Developmental Benefits of Learning Two Languages At Once As A Child

A Research Submitted to the Council of College of Arts / Al- Iraqiya University Produced By Instructor Lecturer Jasim Mohammed Abbas





### Abstract

Learning to speak two languages is just like any other skill. It has been found that there are various and valuable benefits to being able to speak multiple languages. Learning more than one language nourishes the brain and develops cognitive and social- emotional development, and the opportunities of successful learning. It is now believed that constant demand to switch between languages leads to several cognitive advantages. The present study focuses on the fact that an early stage of life is considered the best period of time to learn a foreign or a second language. Research has found that children who experience two languages at an early childhood stage normally become native of both. In related words, both bilingual adults and children have the ability to employ a distinguished executive functioning of the brain which assists them to shift attention, switch between tasks and find solutions for problems. Also, they have been found to have increased metalinguistic skills which reveal their abilities to think about languages and understand how it works. Class observation and interviews with teachers of kindergarten and primary school were conducted for data collection. The data collected were analyzed using qualitative content analysis. The findings indicated that students who received an English instruction before the age of six demonstrated higher language and cognitive ability than students who didn't receive the English language instruction at the same age.

Key words: bilingualism, childhood, developmental benefits

### 1. Introduction

The possibility that early bilingualism affects children's language and cognitive development has long been the concern of both parents and educators. In the first half of the 20<sup>th</sup> century, the dominating view was that second language acquisition in an early stage in life made children confused and interfered with their ability to develop common cognitive functions and manage in educational environments. It is the task of parents to play a crucial role in helping their children learn dual languages and develop their abilities to master both. Dual language development requires the clear conscious effort, reinforcement, and family members (Tabors, 2008). This contrasts the myths which claimed that growing up with more than one language can confuse children and lead to speech delays (Soto, 2016). As stated by Bialystok, et al. (2012), a bilingual mind is organized in a way that it consists of two independently- represented language systems that are uniquely accessed to the context.

According to Lowry (2016) argues, children can acquire a second language in two types of acquisition:

a) Simultaneous acquisition is that type which occurs when a child is learnt to be bilingual at the age of three or before that. In such case, children who learn two languages at the same time follow the same developmental stages in the





same way they learn one language. From an early stage of language learning, simultaneous bilinguals tend to acquire two unrelated languages and have been found to use two languages through conversations. For example, they speak Spanish to a Spanish- speaking parent, then switch to French- speaking parent.

b) Sequential acquisition occurs when a second or a foreign language is learnt after the first language is already established (usually after the age of three). Sequential acquisition occurs when children move to another country where a different language is used or when they receive an instruction in a different language in school.

Whatever the type of acquisition is, there is a relationship between bilingualism and intelligence and cognition in spite of the fact that it was thought that bilingualism is not fully related to the proficiency in all the relative languages. Hence, Skutnabb- Kangas and McCarty (2006) argue that "proficiency in and use of two or more languages by an individual, the term does not always imply an equally high level of proficiency in all the relevant languages". Therefore, there was a belief that children should not learn two languages simultaneously because it could cause intellectual and cognitive disadvantages in addition to linguistic confusion (Diaz, 1983). However, this view changed in the year 1962 after Peal and Lambert had published a study which investigated the importance of a systemic method. Thus, their findings showed that bilingual children do not face serious difficulties in the respect their cognitive and metalinguistic development.

#### 1.1 Benefits of Learning Two Languages at Once

Based on previous research, developmental benefits of learning two or more languages are viewed as various benefits. According to Kamenetz (2016), people who speak two languages often have the ability to outperform monolinguals on general measures of executive function. They can pay focused attention away from the effect of distraction and also show the ability to switch from one task to another. Centeno (2016) mentions four types of benefits for bilingualism. These types are as follows:

1) *Emotional* benefits: the emotional benefits that could be gained from speaking a second language are explained as follows:

a) Communication with an extended family: this means that a child who is a bilingual can communicate with other children from different nationalities. It couldn't be achieved if they couldn't speak Arabic or English and so on. Children who are able to interact across cultural boundaries normally prefer to be closer to families from other cultures.

