Three Factors of Preschool Classroom Influenced On Bilingual Development of Korean Preschoolers [1]

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Abstract

This is a qualitative study that investigated the first- and second language speaking peers' contribution to the bilingual development of Korean preschoolers in a classroom in a Midwestern university campus town in the USA. Natural data collection was made from children's bilingual discourses. Three factors, such as verbal interaction, presence of communicable peers, and play/materials, provided an authentic language learning context for the first and second language development. The several helping strategies, exchanged their roles as peer-teachers and peer learners. They used code-switching in diverse ways at different levels for active verbal communication embedded in their first-and second culture in the process of bilingual development.

Keywords: verbal interaction, communicable peer(s), bilingual development, codeswitching, first language, second language, authentic language learning context

1. Introduction

Early bilingualism of a multi-cultural society has been a hot issue of increasing attentions in understanding their valuable resources for better communication in the classroom and in the multicultural society [2]. Working with minority children is an inevitable task for teachers because of increasing minority enrollments in our mainstreaming classrooms [3]. This is also a challenge for teachers since they_have direct contacts with the language minority students in their classroom today. Many teachers do not seem to understand the problems and the needs of second language students appropriately. Lack of understanding language-minority children in the classroom can produce prejudices and negative attitudes against the minority students for both teachers and majority students [4].

The purpose of the study is for preschool teachers to find what helps young bilingual children develop their first language and second language in natural verbal interactional settings of preschool especially with the role of peers, play/play materials, finding meanings of code-switching.

1.1. Research Questions

The purpose of the study is to find the nature of verbal interaction among native English-speaking peers (NEP) and non-native English-speaking peers (NNEP) in the preschool classroom with following questions.

1.1.1. What is the role of play/play_materials for children's first- and second language acquisition?

1.1.2. How do the presence and absence of English-only speaking peers and Korean bilingual peers influence classroom language and language choice for Korean bilingual children?

1.1.3. How do English-only speaking peers and Korean-English bilingual peers help each other in acquiring their first- and second language simultaneously?

1.1.3.1. What prompts children to engage in verbal/social interactions in order to acquire languages?

1.1.3.2. How do English-only speaking peers and Korean-English bilingual peers exchange their roles as peer learners and peer teachers in their first- and second language acquisition?

1.1.3.3. Why do Korean bilingual children code-switch for communication and what does it mean to them?

2. Theoretical Foundation for L1 and L2 Acquisition

First and second language acquisition theories will be discussed with several traditional language theories. Skinner's verbal behaviorism explains that repetitive language inputs and reinforcements from advanced peers and adults around learners are important factors in language acquisition. The language learners acquire by imitating external language stimuli and internalize them through countless repetitions. Behavioristic explanations of language acquisition help us understand the children's language imitations [5]. Verbal behaviorism has its limitation in explaining the children's overgeneralization and inner variables such as motivation, emotion, intelligence, and social variable with school curriculum and social context, however [6].

Chomsky's nativism introduced a fundamental language theory that can be applied to all the children. He advocates that children acquire their language in accordance with their innate program called "Language Acquisition Device" (LAD) or universal grammar. His theory has been successful in explaining a great amount and tremendously rapid language growth of young children in a short period of early years. He says children follow unconsiously the rules of their innate program and unfold what they have in their biological program regardless of different language backgrounds [7].

Vygotsky's social interaction theory is appropriate in understanding children's verbal interaction, in the meaningful context that provide young children with natural opportunities to learn new concepts and solve advanced tasks by sharing ideas and clarifying by exchange their ideas in verbal and social communications with advanced peers and adults. They scaffold language learners to achieve the advanced tasks at the higher level of development than the present one by modeling, prompting, and sharing helpful experiences in the zone of proximal development. He agrees with Piaget and Dewey in viewing play as an important context for verbal and social interaction that facilitates language development and language acquisition for young children. He has a different viewpoint that social interaction between a child and the child's caregiver provides important experiences for mastering tasks or learning a new language in an appropriate developmental gap [8].

