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I, Eunyoung Kim Chae, hereby submit this original work as part of the requirements for the degree of Doctor of Education in Curriculum & Instruction.

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**Early Childhood Teacher Professional Development Using an Interdisciplinary Approach:
Teaching English as a Foreign Language for Young Children in Korea**

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Early Childhood Teacher Professional Development Using an Interdisciplinary Approach:
Teaching English as a Foreign Language for Young Children in Korea

A Dissertation

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Doctor of Education (Ed.D.)
Division of Teacher Education
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By

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April, 2014

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ABSTRACT

This study employed pragmatic parallel mixed methods to determine the impact of TPD on early childhood teachers' pedagogical methodology and English acquisition by young children in South Korea. The data included observations from the TPD sessions and classrooms, interviews and lesson plans, as well as the pre- and post- test scores of the 42 participant children. The findings have provided valuable insights into (1) how the HIA TPD program could serve as a means of effective TPD, positive impact on the growth of teachers' English instructional practice, and young children's English learning, and (2) the benefits for children in the treatment group that was generally greater than the control group in the areas of VA, LS, and PA skills. Implications for further research on TPD and other supports for the integrated early childhood English education were discussed.

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CHAPTER ONE: INTRODUCTION TO THE STUDY

Background

Teaching and learning to speak English has become increasingly important in South Korea (hereafter referred to as Korea) because English has been identified as one of the world's most widely-spoken languages (Bae; 2010; Han, 2002; Jeong, 2011; S. Lee, 2012; Park, 2003). This trend has increased with the developments in information technology and globalization. According to the British council (2013), the English language has an official or special status in more than 70 different countries and is being learned by more than 1.75 billion people worldwide. These numbers support the importance Koreans place on being conversant in English in today's world.

English has been taught in Korean secondary schools as a required foreign language since 1950 and has been incorporated into primary school curriculums since 1997 (H. Lee, 2010). English education for young children (ages 3~6) has been implemented in most kindergarten schools (approximately 92.2%) using a variety of English programs (An, 2010; Ban & Seo, 2009; Cha, 2004; Cho, 2011; Kim, 2007; M. Lee, 2005; Ma, 2007).

Concerns about early childhood English education in Korea, however, revolves around implementing English language instructional programs without research based on a systematic, pedagogical model (Bae, 2010; Cheon, Choi, Jwa, & Seo, 2002; Y. Lee, 2012; Park & Shin, 2005; Yoo, 2011). Given this reality, some educators are calling for the Korean government to carry out a comprehensive review of early childhood English education. (S. Jeong, 2005; S. Lee, 2012; Yoo, 2011). In response, Korean researchers have started to analyze the current status of English instructional programs and teachers' and parents' perceptions of early childhood English education; yet there are few empirical studies of teacher professional development (TPD)

including English teaching methodology (Cho & M. Lee, 2009; S. Lee, 2012; Ma, 2007). According to the research studies of E. Kim (2003), Y. Lee (2012), and Ma (2007), many principals, directors and administrators of the early childhood educational institutes, including kindergartens and children's houses are implementing English education in order to meet high demand and interest of parents, despite the difficulties of obtaining suitable English teachers and English teaching methodology. In addition, there is neither national support nor common core standards in early childhood English education. Even when the early childhood curriculum was newly revised in 2012 by the Korean Ministry of Education, Science, and Technology, the responsibility for the implementation of early childhood English education program was left to the discretion of each kindergarten instead of being included as a part of the curriculum (Bae, 2010; Jeong, 2005; M. Kim, 2007; H. Lee, 2010; S. Lee, 2012). The reasons why the Ministry of Education didn't implement early childhood English education may be because scholars and educators still debate the pros and cons of implementation of early childhood English (Kang, 2009; S. Lee, 2012; Yoo, 2011). Some educators claim that it could be successful if children acquire English as a Foreign Language (EFL) during the children's critical (sensitive) period of language acquisition (Boo, 2003; J. Lee, 2000; J. Lee, 2009). On the other hand, others argue that it would interfere with native language development of young children, while they are still developing their mother tongue (Brown, 2007; G. Lee, Jang, M. Jeong, & Hong, 2003). Regardless of this debate, most kindergartens in Korea presently implement English education.

Consequently, current English education for young children needs to be re-evaluated to maximize the effectiveness of English teaching (Cheon, Choi, Jwa, & Seo, 2002; S. Lee, 2012; Y. Lee, 2012). In fact, it is essential that classroom teachers guide young children to learn through interacting with their environment in kindergartens for more efficient and effective acquisition of

English in Korea (An, 2010; Jang & Won, 2008; Kang, 2009; H. Lee, 2010). Early childhood teachers should ideally have the knowledge, skills and experiences to integrate English into their total curriculum because they believe that (1) they know the needs of their classroom children cognitively, intelligently, and psychologically, and (2) they can create an appropriate learning environment for English education for young children when it is interwoven with other content curriculum in the classroom (An, 2010; Gu & Lee, 2002; Kang, 2009; Yoo, 2011). Accordingly, new English instruction programs for young children need to be supported by TPD program for most effective implementation and TPD programs in this field should be supported by the policymakers from all relevant organizations including schools, universities or government (An, 2010; Kang, 2009; D. Kim & King, 2011; C. Youngs & G. Youngs, 2001) so that teachers leaving training programs can be equipped to teach English using the interdisciplinary approach.

Statement of Problem

Increasingly South Korean educators and researchers are focusing attention on the most effective way in which to teach young children English (An, 2010; Cheon et al., 2002; Kang, 2009; J. Kim, 2004; Shim, 2009). These researchers identified issues from the current early childhood English education. First, the English method currently being implemented in most of kindergartens has been developed by commercial English education companies outside school, not by reliable educational institutes based on research (J. Kim, 2004; M. Kim, 2007; Shim, 2009). Kang (2009) stated that 76.5 % of 333 early childhood teachers expressed dissatisfaction of the current English method because it had its own curriculum, not connecting with the early childhood education curriculum. Secondly, the newly revised early childhood curriculum called '*nurigwajeong*' in Korea has been used since March 2013 (Ministry of Education, Science, and Technology, 2012). '*Nurigwajeong*' means 'enjoy the process,' and focuses on holistic,

integrated education based on the nurture of necessary life-long skills of young children, in conjunction with the five fundamental areas: physical activity and health, communication, social relationships, artistic experience, and natural exploration. However, the current early childhood English education has been separately taught as a special subject, and this method is not compatible with the goal of holistic, integrated education, as stated by the new revised early childhood curriculum (Kang, 2009; Yim, 2008). Through integrated English education with the content areas, young children would increase their interest and motivation to learn English (Choi, 2009; Shin, 2004). Third, An (2010) and Kang (2009) argued that it would be the best when English education for young children is intertwined with other content curriculum in the classroom, and trained Korean classroom teachers teach their students English utilizing an integrated curriculum. However, many early childhood teachers don't know how to teach English in their classrooms because they have had few opportunities to develop English integrated teaching strategies in meeting the English language learning needs of young children (An, 2010; Choi & Son, 2011; Cheon et al., 2002; J. Kim, 2011). According to H. Lee (2001), J. Kim (2004), M. Kim (2008), Shim (2009), and Kang (2009), they argued that the high quality TPD should be a priority in order to allow teachers to have a deep understanding in both sides of early childhood education and English education as prerequisite for effective early childhood English education.

Therefore, researchers recommended that Korea should consider the country-wide adoption of alternative, research based approaches based on TPD with the integrated English methodology in teaching English since the current English methods and approaches have been found to be inadequate to address the nation's needs (An, 2010; Kang, 2009; H. Lee, 2010; S. Lee; 2012; Yoo, 2011). In this study, I developed a Holistic Interdisciplinary Approach (HIA) as

the early childhood English education curriculum, and implemented TPD using HIA to make sure if this program can promote the development of effective early childhood English education.

Purpose of the Study

The main purpose of this study was to investigate the effect of a teacher professional development (TPD) program utilizing a Holistic Interdisciplinary Approach (HIA) to determine its impact on early childhood teachers' pedagogical methodology and English acquisition by young children (ages 3~6) in South Korea. Ultimately, the improvement of teacher knowledge, beliefs and practice will place young children in better position to learn English by motivating their learning and influencing their accomplishment.

Research Questions

The guiding question of this study was: How does the early childhood teacher practice her learning and teaching with guidance from a mentor using the HIA English program, and enhance young Korean children's learning of English both inside and outside her classroom?