b) A child's learning of another heritage language will help both parents and child to stay closer as a family. It is very depressed when interaction is cut just because parents don't have the ability to speak the language of the people they live with and children have only very limited heritage language abilities.





c) Also it is better for parents to express their feelings and emotions in the first language. It could bring special ways of communication which are full of intimacy and comfort.

d) It is a common and known fact that not all parents could be bilingual since they learned second language as their heritage. When they have children, they may hope that their kids could experience similar feelings and get benefits from learning a second or a foreign language.

2) *Practical benefits*: this type is considered the first reason that parents aspire to raise bilingual children. Practical benefits of bilingualism are reflected in various aspects.

a) **Travelling** is one of the good practical benefits of bilingualism. And it is known and common that travelling plays a very effective role in providing various means to add and change open minds towards new ways and views.

b) A second language provides job opportunities. In related terms, globalization has brought numerous opportunities for work and business. Based on this view, parents begin to help their children learn a second or a foreign language in the age of 2 or 3. The demand for multilingual professionals is steadily increasing all over the world. In Middle East, for example, there is an increasing demand for the English and French languages to be taught to children in early stages. On the other hand, in spite of the fact that English is the first language to be used in different fields, the need to learn a second language has become urgent in English speaking countries.

c) Learning two or more languages in an early stage of childhood helps to acquire more easily in following stages. It is better to help children converse in many languages in their adult life. So, it is advised to teach them a second language early.

d) Having the knowledge to speak two or more languages paves the way to obtain any information involved. Bilinguals are given the chance to get knowledge from various resources.

3) *Educational benefits*: Child development specialists confirm that bilingual education trains and shapes a child's brain. Accordingly, the educational advantage is observed in the following:

a) Bilinguals score higher on average on those types of tests involving creative thinking or problem- solving.

b) Early bilingual training increases a child's ability to concentrate on mental tasks.

c) Bilingual children develop stronger skills in their primary language as well as their secondary language.

4) *Cultural benefits*: It has been found that deep understanding of another culture assist in knowing the language of that culture. Bilingual children are better trained to immerse themselves in other cultures than monolinguals. Because they have two or more languages, bilingual children are more likely





to have interest in the cultures that speak their second language. Further, children brought bilingual are more likely to show tolerance for other cultures at a younger age. They interact more easily with children who do not speak their language or who come from different socioeconomic backgrounds.

### **1.2 Rationale of the Present Study**

The present study offers two main rationales for the process of learning two languages in the stage of childhood. These rationales are due to:

a) the compatibility of the childhood stage in learning two languages

The rationale of the present study behind selecting the childhood stage in the acquisition of two languages is that children can apply what they know of learning the second ( or third, and so on ) language, improving their literacy abilities and allowing them to " increase the rate at which they read and speak comfortably...". It is clear that the childhood stage has numerous merits by which it could be a good stage for learning and acquiring two languages. However, there are some questions which parents and educators raise. Among these questions are the following, "Is it confusing for children to learn two languages simultaneously?", "Can a baby brain specialize in two languages?" If so, how is process different then specializing in a single language?"

Based on previous research, babies and children begin to learn language sounds before they are born. In the womb, an unborn baby can hear a mother's voice. By the time they are born, newborns can tell the difference between their mother's language and another language.

As language learning depends on the processing of sounds, Ramirez (2016) stated that at birth, the baby brain has an usual gift; it can tell the difference between all 800 sounds that all the world's languages comprise. This indicates that at this stage infants can learn any language they are exposed to. In related terms, Ramirez has found some **key differences** between infants raised in monolingual versus bilingual homes. This was conducted through studying brain processing of language sounds in 11-month- old babies from monolingual (English only) and bilingual (Spanish-English) homes. In that study the results showed that babies from monolingual English households are specialized to process the sounds of English, and not the sounds of Spanish. On the other hand, babies from bilingual Spanish-English households are specialized to process the sounds of both languages.