Goodman's transactional perspective of language acquisition in children's first and second language acquisition describe how children acquire their first and second language by inventing new words outward and modifying their invented words inward in conventional form. He describes the learner's first and second language growth as the result of individual inventions of language from learners' inside and limitation from the way people in the outside community expect their language to be. He believes that the language acquisition process should be authentic, natural, and purposeful for learners' needs for their use. Language learning experience should be coherent in school and home in the natural context for language learners for their own useful purpose [9].

Krashen's input hypothesis, affective filter, and Cummins' threshold theory propose essential factors of second language acquisition condition. Second language learners need comprehendible language inputs for their understanding. They need to have low affective filters that mean their low emotional or mental block such as anxiety, stress, low motivation, discomfort for learning the target language [10]. Cummins' threshold theory is most of ten cited when the second language learners should be equipped with a minimum level of capability in the first language when they begin to learn their second language [11].

Maintenance of the first language of second language learners is the most important issue that we should consider, since second language acquisition is not simply acquiring another language but constructing oneself as member of the group interwound with the target language and culture. The loss of the first language stands for preventing second language learners from their belonging to their families and relative, value, respect in their daily communication in their native community inherited from generation to generation. Second language acquisition cannot compensate the tragic loss of their first language [12]. Moreover, with appropriate support for maintenance of the first language, second language learners tend to be empowered to use their cognitive concepts and all the resource produced by their cognitive concepts and resources from their first language. Development of both first and second language, called additive bilingualism, leads bilinguals to be more useful as a bridge between two different language communities [13].

3. Methodology

3.1. Profile of Participants

Six bilingual children participated in the current study and their language and ethnic backgrounds, length of preschool attendance and American residence is presented in the table 1. Inchul and Sam are Korean-English bilingual boys. They are both 4 year old and were born in USA. Both are native residents of USA but their lengths of preschool were different. Inchul has attended the preschool for 3 years and Sam for a year. Kyuchul has just immigrated with his family and joined in the second visitation period. He did not know English at all, mostly stayed with Korean peers speaking Korean only at the beginning and began to speak English in the process of developing his English proficiency.

Blake and Cody, 4 year old boys, are native English-only speaking step brothers born in USA. They have attended the preschool about a year. Jacquie is a 3 year old native English-only speaking girl, born in USA, who has attended the preschool for 2 years. 3 year old Cheryl is a native English-only speaking girl. Cheryl was a 3 year old cute Chinese-American girl, born in the_USA, attended preschool for 4 years, speaking | Chinese and English, however, no one really responded to her in Chinese in the school.

Children	Age	Sex	Ethnic Background	Home	Birth	Length of	Length of
				Language	Place	Preschool	American
						Attendance	Residence
Inchul	4	m	Korean American	Korean	USA	3 years	Native
Sam	4	m	Korean-American	Korean	USA	1 year	Native
Kyuchul	4	m	Korean-American	Korean	KOR	1 mons	3 mons
Blake	4	m	American	English	USA	1 year	Native
Cody	4	m	American	English	USA	1 year	Native
Jacquie	3	f	American	English	USA	2 years	Native
Cheryl	3	f	Chinese-American	Chinese	USA	4 years	Native

 Table 1. Profile of Bilingual Children Participated

3.2. Data Collection

Weekly observation for collecting verbal interactions of six bilingual preschoolers was made with videotaping. Each videotaping went on forty to sixty minutes at a time during natural observations. Thirteen visits in total were implemented with observations, field notes, videotaping, and interviews with participant children, their parents, and teachers for better understanding of participants. Visits consistently began when the children began arts/craft time given with ready-made cardboard. The children seemed to talk more often and longer with more open-ended and creative play materials with construction paper, scissors, glue, plastic toys, and play dough, and blank papers. They made their own things with which they began to talk about different yet related topics, and ended at a natural break, marked by the children's transition to the next session of daily routines.