The qualitative research question to be answered in this study was:

1. In what ways did Teacher Professional Development using the HIA English methodology impact the early childhood teacher's English instructional practice in teaching English to young Korean children?

The quantitative research question to be answered in this study was:

2. How did Korean kindergarten children who received the HIA method perform in comparison to those who received the current method of English instruction in the areas of auditory discrimination, vocabulary acquisition, letter sound recognition, and phonemic awareness skills?

Definition of Key Terms

Holistic Interdisciplinary Approach (HIA): The researcher developed the HIA English curriculum, which is an integrated curriculum of Montessori language method and interdisciplinary methodology based on children's literature. In addition, the HIA focuses on whole language and language experience in music and art, as well as story telling including multi-media and Montessori language materials: sandpaper letters, movable alphabets and phonetic reading materials. It is a child-centered and teacher-guided method that inspires independence, freedom within limits, and a child's natural development through his/her choice and active learning (Montessori, 1946).

Kindergarten: Kindergarten in Korea is composed of children from ages three to five (sometimes six). The children are grouped according to age or mixed together in a kindergarten class with other children who may be within a three (or four)-year age span.

English teachers: In Korea, there are three types of English teachers to teach young children English in the kindergarten: Korean natives who majored in English Education, trained Native English-speaking teachers or Korean natives who didn't major in English Education or Education.

Montessori: Montessori classrooms are mixed-age, mixed ability communities where children learn from peers and older children as well as the teacher. They also have "materials," which mean the educational objects for working in a particular subject area (Lillard, 2005). The children in Montessori classrooms have freedom to choose, which allows them to develop their physical, intellectual, and psychological powers (Montessori, 1949). Montessori also believed that deep concentration was essential for helping children develop their best selves, and that deep concentration in children comes about through working with their hands. Montessori teachers are

the dynamic link between the child and the environment, and function as observers, facilitators, and guiders. Montessori teachers prepare the learning environment, engage children in learning activities, inspire their imagination, and maintain a record keeping system. They are also community builders between the parents, classroom, and child. By providing opportunities for children to take initiative and materials that captured their attention and affection, the children guide themselves to meaningful learning and social relationships.

Teacher Professional Development

The researcher in this study followed Bell and Gilbert's (1996) model for achieving teacher development. Bell and Gilbert (1996) outlined a model for TPD as containing three main structures. The first structure is teachers' social, personal, and professional development. The social development includes working collaboratively with other teachers through the social interaction, which enables them to observe others' new ideas. The personal development implicates changing teachers' own knowledge and beliefs by experiencing different approaches or opinions between their ideas and ideas from other teachers. The professional development (PD) involves adopting, practicing and presenting a different teaching method. Second, the PD incorporates effective instructional mechanisms. The mechanisms provide opportunities for on-going support, feedback, and reflection. Finally, the last structure is considering teachers' individual situation during the PD. The PD program needs to focus on continued interacting among teachers and educators, including the PD leader, rather than moving forward through the sequence of the planned curriculum with little or no consideration for the needs of the recipients. In other words, effective PD should be teacher-centered because with respect to the personal aspect, the teachers will strongly know who they are as teachers, and also have an ownership of their ideas and views. Bell and Gilbert (1996) indicated that "there is a loose and flexible

sequence implied in the model” (p. 31). This flexibility helps teachers to be aware of their own learning and to guide the scheduling and engagements of facilitators.

In summary, Bell and Gilbert’s (1996) TPD model focusing on social, personal, professional development with on-going support is considered to be universal, regardless of content areas. Thus, this model for accomplishing effective TPD was chosen as the underlying framework to implement TPD in this study because the three main features, as described above, could be applied to reach the ultimate goal of improving teachers’ knowledge and skills, and increase young children’s English learning in Korea.

Theoretical Framework

The researcher implemented TPD underlying constructivism as the psychological foundation of this research in an effort to assist the early childhood teacher in conducting an HIA English program as EFL in her classroom. Constructivists contend that the learners learn from being engaged in constructing their own knowledge (Mayer, 2004; Hmelo-Silver, Duncan, & Chinn, 2007). Knowledge comes into its own when the learner can deeply understand (Perkins & Unger, 1999). In other words, the learners seem to learn by themselves through inner drive, and their learning doesn’t come from teachers’ teaching. Constructivists are interested in having learners identify and pursue their own learning goals. As applied to teachers, a mentor in TPD may have some specific learning objectives in mind, but s/he also needs to provide participant teachers with opportunities to explore and learn something of personal interest (Driscoll, 2005). So, in order to help the personal development of participants, which involves changing teachers’ own knowledge and beliefs, a mentor of TPD has to assess their prior knowledge including strengths and weaknesses. It is necessary to provide the proper learning environment that stimulates and supports the learners. By doing this, a mentor will be a role model for participant

teachers so that they can prepare for the suitable prepared learning environment for children which reflect both their interests and learning objectives.

Constructivists believe that meaningful learning occurs when one constructs for oneself, while learning through connections formed among existing ideas (Burner, Goodnow, & Austin, 1956; Dewey, 1924). Learners are able to select and change information, develop assumptions, and make decisions depending on their thoughts. The theory of constructivism has implications for the effective utilization of learner-centered activities. Through observation and constant record keeping, teachers and mentors are able to support the learner to learn on his/her own pace and manner so that the learner may become a lifelong learner in our knowledge based society (Hmelo-Silver, Duncan, & Chinn, 2007).

Social constructivist, Vygotsky claimed that all the higher functions of learning are rooted in the actual relations between relationships (Vygotsky, 1978). The participant teachers' social development can be fostered from social interaction with other teachers, which then enables them to implement more adaptive relationships with students, other school personnel and parents. Since the interaction between teachers and learning communities contributes to the development of cognitive structures (Driscoll, 2005), it helps the growth of teachers' knowledge and beliefs. The teachers' professional development during TPD can occur while practicing a different teaching method learned from other teachers or mentors.

Driscoll emphasized that the learning conditions to reach the goals of constructivist instruction should include: problem solving, reasoning, critical thinking, and the active and reflective use of knowledge. She also recommended five constructivist conditions for learning: "(a) embed learning in complex, realistic, and relevant environments, (b) provide for social negotiation as an integral part of learning, (c) support multiple perspectives and the use of

multiple modes of representation, (d) encourage ownership in learning, and (e) nurture self-awareness of the knowledge construction process” (p. 393). The HIA TPD is grounded in the rationale of above constructivist approach.

The characteristics of TPD as a learner-centered approach within which teachers learn from peers and a mentor of TPD who performs facilitative function are adequate to qualify as a cognitive constructivist learning theory. First, the HIA TPD enables learners to explore their own problems in the real world, and to practice their skills in intricate learning situation (Savery, 2006). Learners obtain knowledge through engaging with realistic and stimulating problems. Second, collaborative working is crucial in the HIA TPD. Constructivists believe that “higher mental processes in humans develop through social interaction” (Driscoll, 2005, p. 396). Third, the HIA TPD provides diverse ways of learning. By doing so, learners can view a problem from many different viewpoints. Fourth, the HIA TPD supports learner-centered learning so that learners may be actively involved in finding solutions, and take responsibility for their own learning and problem solving (Kendler & Grove, 2004; Savery, 2006) Fifth, in the HIA TPD, learners learn from connections through a varied range of disciplines, and the multiple viewpoints lead to a fuller understanding of the issues and the possibility of a more interesting and creative solution. Lastly, Driscoll noted that constructivists stress the importance of reflection; with reflection the learners improve their ability to create and discover new structures. The HIA TPD emphasizes reflective learning through journaling and record keeping.

Significance

Given that teaching and learning English have been long-standing major concerns for Koreans, it is essential that Korea acquires efficient and equitable means of teaching English to its populace. It is anticipated that this study will make at least four contributions to the

areas of teaching young Korean children English (ages 3 to 6) as EFL. First, this study will contribute to effective English learning for young children by giving them an opportunity to learn at their own pace through interacting with their own teachers and peers in the prepared environment, which includes all the Montessori pedagogical work. By using a Montessori approach, individual children will be able to use the HIA work to gain mastery on their own and have the satisfaction which comes from individual accomplishment. In addition, HIA will support the classroom setting wherein the children will be encouraged to submerge themselves in their own learning development. Second, this study is the first exertion to apply HIA by a trained classroom teacher to guide children to learn English in Kindergarten. Thus, HIA will also enhance a classroom teacher's knowledge of English. Third, this study will contribute to save money and time of parents and schools because the same classroom teachers trained will play a great role to motivate the children and to raise their levels of interest in the English language.