In addition, it has been found that bilingual babies showed an equally strong brain response to English sounds as the monolingual babies. This suggests that bilingual parents' fear that their child is not learning fast enough is unreal.

b) the developmental benefits of learning dual languages

It has long been assumed that children bilingualism affected minds. Accumulating research showed a significant advantage for bilingual children

محلة الحامعة العر اقبة \_\_\_\_\_ \_ العدد ٢/٤٠



in their ability to solve linguistic problems (Bialystok, 2008). This ability is based on understanding such concepts like the difference between form and meaning, that is, metalinguistic awareness and nonverbal problems that require children to ignore misleading information. In addition, numerous researches have asserted that the bilingual brain can have better attention and task- switching abilities than the monolingual brain. Moreover, bilingualism has positive effects at both ends of the age spectrum.

### 2. Statement of the Problem

Because of the rapid development and the urgent need to cooperate with other people in different countries all over the world, bilingualism or learning a second language becomes a necessity. The fact that one is being surrounded by language during nearly every waking moment makes it so urgent to be bilingual. That's why it could be said that the world is becoming increasingly multilingual. Lowry (2008) mentions some statistics about learning a second language in different countries. For example, in Canada 11.9 % of the population speaks a language other than English or French at home. In Toronto 31 % of the population speaks a language other than English or French. In the United States 21 % of school age children (between 5-17) speak a language other than English and the number may increase in the coming years. In the worldwide it is estimated that (1) there are some second language speakers of English than native speakers, (2) there are many bilingual children as there are monolingual.

As the main concern of this study is on the developmental benefits of learning two languages at the early childhood, it could be argued that information about the language, cognitive and educational development of children with varied language backgrounds is necessary to interpret the performance of these children in school and evaluate their development. For example, children with limited proficiency in the language of schooling are found to experience increased difficulty in coping both academically and socially, and it is important to identify those difficulties to understand solutions or remedial approaches are needed.

In addition to what has been stated above, views which argued that children could be confused when they learn two languages at the same time have been proved to be mistaken. Based on previous research, Marian and Shook (2012) have shown that when a bilingual person uses one language, the other is active at the same time. This means that when a person hears a word, he or she doesn't hear the entire word all at once; the sounds arrive in sequential order. Before the word is finished, the brain's language system starts to guess the identity of a word by activating a lot of words which match the signal. For example, if one hears a word like 'can', he or she will likely activate words like 'candy', and 'candle' as well as at least during the early stages of word recognition. Consequently, the process of acquiring or learning





two or more languages is not difficult especially in an early stage of the person's life. For this reason, the present study intends to elaborate the significance of learning two languages at the same time in an early childhood stage.

## 3. Purpose of the Study

The present study aims to achieve the following objectives:

1) To identify the developmental benefits of learning two languages at the same time in an early stage of children's life.

2) To show the difference between the acquisition of two or more languages before and after the age of six.

## 4. Research Questions

1) What are the developmental benefits that could be gained in the learning of two languages at once by children?

2) In which aspects does the acquisition of two languages before the age of six differ from that after the age of six?

## 5. Methodology

### 5.1 Sample of the Study

The sample of the present study was a) Iraqi kindergarten children and public primary school students in Baghdad and b) teachers in both a kindergarten and a primary school. The participants of this study were selected according to their relevance to the research topic. They were not randomly selected to construct a representative sample of a general population. Ten children in a kindergarten and ten students in a primary school were selected to be the subjects of the study. In addition, five kindergarten teachers and five primary school teachers were also selected to be the second type of the subjects of this study. The ten kindergarten participants consisted of children who were first taught the English language at the age of three in a private kindergarten. On the other hand, the ten primary school students consisted of students who were also first taught the English language at the age of three or four in a kindergarten. In this study, the children and students' performance in English language only is observed and questioned since all the students are Iraqi and native speakers of Arabic.