Verbal data transcribed with 92 episodes of children's discourses were analyzed according to several categories of verbal strategies that bilingual peers used. Five different observation periods were divided by the presence and absence of English-only speaking peers that seemed to influence critically on the classroom language.

During five observation periods, children showed a series of fluctuation of presence and absence. In this fluctuation, language of the classroom changed as shown in the table2

3.3. Data Analysis

The dynamic nature of the relationship between the first and second language of English-speaking peers in the natural play context was the focus of data analysis. The simple counting of words, turn-taking, and whole discourses with 92 episodes were transcribed from verbal data and selected for data analysis. Different roles of the peers and the dynamic relationship among the first- and the second language peers were investigated in detail. Three different verbal interactions among native English-speaking peers and Korean-American peers were found as helping strategies: peer prompts, peers' exchanging roles as teachers and learners, and code-switching. Each main category had several sub-categories. Peer prompts include identifying gender, social relationship, language play, requesting, and role-play. Exchanging roles include orrecting, coaching, demonstrating, extending, informing, and interpreting. Code-switching was used for emphasizing, getting attention, keeping confidentiality, showing low second language proficiency, and using culturally specific-terms. Table 2 shows how peers' helping strategies were divided into sub-categories with each title as following.

Categories	Code	Sub-category	Sub-Code
Peer prompts	PP	Having social relationship (friendship, protect peers' belongings, emotional support, sharing, choosing leader, etc.)	PPF
		Identifying gender	PPG
		Having language play (using witty or funny words)	PPL
		Requesting peers to do something	PPQ
		Playing role play (playing house)	PPR
Role Exchanging as Teachers & Learners	HT	Coaching (teaching or guiding in learning or using letters, words, labels, and numbers in which verbal interactions are actively engaged or embedded.)	HTCh
		Interpreting	HTI

Table 2. Code Lists for Data Ana	lysis for Sample Episodes
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		Correcting	HTC
		Demonstrating	HTD
		Providing information or explanation	HTM
		Extending	HTE
Code- Switching	CS Reasons	Gaining attention	
		Emphasizing, or clarifying	
		Building confidentiality	CSC
		Filling linguistic needs for lexical items to identify culturally specific terms (Korean baby talk, American characters), and for lack of proficiency in L2	CSL
	CS Levels	Code-switching at a word level	CSWd
		Code-switching at a phrase level	CSPh
		Code-switching at a sentence level	CSSt

Each episode was named ccording to words or sentences that reflected its corresponding individual subcategory. Episode 1 presents how children's discourses were classified with each title and sub title. The following episode was classified into CSA, meaning code-switching for gaining attention. This code-switching was spoken at a sentence level. This episode was from the 3rd visit observation, and was transcribed in the page 13 through 14.

Episode of CSA & CSSt (#3:13-14)

Kyu: (to Cody) Don't touch. Don't touch. Inchul! Inchul! Inchul!

Inch: What? You guy (to Cody and Kyuchul).

Kvu: 얘가 이거 만질라구 했어. 봐봐! [He tried to touch this. Look!]

Inch: Don't touch. It's mine.

Inch: (takes object from Cody and says...) Don't. That is mine (Inchul then hits Cody).

Cod: (starts knocking other toys to the floor and says to Inchul). You have to put'em down here. Inch: (to Cody) Don't. You baby. Okay.

Kyu: 이거 내꺼야 (to Cody)

[This is mine.]

(He puts some blocks on the shelf and leaves Inchul and Cody.)

Cod: the... (to Kyuchul)

Tch: There are already two people playing there. You'll have to find a different game to play with. Please (Cody still wants to touch the fire engine and puts his hand on it.).

Inch: Don't (to Cody) (Kyuchul returns to Jacquie on the floor.)