Finally, the crucial question underlying this study is finding an effective and efficient English learning methodology. This study has the potential to give educational authorities the key data that could provide the rationale for Korea's educational reform efforts as they pertain to the teaching and learning of English. The HIA educated teachers will be leaders in the movement for more access to English language instruction for all Korean children. As the teachers are more proficient, the school-aged children will have more equitable access to English language learning and thus be more prepared to compete in the global marketplace as adults.

CHAPTER TWO: LITERATURE REVIEW

Introduction of the Current Early Childhood English Education

Kindergarten in Korea is composed of children from ages three to five (sometimes six). The children are grouped according to age or mixed together in kindergarten class with other children who may be within a three (or four)-year age span. The main thrust of the current use of visiting teacher-directed English classes in Korea's kindergartens is simply to encourage children's interest and proficiency in English language and culture (Bae, 2010). In general, children have one or two 20~30 minute classes per week in which they learn songs and basic expressions by repeatedly listening to and repeating short words or sentences in English (Cho, 2004; Yang, J. Kim, H. Kim, & S. Kim, 2001). A class size of approximately 25 children makes the situation difficult for frequent interaction between the teacher and an individual child. In addition, an English teacher rarely has a chance to meet with an individual child, to observe him/her and analyze what s/he needs because of the short teaching hours and large classes. Furthermore, it is uncommon for a teacher of English to have either the knowledge or experience in meeting the academic needs of young children who are of varying learning styles, cognitive styles, psychological types, and intelligences (Ehrman, Leaver & Oxford, 2003; An, 2010; Yoo, 2011).

Social, Personal, and Professional Development

In the effective TPD, social, personal and professional development becomes intertwined (Bell & Gilbert, 1996). Through collaboration with other teachers and more opportunities to discuss and share ideas, teachers learn to differentiate and evaluate the similarities and the differences of their teaching (social development). Teachers need to recognize the problems of current teaching, to be ready to change their ideas, and to trust in the new program in order to

develop over time (personal development). In the professional development, helping teachers to accept a new teaching method as a learner, to be confident about themselves as a teacher, and to perform activities in the classroom are essential and must be achieved in order for PD to be useful and effective (professional development).

Social Development. Webster and Valeo (2011) in their qualitative study indicated the importance of social development of TPD as follows. First, teachers had more opportunities to apply a new method learned from TPD to the students if provided the opportunity to discuss the problem with other teachers who had the similar problems. Furthermore, they gained insight into actual resolutions of specific behaviors through collaboration with other professionals (Barnes, 2006; Meskill, 2005). Second, teachers could create classrooms helpful to the needs of children, who were English Language Learners (ELLs), through having chances to observe other successful teachers working in the classroom and being able to discuss and compare methodology and outcomes. Many educators have shown that establishing professional learning groups gives teachers additional benefit in acquiring a better understanding of ELL curriculum, and allows them to make more rapid progress in their own teaching practice (Barnes, 2006; Meskill, 2005; Walton, Baca, & Escamilla, 2002; Webster & Valeo, 2011).

Personal Development. Personal development starts with the feelings about the need to change present teaching and about extending of one's own knowledge (Bell & Gilbert, 1996). Gebhard, Demers, and Castillo-Rosenthal (2008) described two mainstream teachers, who joined in the second language TPD initiated to develop new techniques to improve their work. Teachers in this study realized that the pullout program might make it hard for ESL (English as a Second Language) students to learn English and make friends at school. So they and their administrator decided to combine the Spanish-English bilingual group with the typical classrooms; they were

trained by authors to become text analysts and action-researchers who could investigate their students' developing academic literacy practices, and to conduct systematic instructive practice. According to Demers and Castillo-Rosenthal, the trained teachers reported a better understanding of how bilingual students learn English and why monolingual teachers, who are not aware of special language development, often have a difficult time with ELLs.

Barnes (2006) outlined three main characteristics of teachers who participated in the research before TPD; most of teachers (1) had not experienced working with culturally and linguistically diverse students, (2) wanted to learn content knowledge and teaching method without focusing on learning about cultural differences and diversity problems, and (3) focused on the course explanation, not on the field experience. In other words, many teachers don't realize that they need to generate the best environment to provide all students with the optimal chances regardless of students' different backgrounds. So Barnes emphasized the utilization of culturally responsive teaching in the TPD program because it increased the chances of success of all students.

Therefore, through TPD, including field experience, teachers should come to understand that their own interpretations about the world are not universally accepted (Barnes, 2006). This kind of mindset can better boost teachers' personal development in order to become competent in guiding culturally and linguistically diverse students (Karabenick & Clemens Noda, 2004; Walton, Baca, & Escamilla, 2002).

Professional Development. Positive attitude and ownership of learning a new program from TPD is the basis of all success in new learning and its application to teaching (Farrell, 2006; Karabenick & Clemens Noda, 2004; O'Hara & Pritchard, 2008; Youngs & Youngs, 2001). Webster and Valeo (2011) observed a frequent disparity between TPD and the feeling of teachers'

self-confidence concerning the needs of ELLs in the classroom. They stated that participants in their research study wanted more intensive phonological training because when teachers were knowledgeable and well equipped for teaching, they would have a high level of confidence in their knowledge and skills. In addition, it is necessary for teachers, who have to deal with the Limited English Proficient (LEP) students and /or parents, including ELLs, to be sensitive to special problems in language development and to receive training in ELL teaching pedagogy (Gebhard, Demers, & Castillo-Rosenthal, 2008; Seabolt, 2008). Consequently, the more confident teachers become through TPD, the more motivated and successful they will be in the classroom (Cooper, 2009; Farrell, 2006; Verdugo & Flores, 2007). Improved teachers' self-efficacy can have more impacts on ELL students learning in the near future than any methods that they learned during the period of TPD (Webster & Valeo, 2011).

Another factor contributing to the professional development is ongoing support (Walton, Baca, & Escamilla, 2002; O'Hara & Pritchard, 2008). Both face-to-face and the online sessions to reinforce and extend a new program have been suggested by O'Hara and Pritchard as ways to implement ongoing professional communication. Gibbs (2003) also found through survey that most teachers would like to have both face-to-face and online professional development. The face-to-face meetings allow the program to be supported by demonstrating, instructing, overall planning and problem resolving and personalized feedback (O'Hara & Pritchard, 2008). The online interactions, such as podcasts, internet-based audio files and blogs, provide easy access to resources at the teachers' convenience, to raise relevant issues and topics, and to tailor the lessons according to individual teachers' needs (Luehmann, 2008; Kim & King, 2011; O'Hara & Pritchard, 2008; Walker et al., 2011).

Kim and King (2011) investigated three ESOL (English for Speaker of Other Languages) teacher candidates, who joined an ESOL teacher professional development program using podcasts and blogs as main instructional tools so that teachers could apply the technology in their classroom for ELLs. In this qualitative case study, the authors explored how teachers changed their beliefs and practices and the manner in which they integrated newly acquired methods from TPD while creating podcasts and blogs in accordance with their ELL case-study project. According to Kim and King (2011), the three teachers inexperienced with podcasting and blogging could master the use of them through TPD, test their approaches, improve practice, and share their projects with other teachers on the Web as podcasts.

Roessingh and Johnson (2005) summarized phases of the transition from a face-to-face to an online teaching and learning environment for their TESOL adult students, and reported their observations in order to create professional development by connecting their students in the world, as well as building strong community among them. The authors in this study concluded that online mentoring TPD could provide an effective learning environment for promoting self-reflection and community building among adult learners, as well as make it possible to overcome distance delivery. Walker et al. (2011) used mixed methods to examine TPD utilizing technology to help teachers find high-quality online learning resources and use them in developing actual activities for their students. Walker et al.'s study indicated that TPD using technology integration was related to the large increases in teacher knowledge, experience, and confidence.

There are, however; some challenges created by implementing TPD utilizing technology integration, while there are advantages in technology use for TPD, as stated above. Kabilan and Rajab (2010) investigated the benefits and problems surrounding the use of an online TPD for teachers of EFL. Kabilan and Rajab in this study found that EFL teachers had not fully used the

Internet because of barriers related to time factor, Internet access, slow speed connection, and lack of facilities, although teachers were using the Internet for teaching English in classrooms as well as for numerous activities that increased their professional development, such as searching for EFL-related information and sharing ideas with other teachers. Additionally, Shin (2008) used qualitative research to explore the use of computers by Taiwanese ELL teachers. In Shin's study, the author used a cross case analysis of four teachers to examine teachers' actions, beliefs, and the contexts they taught, and revealed that technology implementation required more time, and more teachers' technology training. This needs to be taken into account when planning TPD.