## 5.2 Instruments

This study is typically conducted in classrooms. Class observation and oral interviews with teachers were conducted to collect the data of this study. Ten students in their first and second classes were observed. In a similar way, ten kindergarten children under the age of six were also observed in their classes. Class observation included two settings for each group of students, each setting lasted for one hour in which the researcher observed the natural activity of students in their classes when they were taught by their teachers. On the other hand, oral interviews with the children and students' teachers for





the purpose of obtaining information on the students' background and educational information.

5.2.1 Data Collection Procedure

The data collected in this study were qualitative data since they were collected by means of class observation and interviews. First, the twenty children and students were observed in their classes. Kindergarten children were first observed in two settings. Then, primary school students were observed in two settings as well. The class observation for both groups focused on the students' ability to communicate using their English as a foreign language. Moreover, it aimed to collect data on the students' educational performance in other subjects of their academic study. In this respect, observation is viewed as a central procedure when students are taught the process skill (Harlen, 2000; Johnston, 2005).

Then, the students' teachers were orally interviewed separately. Educational, cognitive, background information and cultural background on the children and students were collected from the interviews with students' teachers. The aim of choosing teachers in the kindergarten and primary school was due to the fact that they are in charge of the pedagogical activity, and therefore they are well prepared for answering and going in depth in the aspects the study is concerned with.

The oral interviews to the children and students' teachers of both the kindergarten and primary school took place in the kindergarten and school during the opening hours. These places contributed to create a good atmosphere and lessen the asymmetric relation between the researcher and participants. In both interviews, the participants spoke freely and open about the material and program they have in the kindergarten and school.

5.3 Analysis

For the purpose of analyzing the data collected for this study via classroom observation and interviews with teachers, qualitative content analysis was used. Content analysis can be used when qualitative data have been collected through:

- 1. Interviews
- 2. Focus groups
- 3. Observation
- 4. Documentary analysis

It could be argued that content analysis is a procedure that is followed for the categorization of verbal or behavioral data. It involves coding and classifying data and the aim of content analysis is to make sense of the data collected and to highlight the importance of messages, features or findings. According to Mayring (2001, 2014), the central idea of Qualitative Content Analysis is to initiate from the methodological basis of Qualitative Content Analysis and to conceptualize the process of assigning categories to text





passages as a qualitative- interpretive act. In related words, "qualitative analysis therefore pursues a double strategy; it forces the object of analysis to reveal its structure in a de-totalizing approach which inquires into the relationship between individual aspects and general approaches, but does this with the aim of achieving a conscious re-totalization, so as not to lose sight of the overall social core content of every statement" (Rust, 1980a, p. 21). Then, the researcher determined whether there is any difference on the two groups of students' acquisition of English language and their abilities to communicate in addition to the educational and cultural benefits they can obtain.

### 6. Findings of the Study

The primary aim of this study was to reveal the developmental benefits of learning two languages at the same time in an early stage of childhood, before the age of six. In this study, leaning the English language was investigated as being the foreign language beside the Arabic language which is the mothertongue of the participants of this study. As explained earlier, the data collected for this study were mainly qualitative by means of class observation and interviews. Thus, the data were obtained by notes and tap recordings to later make the transcription. The data collected were divided and interlinked into categories to provide information into each other.

Oral interviews with the teachers were analyzed in order to answer the first research question: *What are the developmental benefits that could be gained in the learning of two languages at once by children?* The interviews with the teachers of both kindergarten children and primary school students concentrated on the material given to the children and students in the English language instruction and their performance in English and other subjects. Further, the interviews focused on the view on learning the English language as a foreign language before the age of six as well as strategy use and assessment of language and vocabulary development. This allows focusing on the aspects which are relevant fro answering the first research question.

