar](https://doi.org/10.1017/S0272261910000384)
- Peal E and Lambert W E (1962). The relation of bilingualism to intelligence. *Psychological Monographs: general and applied*, 76(27): 1. [Google Scholar, https://doi.org/10.1037/h0093840](https://doi.org/10.1037/h0093840)
- Salsbili N (2009). Search for creativity and holism in the designed curriculum and the compiled Persian content of the elementary school (read and write). *Quarterly Journal of Education*, 25 (3): 35-68.
- Sharifi H. P. (2010). *Principles of Psychometrics*. Tehran: Roshd Publications.
- Siguan M and Maki W F (1990). *Education and the issue of bilingualism*, translated by Asghar Vaghedi et al. Tehran: Adibpour Publications.
- Tabatabaei E and Bagheri M (2013). Readability of Reading Comprehension Texts in Iranian Senior High Schools Regarding Students' Background Knowledge and Interest. *Journal of Language Teaching and Research*, Vol, 4, No 5, 1028-1035.
- Topping K J and Trickey S (2007). Collaborative philosophical enquiry for school children: Cognitive effects at 10–12 years. *British Journal of Educational Psychology*, 77(2):271-288. [Google Scholar, https://doi.org/10.1348/000709906X105328](https://doi.org/10.1348/000709906X105328)
- Trickey S and Topping K J (2004). 'Philosophy for children': a systematic review. *Research papers in Education*, 19(3):365-380. [Google Scholar, https://doi.org/10.1080/0267152042000248016](https://doi.org/10.1080/0267152042000248016)
- Wittgenstein L (2009). *Philosophical investigations*. John Wiley & Sons. [Google Scholar](https://doi.org/10.1002/9781118150000)