If so, when teachers acquire technology and pedagogy knowledge synchronously while engaging in TPD, they may be knowledgeable and confident with technology integration (Kramer et al, 2007; Walker et al, 2011). Those who are confident with technology may still benefit from focusing on one thing at a time, and be better to control time using technology.

It is important that online educators accept dual roles of becoming guiders of the technology and facilitators of the learning process. For TPD to be successful, it is necessary that there is an inter-relation among educators and learners. In online teaching, when the teaching is focused on the relationship between the teacher/learner and learner/knowledge, while interacting actively with learners, giving them constant feedback, animating synchronous discussions, and making learners aware of cultural differences among members of a group, the learner will be guided to learn to be more self-directed, and more responsible for his/her own leaning, Educators have stated that one TPD issue is the continued long-term support (O'Hara & Pritchard, 2008, Richardson, 2000; Walton, Baca, & Escamilla, 2002). The TPD programs also need to be more reachable, offer greater selections, and promote collaboration (Belzer 2005; Marceau, 2003). Online professional development appears to meet these requirements. The Internet has the

capability to present itself as a key component of education and has the potential to become an important source of information for the English language teachers (Kabian & Rajab, 2010). The Web-Based online components, combined with the face-to-face training, fostered collaboration and sharing of knowledge among participants while providing additional resources by trainers (O'Hara & Pritchard, 2008).

Holistic Interdisciplinary Approach

Social, personal and professional development should all be included in order to see the full effect of TPD, as mentioned in the above literature review. In particular, it is very important that teachers learn how to use a new teaching method they have learned from TPD, and become confident of their teaching. Teachers require learning how to design and approach their teaching as a part of their professional development. HIA English program, which is the early childhood teacher English education methodology for EFLs, utilizes a wide variety of children's English storybooks with rich explanation by classroom teachers in Korean, the children's primary language. Collins (2010) investigated the effects of rich explanation, baseline vocabulary, and home reading practices on English language learning preschoolers' sophisticated vocabulary learning from storybook reading. Eighty developing preschoolers were pretested in L1 (Portuguese) and L2 (English) receptive vocabulary, and were assigned to experimental or control groups. Eight books were selected and paired. Experimental participants heard books read three times over a 3-week period with rich explanations of target vocabulary. Controls heard stories read without explanations. Parents completed questionnaires about the frequency, content, and language of home reading practices. Rich explanation, initial L2 vocabulary, and frequency of home reading made significant contributions to more rapid word learning from story reading.

Huerta and Jackson (2010) argued that connecting Literacy and Science increased achievement for ELLs by giving students a purpose and a passion for sharing their thinking through authentic learning experiences and by providing them with the tools for writing through which they could risk new vocabulary, language, and thought, stimulating linguistic and cognitive development of the students. Furthermore, they indicated that students developed a deeper understanding of content they have heard and read when given time to process information through writing and speaking.

Bird (2007) used qualitative case study, and Anvari, Trainor, Woodside, and Levy (2002) and Gromko (2005) used quantitative study to investigate the function of music instruction on learning. Bird studied five families in a prekindergarten school through classroom observations, parent and teacher interviews in an effort to investigate the effect of music on English language learning in young children. Results from this study revealed that music helped young Pre-K children improve their spoken language development and social skills by offering a safe environment to practice English. In addition, Anvari, Trainor, Woodside, and Levy found by regression analyses of 100 four- and five-year-old children that music skills were bounded up with phonological awareness and language development. Gromko's data analysis showed that kindergarten children in the experiment group after 4 months of music instruction displayed significantly greater improvement of their phoneme awareness when compared to children in the control group.

To sum up, Collins (2010) claimed that the findings of his study which utilized English language story books with extensive explanation in the primary language had important implications for English vocabulary acquisition in ELL preschoolers. Huerta and Jackson (2010) showed that integration of Literacy and Science, and implementing the effective research-based

instructional strategies supported kindergarten ELL students to increase their skills in both content areas. Additionally, research has proved that music enabled young children, including ELLs, to improve language development, increase motivation to learn, and promote listening skills (Anvari, Trainor, Woodside, & Levy, 2002; Bird, 2007; Campabello, De Carlo, O'Neil, & Vacek, 2002; Gromko, 2005). Learning would be more successful, meaningful and accelerated when teachers and children enjoy singing songs together.

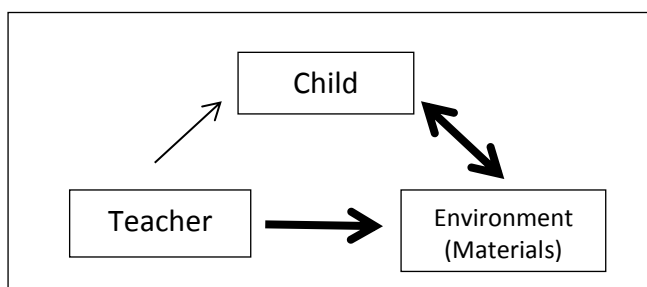
Moreover, the Montessori curriculum itself integrates all subjects as a part of a whole intellectual tradition. Harris (2008) and Kathleen (1990) emphasized the importance of an integrated curriculum similar to a Montessori curriculum, discussed the advantages of mixed-age primary classrooms, which are typical Montessori classrooms, and suggested different ways to group children of different ages and methods for successful implementation. The Montessori teacher is also trained to integrate all content areas and should set up the classroom for this. In the classroom, the child has the opportunity to see the interrelatedness of all subject areas and is also free to choose his/her work for him/herself. This method increases the child's level of understanding and ability to make connections and increases independence and confidence.

The Prepared Learning Environment in HIA

The researcher developed the HIA English curriculum grounded on the Montessori prepared learning environment that supports a child-centered and teacher-guided method promoting a child's natural development through his/her free-choice and active learning in the prepared environment (Montessori, 1946). Montessori, considered a constructionist, saw knowledge as something to be roused within children (Vaughn, 2002), and the task of the child as being the construction of the developing adult, including the construction of knowledge (Loeffler, 1992). This construction process can be seen in all areas of the child's development,

and it provides the innate motivation for all true learning (Moll, 2004). Accordingly, to support children's inner construction of the world, the most importance of a teacher is in providing a prepared learning environment to awaken the potential within the children; the power of a prepared environment should not be underestimated. (Miron, 1996; Vaughn, 2002).

Figure 1: *The Montessori Triangle*



The prepared learning environment is one of the three important elements (the Montessori triangle) in Montessori education, along with a child and a teacher (Standing, 1984). As shown in figure 1, the heavy line is a two way arrow indicating interaction between the child and the environment. In other words, the child constructs his/her own knowledge, which is significant and applicable, by self-directed learning in the prepared environment. A heavy line between a teacher and the prepared environment shows the importance of the teacher's role as a developer and maintainer of the learning environment. The teacher must organize the environment and in some cases, create materials for the class of children. A light arrow shows that the teacher still has some responsibility for teaching the child directly. While the teacher has a role as a facilitator, a guider and an assistant, the child is the ultimate decision maker in creating his/her authentic experience. Therefore, teachers need to realize that it is not their job to direct child's learning, but to respect each child's effort at independent mastery (Crain, 2011; Vaughn, 2002). What teachers should do is to watch for children's spontaneous interests, and help them to pursue them, as Crain stated. Thus, the HIA TPD program based on Montessori

Method focused on enhancing teachers' ability to be good facilitators, while incorporating English education for young children in the regular prepared environment.

To better understand the differences between Montessori and traditional schools, Lillard & Else-Quest (2006), Peng (2009), and Rodriguez (2002) utilized quantitative research methods. Lillard & Else-Quest (2006) evaluated the social and academic impact of Montessori education through analyzing students' academic and social scores of a Montessori school and other traditional elementary school education programs. As cognitive/academic measures, seven scales were administered from the Woodcock-Johnson (WJ III) Test Battery, and as social/behavioral measures, randomly chosen 53 control group and 59 Montessori (treatment) children were given five stories about social problems. As a result, Montessori students achieved higher z scores for both academic and behavioral tests: Letter-Word identification, word attack, applied problems, and social/behavioral measures.