6.1 Interviews with Participants

6.1.1 Views of the kindergarten teachers in an early learning of two languages The information obtained from the five teachers in the kindergarten indicated that they have various interpretation of learning English as a second or a foreign language in an early age by referring to different aspects. One of the teachers reported that speaking two languages enables to know two or more cultures. Children who learn a new language in early stages are lucky because they have language opportunities in work and studies. In a similar way, another teacher stated that being bilingual means to develop a broad perspective about language and culture. A third teacher reported that learning English in this early age helps the children learn in natural settings surrounded by people who speak both languages, the Arabic and the English languages





and the advantage to be exposed to an English environment. The fourth teacher asserted that the children here in the kindergarten who are exposed to an English instruction show good abilities in English and in other subjects as well when start at school. Besides this, they can learn easily. Similarly, the fifth teacher associated the question with currently work they do in the kindergarten. She explained that the children in this place hear and speak their own mother language as much as they do with English. They hear music in English and play some games using The English language in addition to enhance their abilities in English vocabulary every day. They receive a systematic learning in how to speak and write in English in the same amount and way they use the Arabic language.

6.1.2 Views of primary school teachers

Almost all the five school teachers who were interviewed expressed positive views of learning English extensively before the age of six. However, the views emphasized more in the advantages and benefits of being bilingual rather than giving an understanding about bilingualism. All the teachers asserted that the students who received this English instruction in the age of three and four have special capacities and have brain plasticity which enables them to acquire a language easily. As the teachers reported, the ten students, the subjects of the study, in this school have language competence rather than the other students who didn't receive any English instruction before they joined the primary school. Moreover, the teachers asserted that these students and their equivalents were exposed to an English instruction in kindergartens and at home as well. They consider the continuity in the use of language is very important to start for developing two or more languages. Once more, the linguistic aspect is more highlighted in this instance along with other necessary factors mentioned before such as psychological, physiological, cultural, sociological and cognitive aspects which are often interlinked.

Most of the teachers interviewed in the school mentioned that learning two languages at the same time, culture and positive elements are taken into consideration in the school pedagogical framework. They also reported that mastering a foreign language in the school, the street or at home is considered a good motivation for the students to be good in other subjects. This is clearly shown in the case of the students who received an earlier English instruction. They show high and obvious proficiency in other subjects such as sciences and mathematics.

#### 6.2 Class observation

6.2.1 Observing Kindergarten children and school students

The information collected from class observation in the four settings together with data collected in the interviews helped in answering the second research question: In which aspects does the acquisition of two languages before the age of six differ from that after the age of six? During the two settings of

محلة الحامعة العر اقبة \_\_\_\_ - العدد · ٢/٤



observation which the researcher conducted to observe the ten children in the kindergarten, the researcher took notes concerning the activities the children do and receive. In the two settings of observation which lasted for two hours, the observation first concentrated on the way children can use vocabulary and simple structures in English in both speaking and writing activities. Most of the ten children showed good performance in using English vocabulary in their songs and plays and they also showed good abilities in writing various words and certain activities on board. Some of the children could memorize long songs and stories in English language. It was clear that the children's pronunciation of the various words and sentences was almost accurate. They generally didn't face serious difficulties in dealing with the material they were given in the kindergarten. Additionally, their performance in the English language.

What has been reported by the five teachers in the primary school was also observed by the researcher in the two settings of observation. The researcher first observed the students' performance in the English language in activities which revealed their abilities in speaking, reading and writing. The earlier English instruction they received in the kindergarten is reflected in the primary school. Their use of English in the four skills of language was clearly good and different from that of the other students. It was noticed that those students were eager to participate and answer the various questions asked by their teacher. Their vocabulary and spelling were the most prominent issues that attracted the researcher's attention. In the other setting of the observation, the researcher observed the students' performance in the other subjects like mathematics and sciences. They were more prepared and ready to answer the different questions and they showed high motivation to raise some questions that made their teacher praise them.

#### **Conclusion and Suggestions**

The purpose of this study was to reveal the developmental benefits of learning two or more languages at the same time at an early childhood. The study was mainly concerned with the performance of Iraqi kindergarten children and primary school students in the English language in general as a foreign language and in vocabulary, reading and speaking in specific. The qualitative content analysis of the data collected in the oral interviews with the teachers and in the settings of class observation for the children and students indicated that learning English as a foreign language before the age of six in a kindergarten or at home in a systematic instruction makes it possible for children to master English in the following stages of their study and life.