3.4. Observation of Different Classroom Languages on Visitation Periods

Classroom observation was made naturally. The classroom language was English until a new Korean boy Kyuchul joined his Korean bilingual peer group in the second visitation period. He was not able to speak English at all at the beginning of observation but produced an increasing frequency of speaking English as well as Korean among Korean bilingual peer groups, prompting Korean bilingual children to speak Korean in their ethnic group. There was none of Korean words among Korean bilingual peers in the first visitation period before a new Korean speaking peer was present in the classroom.

Visitation Periods	1 st Period	2 nd Period	3 rd Period	4 th Period	5 th Period
Population Change	Old Members: Native English-only speaking peers & Korean bilingual peers	Presence of a new Korean boy & American Peers with Korean Bilingual Boys	Absence of American Peers	Return of American Peers	Korean Peers Only
Classroom Language	English Only	English & Korean only with a new Korean boy	English with more Korean among Korean peers	English with less Korean among Korean peers	English & most Korean

 Table 3. Observation of Different Classroom Languages on Visitation

 Periods

4. Findings

4.1. Dynamic and Multi-Dimension of Verbal Interaction among Bilingual Peers

First significant finding of the current study was that peers' verbal interaction was dynamic and multidimensional. Play with appropriate play materials, presence of communicable peers, and verbal interaction were important factors in providing an authentic context for the language learners to acquire the first and/or the second language.

4.1.1. Open-ended Play Materials and Children's Active Verbal Interaction

Play with open-ended materials such as play dough with props like cookie monster molder, wooden sticks for socio-dramatic play. These preschoolers' conversations were extended and sustained up to 20 minutes in the case of the "boat-making episode" and to 58 minutes for the "play-dough with grapefruit knives episode." These materials facilitate more opportunities for the children to have more opportunities to explore their own topics. These two long episodes seem to reveal the possibility of the play materials as an important factor for language development.

Open-ended play materials such as play-dough with cookie monster molder and grape knives and construction paper for making airplanes and boats chanting "row row row the boat" led Korean-English bilingual young preschoolers to choose what they want to make and actively participate the related topic with their crafts. That seem to be an important factor for active verbal interaction needed for language acquisition. However, ready-made craft matter for making a picture case enabled the participants to finish their craft in a short time and their conversations were kept only 1-2 minutes. The children asked their teacher about what they had to do next. They did not seem to be deeply involved with a topic with this type of play matter.

The shape and flexible structure of the open play materials, such as blank paper and play dough, seemed to be key elements for the active verbal communication among Korean peers. The flexibility and the openness to various types of products were key elements for their continuous exploring the ossibilities of paper with different topics such

as making boats, knives, airplane, train, and animals_(bird, goose, dog) (#3:10-20) and relating words, concepts, and labels that were closely related to the conversation themes (i.e. yummy boat and breakfast, speed boat and racing, flying boat and airplane/airport/monster bird). The specially creative shapes of the grapefruit knives and cubes were critically important for the children to associate them with other things such as a fork, hammer, animal, stone, nail, insect, fly, frog, good guy, bad guy, dung, ants, ant's house, hole, Korean school, and Han-gul (Korean alphabet).

4.2. Classroom Language Choice with the Presence/Absence of Peers

The presence and absence of English only peers seem to influence on the classroom language of Korean bilingual children to be English. The percentage of English words in each observation period changed with the presence and absence of English peers. English words occupied 100% with English peer in the 1st period, 93.7% and Korean words (6.3%) in the 2nd period with a new Korean boy, 86% with the absence of English peers and Korean words (14%) in the 3rd period, 98.1% with English peers' return and Korean word (9.9%), and only 11.8% with absence of English speaking peers and Korean words(88.2%). English use in the same classroom increased with the presence of native English speaking peers and decreased with absence of them. This statistic says that Korean bilingual children show their fluctuation of English usage according to the presence and absence of native English speaking peer which seem to influence on the language choice of Korean bilingual children.