Peng (2009) compared elementary children in Taiwan who attended Montessori pre-schools with ones who attended non-Montessori pre-schools, and the result by one-way MANOVA in this study revealed children who had received Montessori education had significantly higher scores on tests of language arts, math, and social studies.

Rodriguez (2002) employed the long-term academic impact of a public school prekindergarten Montessori bilingual program on second grade students' academic achievement as compared to a prekindergarten traditional bilingual program. Quantifiable variables used in the study were student achievement scores for second grade students as measured by the reading sections of the ITB English test and the Aprenda Spanish test. Data from 100 participants selected randomly among 450 students were analyzed using SPSS 10, and an independent t-test was conducted. The results indicated that the children who had participated in a prekindergarten

Montessori bilingual program significantly outscored the children who had participated in a traditional bilingual prekindergarten program in reading.

The Montessori method has been shown to be very successful in helping to improve the academic achievement of ELL children, and developmentally delayed children (Devich, 2000; Harris, 2004; Rodriguez, 2002), as well as the cognitive development of exceptional learners, such as children with learning disabilities and children who are gifted and talented (Centofanti, 2002; Ibeji, 2002). Particularly, Centofanti and Ibeji found that the literacy skills of children were significantly improved when Montessori language methodology was used in the classroom. The studies, as explained above, also indicated that the Montessori language program was an effective method for the early childhood education, and Peng (2009) found that the longer the child was in the Montessori program the more positive the impact on academic scores. It may be because the Montessori prepared learning environment provides variety of learning materials, and gives each student opportunities to learn based on his/her own developmental level (Kendrick, 2000). Additionally, the Montessori approach highlights the development of the whole child rather than not only focus on academic achievement. Therefore, Montessori students have a more positive sense of self-esteem (Glenn, 2003), and show higher level of inherent motivation (Rathunde & Csikszentmihalyi, 2003) than do students from traditional American schools. The Montessori pedagogy emphasizes a total curriculum that is integrated and sequential (Rodriguez, 2002). Montessori students in the prepared learning environment do their work because they are naturally motivated to do so.

Bagby (2007) identified articles published from 1996 to 2006, and Bagby and Jones (2010) examined articles published from 2007 to 2009 in non-Montessori professional periodicals that include information about Maria Montessori and/or the Montessori method of

education. There were no articles related to ELL or EFL among the 79 articles all together they reviewed in these studies. To locate other studies since 2000 related to ELL and EFL in Montessori education for the review, I conducted extensive online searches using the collection of databases available through the University of Cincinnati and American Montessori Society (AMS). I found only one study related to ELL. Consequently, school districts need to look closely at bilingual Montessori programs for limited English proficient students (Rodriguez, 2002), and longitudinal follow-up studies should be extended into upper grades (Peng, 2009), or into different Montessori schools, which can vary widely (Lillard and Else-Quest, 2006).

The Importance of Phonological Awareness

The HIA English curriculum for young children is based on the Montessori language method, as stated previously. It includes auditory/visual discrimination, vocabulary, key sounds of the English alphabet and phonemic awareness skills. Young children are sensitized to whole word perception through the auditory and visual senses, while listening to English stories and singing English songs. Phonological processing exercises with sandpaper letters in the Montessori classroom enable children to strengthen their phonemic awareness, and support them in developing the ability to analyze spoken words into component sounds and syllables (Richardson, 1997; Richardson, 2004).

Montessori (1912) mentioned that touching and looking at the sandpaper letters simultaneously fixes the image of letters more clearly through the combination of senses. Through steady mastery of the grapheme-phoneme correspondences, while working with the sandpaper letters and small objects or pictures, children are guided to the process of decoding and blending sounds. The moveable alphabet entails a box divided into components containing the lower case letters (vowels in blue and consonants in red) cut out in plastic or cardboard. The

moveable alphabet helps the children with the analysis and exploration of the language which is known to them and to reproduce words with graphic symbols (Montessori, 1965). The children develop phonological awareness in the Montessori classrooms during the preschool and kindergarten years. Many researchers indicated that phonological awareness was a significant indicator of future reading achievement (Anthony & Lonigan, 2004; Cho & McBride-Chang, 2005; Hulme et. al., 2002; McBride-Cang, Bialystok, Chong, & Li, 2004; Richardson, 2004; Shaywitz, 2003).

Hulme et. al. (2002) used a quantitative short term longitudinal study to explore the role of different phonological tasks as predictors of children's early reading skills. The authors in this study compared 5- and 6-year-old young children's performance on tasks that contain awareness of onset, rime, and initial and final phonemes. The onset is the part of the word before the vowel, and the rime is the part of the word including the vowel and what follows it: Onset-rime, s-
sunshine. The example of phonemes is: /s/ /u/ /n/ in the word "sun." Hulme et. al.'s research results found that the measures of initial and final phoneme awareness seemed to be better predictors of reading than the measures of onset and rime awareness. The data in this study also showed that onset-rime tasks correlated with verbal ability and that onset-rime were easier than phoneme tasks.

Anthony and Lonigan (2004) implemented 4 studies that included 202 5-to 6-year-old children studied longitudinally for 3 years, 123 2- to 5-year-old children, 38 4-year-old children studied longitudinally for 2 years, and 826 4- to 7-year-old children to examine the relationship of rhyme to other systems of phonological awareness. The result of their study showed that rhyme sensitivity greatly correlated with the phonological skills in older children, which influenced reading acquisition. The authors reported that phonological sensitivity affected

reading acquisition through various ways: rhyme skills helped children's reading by similarity of words and phonological skills enabled them to read by letter-sound correspondences. From the above two studies it appears that phonological sensitivity skills influenced the young children's reading. However, younger children, those under 4 years old, would require different types of phonological assessment if evaluation was needed because phoneme level tasks were too difficult.

Cho and McBride-Chang (2005) implemented 1-year longitudinal study of 91 children, native speakers of Korean, from Masan, Korea to investigate the relationship of levels of phonological awareness to word recognition in Korean and English. The children, who were around 8 years old, were tested on three tasks of phonological awareness in English, English word recognition, and Korean Hangeul recognition. The authors concluded that the phoneme level of awareness was predominantly important for English word recognition, and syllable level of awareness was significant predictor of Korean word recognition, but there was no clear pattern of levels of phonological awareness related with reading of Korean.

McBride-Chang, Bialystok, Chong, and Li (2004) investigated the impact of phonological awareness in relation to reading of Chinese and English in kindergarten and first-grade children. The results in this study indicated that the Chinese language supported syllable-level awareness in children, and English syllable awareness among native Chinese speakers was as good as English speakers, due to the syllabic characters of Chinese. The authors demonstrated from their results that phonological awareness differed strongly across cultures, as well as depended on linguistic and instructional circumstances within a culture, and also found that early reading skills in English and Chinese depended on different levels of phonological awareness.

Cheung, Chen, Lai, Wong, and Hills (2001) investigated how orthographic and spoken language experience influenced the ability to analyze the clarity of speech. The authors in this study used three groups of children to compare young pre-reading children to older, literate children from different linguistic circumstances on their phonological awareness. Their results using simple t-tests showed that orthographic and spoken language experience both impacted on the development of phonological skills. As it were, young children's early orthographic experience affected phonological awareness performance although phoneme awareness developed very slowly.

The above studies suggested that children with early reading problems may need dissimilar types of interventions to help them to learn to read better. The findings showed that the different levels of phonological awareness depended on the writing system between different languages. For Chinese or Korean children, who had their own language recognition difficulties, for example, a focus on syllable-level awareness may be crucial in learning their own language. However, for children learning to read English, the phoneme level of analysis is critical.

The HIA English curriculum supports the development of children's phonological awareness using various Montessori language materials including the sandpaper letters and the moveable alphabets. Montessori (1965) viewed graphic written language as giving children an essential tool for communication as well as a means of completing spoken language. The most effective interventions for children to improve their writing and reading is through the direct teaching of phonemic awareness (Richardson, 2004). Additionally, Shaywitz (2003) emphasized the importance of phonemic awareness by saying that reading and phonemic awareness reinforced each other: Phonemic awareness is essential for reading, and reading continually helps improve phonemic awareness still further.

CHAPTER THREE: RESEARCH METHODOLOGY

Research Questions

The qualitative research question to be answered in this study was:

1. In what ways did Teacher Professional Development using the HIA English methodology impact the early childhood teacher's English instructional practice in teaching English to young Korean children?

The quantitative research question to be answered in this study was:

2. How did Korean kindergarten children who received the HIA method perform in comparison to those who received the current method of English instruction in the areas of auditory discrimination, vocabulary acquisition, letter sound recognition, and phonemic awareness skills?