The teachers in the kindergarten and primary school who were interviewed expressed positive views of bilingual education. They considered learning English as a foreign language in an early stage of childhood

محلة الحامعة العراقية \_\_\_\_\_ \_ العدد ٢/٤٠



contributes to acquire language easier than that of adulthood. Cognitive and socio cultural aspects were highlighted in the discussions with the teachers and considered one part of the developmental benefits of learning two or more languages at the same time by children. Thus, advantages to raise a child in early years, the possibility of learning tradition and cultures and the improvement of mental abilities are viewed as important aims in the process of bilingualism.

In similar cases, class observation indicated that although, in some instances, both Arabic and English were used simultaneously, different activities such as playing games, singing, reading stories, books and other steady routines were mostly employed with kindergarten children for English development in the same amount of Arabic. It was also observed in the kindergarten that strategies followed by the teachers aimed to develop social, cultural, physical, and linguistic abilities in a natural way in which children use both languages freely. In the primary school, students reflected, in a more obvious way, the previous learning of English they had received in the kindergarten. They showed good readiness and abilities in using and dealing with the foreign language in the respect of vocabulary, reading and making simple and correct structures. Finally, this study suggests that developing the use of a foreign or second language by learners requires a suitable linguistic environment. This environment helps learners use language in a way similar to that of native speakers and allows children to challenge themselves when they are performing activities rather than causing anxiety, boredom, and failure. In addition, since the scope of is limited as it investigated one issue, other areas such as the study of bilingualism in private primary or secondary schools is advised to be conducted.

#### References

Bialystok, E. (2008). Second language acquisition and bilingualism at an early age and the impact on early cognitive development. *York University, Canada*.

Bialystok, E. Craik, F. L., and Luk, G. (2012). Bilingualism: Consequences for mind and brain. *Trends in Cognitive Sciences*, 16 (4), 240-250.

Centeno, O. (2016). Why raise a bilingual child? 4 powerful benefits. *Bilingual Kids Rock*.

Diaz, R. (1983). Thought on two languages: The impact of bilingualism on cognitive development. *Review of Research in Education*, 10, 23-54.

Kamenetz, A. (2016). 6 potential brain benefits of bilingual education. *npred How Learning Happens*.

Lowry, L. (2016). Bilingualism in young children: Separating fact from fiction. *Hanen Certified Speech- Language Pathologist*.

Harlen, W. (2000). The teaching of science in primary schools. London: David Fulton.





Johnston, J. (2005). *Early explorations in sciences*. Maidenhead: Open University Press.

Marian, V. and Shook, A. (2012). The cognitive benefits of being bilingual, *The Dana Foundation*.

Mayring, Ph. (2001). Combination and integration of qualitative and quantitative analysis. *Forum: Qualitative Social Research*, 2(1) (available in German as well). <u>http://www</u>. qualitative-research. net/fgs.

Mayring, Ph. (2014). *Qualitative Content Analysis. Theoretical Foundation, Basic Procedures and Software Solution.* Klagenfurt, Austria.

Ramirez, N. F. (2016). Why the baby brain can learn two languages at the same time. *Research Scientist*, University of Washington.

Rust, H. (1980a). Qualitative Inhaltsanalyse- bagriffslose Willkuer order wissenschaftliche Methode? *Ein theoretischer Entwarf*. Publizistik, 25, 5-23.

Skutnabb- Kangas, T., and McCarty, T. L. (2006). Key concepts in bilingual education: Ideological, historical, epistemdogical, and empirical foundations.

In J. Cummins & N. Hornberger (Eds.), *Bilingual Education: Encyclopedia of Language and Education*,  $(2^{nd})$  (pp. 3-17). New York: Springer.

Soto, R. A. (2016). Raising a bilingual child: The top five myths. *Baby Registry*.

Tabors, P. (2008). One child, two languages: A guide for early childhood educators of children learning English as a second language.  $2^{nd}$  ed. *Baltimore: Paul H. Brookes.* 