In other hand, the_presence of Korean only speaking peer, Kyuchul, seem to influence the use of Korean among Korean bilingual children in the classroom. Without him, there was none of the Korean words, however, a_number of Korean words increased steadily from the 2nd period to the last period except 4th period with native English peers welcomed.

Visitation Periods	1 st Period	2 nd Period	3 rd Period	4 th Period	5 th Period
Change of Population	Old Members	Presence of a new Korean boy & American Peers	Absence of American Peers	Presence of American Peers	Korean Peers Only
Observation Day	3/28	4/10	5/1	5/20	6/3
Total Turn-Taking	107	74	295	206	170
Number of	0	48	221	106	871
Korean Words	(0)	(6.3)	(14)	(9.9)	(88.2)
Number of	414	714	1352	959	117
English Words	(100%)	(93.7%)	(86%)	(98.1%)	(11.8%)
Total Words	414	762	1573	1065	988
	(100%)	(100%)	(100%)	(100%)	(100%)

Table 4. Classroom Language with Communicable Peers

4.3. Helping Strategies Prompting Peers Verbal Communication

4.3.1. Peer Prompts for Active Verbal Interactions

Peer prompts can be defined as "any kind of verbal initiation that invite the conversation partner as peers to engage in talk and play" [15]. The children showed especially effective verbal strategies to help their peers to talk. Peers prompted Korean bilingual children to use helping strategies and encouraged the children to have active verbal interactions needed for bilingual development by using different strategies. Episode of social relationship related to peer prompts occurred 7 times, language play 7,

dentifying gender 5, requesting 5, and episodes of role-play 3 times in order. The least occurrence of role-play was unlike in ordinary preschool classroom since theses observations was since this observations were usually made during the craft/art play section.

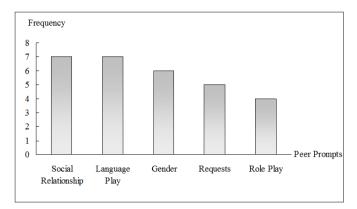


Figure 1. Number of Episode of Peer Prompting Strategies

4.3.2. Exchanging Roles of Teachers and Learners in Bilingual Development

The peers' verbal interaction was also facilitated by the exchange of roles as peer teachers and peer learners. The children who played peer teachers were mostly capable and likely to encourage other peers with appropriate strategies for learning vocabulary or new concepts. They often had advanced problem-solving skills playing the teacher role and used several helping strategies such as correcting, coaching, demonstrating, interpreting, informing, and extending.

Peer learners showed their willingness to follow the peer teachers by listening, accepting, imitating, and following. Playing with play materials were likely to give cues for the preschoolers to share experiences, knowledge, imagination, and information that had been learned from the people around them (#10:1-9). When they kept talking about their topics in various ways, their expertise in the topics of the conversation seemed to characterize the children's social relationships such as being learners or being helpers. Extending and demonstrating were the most frequently occurred peer teacher's role.

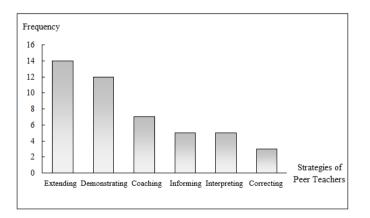


Figure 2. Frequency of Episodes of Helping Strategies of Peer Teachers

4.5. Code-Switching

Code-switching is "a language shift to the other language in a speech act" [16]. Codeswitching especially among Korean-American bilingual peers were actively and meaningfully enriched by frequent discourses spoken by Kyuchul, a new Korean boy. Korean-American preschool peers used code-switching not only as an expression of their dual capabilities in language acquisition and cognitive flexibility but also as their awareness of the cultural contexts. Their culturally-specific terms were appropriately embedded -uniquely in their cultural context. Any other English words could replace them.

Code-switching strategies in this study were coded according as its purpose of usage and level. Purposes of code-switching include getting attention, emphasizing, clarifying, specifying speaker involvement, demonstrating/building confidentiality, expressing culturally-specific terms (Korean baby talk), and filling linguistic needs for lexical items. Korean bilingual peers used code-switching at word, phrase, and sentence level more and more in the process of observation.