Research Design

This research study employed a pragmatic parallel (concurrent) mixed methods using triangulation strategy. After collecting and analyzing the quantitative and qualitative data separately, the results were triangulated to answer the research questions (Creswell, 2003; Onwuegbuzie & Teddlie, 2003). As Creswell (2003) stated, both the quantitative and qualitative data used in this study may support stronger methodical implications than when either is utilized in isolation.

The qualitative data included classroom observations and observations from the TPD sessions, teacher interviews and the participant teacher's lesson plans. The quantitative data using quasi-experimental design included the results of pre- and post- tests of the participant children. After analyzing each data according to appropriate critical techniques, the results for each data were compared to increase the descriptive value of the findings for the impact

of the HIA TPD on a teacher's English instructional practice and children learning in English, and the degree of difference in improvement between the treatment and control groups.

Rationale of Research Design

Mixed methods research includes both qualitative and quantitative structures in the design, data collection, and analysis for the extensive purpose of a deeper understanding (Creswell, Plano Clark, Gutmann, & Hanson, 2003; Johnson, Onwuegbuzie, & Turner, 2007; Teddlie & Tashakkori, 2010). Mixed methods can provide insights and understanding that might be missed when only a single method is used, and attain a more complete picture of participants' behavior and experience (Morse, 2003). When employing mixed methods research, philosophical assumptions that brought about the mixed methods approach should be considered (Creswell & Clark, 2007). With the regard to philosophical assumptions, however, some researchers have argued that mixed methods research was viewed as unharmonious because a post-positivist philosophical paradigm could be joined only with quantitative methods and a naturalistic worldview could be united only with qualitative methods "in terms of epistemology (how we know what we know), ontology (the nature of reality), axiology (the place of values), and methodology" (Guba & Lincoln, 1988, as cited in Hanson, Creswell, Plano Clark, Petska, & David Creswell, 2005, p 225).

On the other hand, Reichardt and Cook (1979) claimed that dissimilar philosophical viewpoints could be comparable because qualitative measures are not always subjective, and quantitative measures are not always objective. Many mixed methods researchers believe that pragmatism is the best philosophical basis of mixed methods research (Creswell, 2003; Johnson, Onwuegbuzie, & Turner, 2007; Patton, 2002; Tashakkori & Teddlie, 2003). These researchers agreed that research paradigms can remain isolated, but they also can be mixed into another

research paradigm. Johnson, Onwuegbuzie, & Turner (2007) described mixed methods research was the paradigm that follows the logic of mixed methods including the valuable logics obtained from both qualitative and quantitative research. Moreover, pragmatists focus on the research questions and purposes, provide acceptable answers to those questions, and also highlight the practical inferences of the research (Creswell, 2007).

Therefore, I have several reasons for choosing to employ a parallel (concurrent) mixed methods using triangulation strategy in this research. First, as stated earlier, some problems from the current early childhood English education in Korea have been identified. The high value of TPD in this area was urgent to support teachers to have a deep understanding in integrated early childhood English education. The descriptive design, data, and methodology in a qualitative approach might be appropriate to give a strong detail of TPD using the HIA English methodology. Additionally, a quantitative approach was adopted to see how much young children in the treatment group had improved, and to compare these children with other children in the control group. If TPD in this study would be efficient and effective, the participate early childhood classroom teacher would improve her knowledge, beliefs and practice, and at the same time, young children in her classroom would improve their English skills as well because the improvement of teacher knowledge and application of that knowledge may correlate with the improvement of young children's English skills. Secondly, the additional quantitative research in this study could support stronger implications to overcome the weaknesses in qualitative research because only one early childhood classroom teacher in the treatment group participated in TPD (Feuer, Towne, & Shavelson, 2002). In addition the literature review performed on both TPD in the early childhood English education and content integration, and Montessori language education in ELL or EFL showed that there was a lack of research studies that have employed

more than one approach. To support a solution of the present problems, the expansive explanation of mixed methods in this study may allow related educational authorities in Korea to have the crucial data that could provide the foundation for the early childhood English educational reform efforts.

Participants and Settings

The target population for this study was the early childhood Korean classroom teachers, and Korean children, ages 3 to 6 years who study and learn English as EFL. The sample of the stated targeted population for this study included 2 teachers and 42 Korean kindergartners enrolled in school D during the 2013-2014 school year.¹ The children participated in either the HIA program or the current program.

The treatment group was comprised of 21 kindergartners from one classroom and taught by one trained classroom teacher using the HIA. The control group was comprised of 21 kindergartners from another classroom. The students in the control group were taught English by a trained English teacher using the current English method as described previously.

The participant school D was located in Gwangju, the sixth largest city in South Korea. Ninety-four percent of children in this school were funded with government funds that supported low-income children during the 2013-2014 school year. All the teachers in school D were certified in early childhood education and had learned English as EFL. Their English instruction focused on English grammar, reading comprehension, college entrance, and English exam preparation during their middle and high school years, and a required two-semester English class during the freshman year in college.

¹ The Korean school year is March (of the current calendar year) to February (of the subsequent one).

Permission for children to participate in this research study was obtained from the school principal. Teachers were offered the opportunity to participate in this research study and participation was voluntary. Each teacher was informed as to what information was to be collected and used, and how it was to be used and disseminated. Parents of children involved were given consent forms requesting their child's participation in the research study. Moreover, all children whose parents agreed to allow them to participate were included in the study. The written consent forms were in both English and Korean, including purpose statement, research questions, and measurement. The written consent forms also requested information of the demographic variables of the child's gender and the length of time spent learning English.

Main Categories of the HIA Teacher Professional Development

In this study, the researcher implemented the HIA TPD, using the five main categories suggested by Desimone (2009): (a) collective participation, (b) duration, (c) content focus, (d) active learning, and (e) coherence. Desimone (2009) argued that these five classifications are very important to increase teacher knowledge and skills, and are included in the many current studies as critical components of effective professional development (PD). Accordingly, as the essential factors of the HIA TPD, they were used in this research as well.

Collective participation/ Duration. The first HIA TPD was held for 4 full days (30 hours) in Korea in December 2011. At this time, the principal of school D had attended this seminar with approximately 20 early childhood teachers. The second 60 hour HIA TPD was conducted through technology such as SKYPE video calls, blog, software, websites, and hypermedia from January to November 2012. Two kindergarten teachers participated in the previous pilot study because the principal agreed to adopt and implement the HIA method for

only the six-year old children. The third 60 hour HIA TPD started on June 2013 and ended on October 2013 using the same methods and materials as the previous TPD. A treatment classroom teacher, Ms. G (Pseudonym), who had already received 60 hour training, continued to be trained through the third HIA TPD. Therefore, Ms. G took 120 hours of HIA TPD training although data in this study were collected from the last 60 hour training.

Content focus. I developed the HIA English curriculum and adopted it as the early childhood teacher English education for EFLs. There are three main curricula for the HIA TPD: (1) language development of young children, (2) Montessori language method, and (3) the integrated English education as EFL aligned with the current Korean early childhood curriculum. Montessori language method includes auditory/visual discrimination, vocabulary, key sound activities of the English alphabet and phonemic awareness skills. The Korean early childhood curriculum as an integrated English experience included children's literature, songs/poems, and content areas such as art, music, mathematics, science and technology. Starfall English language education curriculum for ELLs was incorporated into the HIA program. This research-based curriculum using a computer software program is an efficient phonics approach including phonemic awareness practice (for more detailed information, see www.starfall.com). It motivates young children to learn English through use of imagination, and provides chances for child-directed learning vs teaching.

Active learning. The HIA TPD focuses on the teachers' social, personal, and professional development including on-going support, feedback and reflection, as well as considering teachers' individual learning characteristics and situation. Ms. G was provided information to improve English teaching instruction and content knowledge, as well as being familiar with the basic concepts of the interdisciplinary approach during last HIA TPD sessions.

Therefore, she was guided to create integrated lessons aligned with the current Korean early childhood curriculum on her own by open-ended questions: for example, what English book related to this month's theme do you plan to place for children to listen on the shelf this week? What kind of activities do you think you can create using English book you chose to connect with "zoo animals," which is this month's theme in other content areas? Ms. G actively investigated, gathered information and developed her lessons using various tools such as books and technology.

As seen in Table 2 of the Data collection section, we had 60 hour HIA TPD sessions via SKYPE video call from June to October 2013. The HIA TPD sessions often started with the discussion of questions, challenges and problems happening in the classroom as Ms. G presented and practiced the previous lessons with the children. Ms. G also presented to me her integrated lessons she created with explanation. Ms. G posted self-reflection using Google doc shared with me after analyzing her experiences of lessons presented. She also shared the pictures of English teaching materials she made for children with the detailed explanation, and/or observation notes. During this period, I observed Ms. G's classroom 15 times for 1½ hours each time through SKYPE or classroom visiting in order to design the most relevant and effective TPD curriculum, to better understand Ms. G's ability to learn/teach English, and to establish positive support. I also posted open-ended questions for the next lesson, and gave feedback to Ms. G covering how the lessons were delivered, how the students responded to the lessons, and what aspects helped or inhibited students' understanding using Google doc.

In addition to my role as a researcher, I served as a mentor, facilitator, and instructor by encouraging Ms. G to justify her own thinking and giving her opportunities for self-reflection (Hmelo-Silver, 2004). I also supported Ms. G by modeling the problem solving and self-directed

learning processes until she gained more experience with the HIA method, as well as stimulated her to solve the problems independently. A catalyst role of this kind can't be missed in supporting teacher learning.

Coherence. According to Garet, Porter, Desimone, Birman, and Yoon (2001), three methods were suggested to evaluate the coherence of TPD: (1) highlight the content area to expand teachers' prior knowledge, (2) focus on the content area associated with standards, and (3) support teachers in developing continued communication with other teachers who want to improve their knowledge and skills in similar ways. The content focus of TPD is important. As teachers improve their knowledge and skills of subject matter content and how students understand and learn, they increase their own self-confidence, which, in turn, can impact on student engagement and achievement (Desimone, 2009). Teacher collaboration through TPD can contribute to the ongoing professional communication among teachers who are addressing the same problems: discussing questions with one another builds professional learning communities and can extend understanding of the curriculum. Additionally, Garet, Porter, Desimone, Birman, and Yoon argued that on-going TPD in a school was likely to support sustained improvement in practice over time, as old teachers retire and new teachers join the teaching staff. Teachers who work together and are involved in the TPD activities have opportunities to discourse on perceptions, skills, and issues that affect learning in their school. TPD with the teachers in the same grade or subject from different schools help teachers in different school cultures share different ideas and expand their knowledge base and beliefs about their teaching and student learning.

In January 2012, I conducted a survey of teachers in school D with questionnaires, which included demographic information, the Korean instructional method they were using, and prior

professional development experiences (see Appendix A). It was found that the participating Korean early childhood teachers were familiar with the Montessori language materials because they had adopted the Montessori Method to teach young children Korean in the classroom. The activities of TPD used in the present study were consistent with the Montessori language instruction.

Another area of coherence was alignment with standards. The HIA is aligned with the beginner TOSEL (Test of the Skills in the English Language, 2010), which was established in Korea as a suitable English assessment tool for students of non-English speaking countries. TOSEL, which evaluates and internationally certifies English skills, is managed by the Educational Broadcasting System (for more detailed information, see www.tosel.org) of Korea. The HIA is also aligned with the standard of the American Montessori early childhood language arts and literature (Ages 3~6) curriculum.

The last consideration of coherence was continued communication with other teachers. During the second 60 hour HIA TPD, the HIA teachers could easily communicate, share their ideas and develop lessons because of working in the same school. The researcher could also observe that weekly meetings through the on-line network provided teachers with opportunities to increase teacher collaboration by discussing issues together, and seeking solutions to problems. Although in this study, Ms. G was the only teacher who participated in the HIA TPD, and she did not have the benefit of collaboration with other teachers who were implementing the same method, the researcher actively supported her creating and implementing her integrated lessons, which was similar to the role played by other teacher.

Data Collection Procedure

Instrumentation and Materials

The student learning assessment instrument consists of four main components: Auditory Discrimination Assessment (AD), Vocabulary Acquisition Assessment (VA), Letter Sound Recognition Assessment (LS) and Phonemic Awareness Assessment (PA). Table 1 depicts the instrument's blue print. The AD section includes 12 items including words (correct response=1), brief phrases (correct response=2) and simple complete sentences (correct response=3), with each one containing only one different "word"-the one that the image is actually depicting. The VA section is comprised of 15 items, which are 1~3 syllable English vocabulary words; these were extracted from the beginning lessons of both HIA and the current English method. The LS section is merely the identification and enunciation of 26 letters of the English alphabet. The AD section was modified from TOSEL (2010) by the researcher, and the VA and LS sections were created by the researcher.

The PA section which was modified from TOSEL and Rigby ELL Assessment Kit Benchmark Tests (2011) by the researcher, contains 20 items designed to examine a child's ability to discriminate the beginning, middle, and ending sounds of three-letter (English) words as well as one's ability to encode simple phonemes (again, three-letter (English) words). Of these 20 items, the 4 phoneme encoding and 4 phoneme blending items were scaled: incorrect response=0, 1 letter correct=1, 2 letters correct=2, 3 letters correct=3. The scale was predicated on the child's ability to discriminate each of the "combined" parts of a three-letter English word—its beginning, middle and ending sounds. As such, auditory discrimination (AD), vocabulary awareness (VA), letter-sound recognition (LS) and phoneme awareness (PA) were treated as four individual variables without subscales.

Table 1

Instrument Blue Print

Construct	Items	Time	Assessment Method	reference
Auditory Discrimination	12	6 min.	Online Computer Test	Modified from TOSEL (2010).
Vocabulary Acquisition	20	5 min.	Power-Point Presentation Test Recorder (An assessing teacher recorded each child's voice.)	Developed by the researcher.
Letter Sound Recognition	26	5 min.	Power-Point Presentation Test Recorder (An assessing teacher recorded each child's voice.)	Developed by the researcher.
Phonemic Awareness	20	10 min.	Online Computer Test Recorder (An assessing teacher recorded each child's voice for blending test.)	Modified from TOSEL (2010) and Rigby (2011).

Instrument pilot test. A pilot test of the study's instrument was conducted with 8 five-year-old Korean kindergartners enrolled in Montessori school. The researcher observed the process of these assessments via SKYPE on two different dates, when an assessing teacher, who was trained to use the instrument by the researcher, conducted the pilot test: five children completed the assessment on January 20, 2012, and three on February 27, 2012. The researcher also wrote down the scores of their tests on the assessing report, while an assessing teacher recorded them at the same time, and later made sure two reported scores were the same. Consent Form III was provided to each participating child's parent(s) to obtain authorization for the child's participation in the developed instrument's pilot test.

Three experts reviewed the instrument in effort to determine its face validity. These experts included a 20 year veteran head teacher/experienced ELL teacher Educator in the Cleveland Public School District, a school psychologist/professor/co-founder of Sage Montessori School in New Mexico, and a 25-year veteran literature teacher of OAK Institute.

The current instrument reflected the recommendations of these experts, as well as some of the observations made by the researcher during the instrument's pilot test with the eight Korean kindergarten students. These revisions included the elimination of confusing pictures and words, and the rewording of test instructions. Furthermore, the researcher ascertained that each section of the assessment should be administered individually in order to accommodate the short attention span typical of children this age.

Instrument administration. In this study being conducted during the 2013-2014 school year, the following protocol was observed. One, the assessing teacher was trained to use the instrument and administer the assessment. She had also practiced using the instrument until becoming comfortable with it.

Two, each participating kindergartner was, individually, invited to the classroom's quiet place. The assessment took place in the classroom in effort to minimize potential student participant anxiety. Three, the assessment required the use of a computer, a recorder, and a headphone set. The student completed them, while wearing the headphone set. Four, the vocabulary, letter-sound recognition, and phoneme blending assessments required the use of a recorder. These sessions were recorded; the researcher was able to review both the assessor's prompts and the student's responses during this component of the assessment and was able to further analyze the audio results from these components of this assessment instrument.

Independent and dependent variables

This study's pre-determined independent variable is classroom English instruction methodology. The identified dependent variables are the post-test scores of auditory discrimination, letter sound recognition, English language vocabulary acquisition and phonemic awareness skills to learn English as EFL.

Collection of the Qualitative Data

Qualitative data were collected from June 2013 to October 2013 during the 2013/2014 Korean school year as stated above. As Table 2 depicts, the data sources the researcher used included: (a) teacher interviews, (b) artifacts: samples of the classroom lesson plans, (c) classroom observations and observations from the TPD sessions and video clips, and (d) teacher self-reported classroom observation and performance assessment data.