We need to pay more attention to Kyuchul's use of Korean and English. Although his English proficiency was low, he kept the use of English words at an average of 41% of his total spoken words during observation. He spoke Korean dominantly and kept the rate of 59% of his total words over the research period, although he also increased his use of English over the research period. One interesting finding from the observation of Kyuchul was that his use of Korean words and English words was closely related to the availability of his Korean peers. He spoke Korean only on his first join in the peer group in the second visitation period. He usually kept silent with non-Korean peers. With the absence of American peers during the 3rd and 5th periods, his use of both English and Korean words increased when his Korean bilingual peers were available for him as conversational partners. In other words, the amount and the rate of the English words and Korean words seemed to be influenced by the presence and absence of the first and the second peers. The most helpful peers to Kyuchul's English and Korean development appeared to be Korean bilingual peers were here of the most turns for verbal interaction.

5. Conclusion

Peers' verbal interaction in second language acquisition in preschool is dynamic, complex, and multidirectional. Regardless of their language and cultural backgrounds, preschoolers keep their communication with their peers meaningfully during play more actively with open-ended play maters.

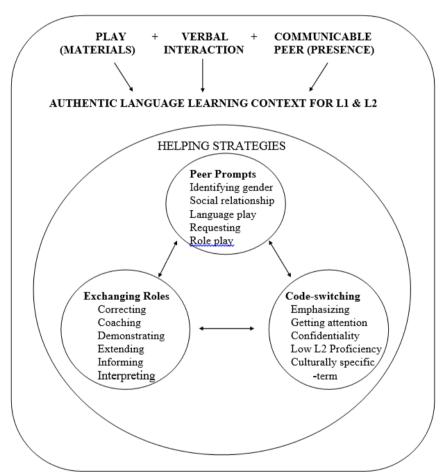
Significant findings such as role of play/materials, communicable peers' presence and absence, and culturally specific terms reveal that second language acquisition classroom teachers and researchers should keep these factors in their minds when considering a supportive environment for the additive bilingual education. That can encourage simultaneous first language and second language acquisition for many language minority preschoolers for encouraging their richer language- and cultural flexibility and resources.

The preschoolers showed especially effective verbal strategies in helping their peers activate their talking by severbal strategies including having social relationship, identifying gender, playing language play and role-play, and requesting. Their verbal interactions were facilitated by the exchange of role as peer teacher and peer learners. The teachers' roles were presented with correcting, coaching, demonstrating, interpreting, informing, and extending. Peer learners showed their willingness to follow the peer teachers by listening, accepting, and imitating. Peer learners showed their willingness to follow the peer talk was supported as active and meaningful by frequent code-switching made by the Korean bilingual peers. Their code-switching was not only an expression of the bilingual children's dual capabilities in language acquisition and cognitive flexibility but also their awareness of the cultural contexts in which their culturally specific terms were -embedded.

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Peer presence was a significant factor that facilitated the classroom language choice such as code-switching among peers. The presence of a new Korean boy was an instrumental factor that encouraged other Korean bilingual peers to talk more and develop Korean with frequent code-switching from Korean to English and from English to Korean. The Korean peers' use of Korean dramatically increased in the English-only speaking peers' absence and decreased in their presence. On the contrary, the Korean bilingual peers' use of English decreased in the English-only speaking peers' absence and increased dramatically in their presence.

All of these factors: verbal interaction, play and open-ended play materials, and peer presence were considered to be critical conditions that seemed to determine the children's first- and second language acquisition. None of them played a less important role than the others. They were closely related to each other so one seemed to be more helpful when the others were provided as well at the same time.



PRESCHOOL CLASSROOM

Figure 3. Helping Strategies Used by Peers in L1/L2 Acquisition in Preschool

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