Table 2

Summary of Qualitative Data Collected

Data collected	Time
Teacher interviews	3 times June, August, October, 2013
Artifacts: samples of the classroom lesson plans	23 lesson plans.
Classroom observations	15 times: 22 ½ hours (treatment classroom) 3 times: 3 hours (control group classroom)
Observations from the TPD sessions	22 times: 60 hours
Video clips	4 times: 4 hours
Teacher self-reported classroom observation	20 sheets of classroom observation reports
Performance assessment data	1 performance assessment report

Interviews. Semi-structured interviews including general open-ended questions based on the goals of this research study were implemented (for interview questions, see Appendix B). It allowed the researcher to focus an interview on the topics without pressuring participants to a specific format (Lindlof & Taylor, 2002) and to have a broader lens about the participants' interests (Mertens, 2010). In addition, the researcher adopted more informal interviewing approaches to build a positive relationship with the participants at the beginning of interview as Korean teachers traditionally are not willing to reveal their concerns or feelings in keeping with Korean customs. The participant teacher was interviewed 3 times at the beginning, middle and ending of TPD across the year through internet video calls. The researcher recorded interviews via audio technology for later transcription.

Field Notes and Observations. The researcher observed the treatment classroom 15 times and the control group classroom 3 times through SKYPE video calls or classroom visiting. Videotaping of each classroom was also implemented four times by the school principal. The classroom observation instrument the researcher utilized is found in Supplemental Appendix C. Observation is the most unprejudiced method of data collection (Desimone, 2009), and feedback from the videotapes is considered as another less biased technique. The observations of the researcher were focused on the interaction between the classroom teachers and students, and students and the English materials, including the students' use of technology and English books.

The samples of the classroom lesson plans including the pictures of teaching materials (see Appendix D), and teacher self-reported classroom observation (see Appendix C) and performance assessment data (see Appendix E) were collected. Since the researcher believes that the scores on standardized tests are merely a snapshot of a portion of the whole child's abilities on one particular day, the participating teachers in the HIA TPD are encouraged to utilize an

observational, student performance and portfolio assessment techniques. Ms. G also continued to be trained in the art of observation to assess children through constant observations, documentation and interactions through the TPD. These skills are fundamental to the Montessori Method and are incorporated in Montessori teacher training programs. After being given individualized instruction on a lesson, at child's own pace, he/she masters a skill, demonstrates the skill, then moves on to the next component of the curriculum. According to Mertens (2010), the performance assessment is a legitimate process for collecting information through systematic observation in order to make decisions about an individual, in this case skill acquisition. The performance assessment relies on the use of multiple types of assessments, not a single test or measurement device, and assessment occurs across time.

Collection of the Quantitative Data

A code sheet aligned with its Excel data file was developed to describe the data and indicate where and how it could be accessed. The EXCEL data were also imported into SPSS. The code sheet included student ID (no name, only number ID), the student's gender, age, length of time studying and learning English as well as the four sections of the instrument. The missing data was coded as "99," and was imputed by an average value as a substitute. The items with no response or the response "I don't know" was coded as "77." Boxplots was used to display the distribution of the variables and to help identify extreme points. As explained by Pearson (2010), the stems that extend from the boxes were not considered as outliers. Yet, a case identified by SPSS with either an open circle or asterisk was initially considered an outlier. Two extreme points from both treatment and control groups were examined as outliers. These outliers were replaced with the mean. Careful consideration of both extreme and missing values was exercised in effort to retain as much information as possible for the data analysis.

The pre-test was administered in June 2013, and the post-test was administered in October 2013. Upon receipt of the data sheets, they were screened for accuracy and completeness. The researcher also reviewed for errors or problems that needed to be clarified, and ensured that relevant contextual information was included. The on-line computer test data for AD and PA assessments were automatically entered into Excel data file. The VA, LS, and Phonemic blending component data were collected in hard-copy and entered by hand directly by the researcher. In order to reassure a high level of data accuracy, the researcher used a procedure called double entry, which allowed me to enter the data twice and then check each second entry against the first (Trochim, 2006). Trochim also mentioned that this double entry procedure considerably reduce entry errors. Presence check was used to ensure that no data had been missed out, and range check was then used to ensure that all data were coded in the right units.

Reliability

In order to evaluate the internal consistency of the instrument (AD, VA, LS and PA), Cronbach's alpha was calculated in addition to establish reliability. The data report the following Cronbach's alpha coefficients: .916 (pre AD), .851 (pre VA), .684 (pre LS), .717 (pre PA), .938 (post AD), .798 (post VA), .931 (post LS), and .730 (post PA). The data overall showed internal consistency for the developed instrument.

Limitations

Several limitations have been identified in this study and should be considered, with the first one being the sampling method. Given that this study used an accessible sample comprised of static groups and these groups, "classes of students," were not developed via random or equal probability, assignment, no assumption as to the groups' equivalences should be made. Furthermore, selection effects may be present as well, for the participant

teacher self-selected into the study. Therefore, it is not absolute that the differences found can be attributed to random or sampling error. Further analysis could indicate that the treatment and control groups are non-equivalent groups; thus, the generalizability of the findings would be considered. If, in fact, it is ascertained that the students were assigned to their classes in a non-random manner, internal validity could also be decreased. However, given that this study used a within-school, pre- and post-test design, some bias may have been eliminated. The data did indicate the differences between the treatment and control groups. It is assumed that the treatment was meticulously administered according to the protocol.

This study, furthermore, did not control for moderating or mediating variables, such as the child's length of learning English, gender (was recorded but not statistically controlled for), class attendance, English-proficiency of care-providers and additional significant others, level of opportunity to practice English language skills outside the classroom, or the child's interest/motivation to learn English. Additionally, the effectiveness of the SKYPE-predicated TPD, facilitated by the researcher for the overall quality or effectiveness of instruction is dependent on individual teacher variables which were outside the scope of the resent study and not measured.

CHAPTER FOUR: FINDINGS AND DATA ANALYSIS

Analysis and Results of the Qualitative Data

Teacher interviews, transcripts of TPD sessions, classroom lesson plans, performance assessment data, and classroom observations from me and Ms. G were inductively analyzed to identify the effects of TPD on teacher and student learning when integrating English education in a kindergarten classroom.

The systematic coding process provided by Tesch (1990) was utilized to analyze the data in this study. As described by Tesch, the researcher made a list of topics after thoughtful examination of all data as it was collected, formed groupings of the similar topics, and then recoded them in the four themes: (1) the importance of collaborative working, (2) the change in teacher's knowledge, (3) the needs of the bilingual classroom teacher, and (4) the role of the early childhood classroom teacher. To produce themes carefully from data itself without any preceding expectations of what themes would emerge, I scanned the data sources for significant statement related to the research questions. I checked the frequency of the similar comments and questions: How often did Ms. G mention a particular type of comment? How many times did Ms. G and I discuss the same problems? I also inspected the distribution of phenomena to discover negative outcomes that needed to be corrected or needed more emphasis or re-teaching. Analyzing, dividing, labeling, comparing, and combining into larger descriptive categories were continued until I gathered the four main themes as described above. The four themes above contained similar frequency of occurrence when the data from teacher interviews, transcripts of TPD sessions, and classroom observations were examined. The data appeared to be intertwined into each other, respectively. Most of Ms. G's written lesson plans showed brief details of Google shared documents, which Ms. G and I created as collaborative work during TPD sessions

and/or other times when needed. The transcripts of TPD sessions included the evidence of Goodge shared documents. Her lesson plans were not descriptive enough to reveal how she introduced her lessons to children in her classroom even though it was obviously demonstrated that she created English materials related to the content areas through observation notes. For these reasons, Ms. G's lesson plans were not separately discussed in the following findings. In addition, the performance assessments Ms. G carried out did not encompass data for all of these themes, but gave an indication of the role of the early childhood classroom teacher.

As Buck, Mast, Ehlers and Franklin (2005) recommended, to establish face validity in this study, the data such as transcripts and the written report were shared with a participating school principal, who joined the previous HIA teacher professional development to make sure that the participating teachers' verbal and written expressions were accurately interpreted. In addition, as the HIA teacher continued to be guided by feedback and modification according to their own situation, classroom environment and school climate, not by following the HIA planned sequence, as stated above, construct validity could be fortified (Buck et al., 2005).

Findings

The Importance of Collaborative Working (Social development). As mentioned in the review of this study, social development was one of three main structures in the HIA TPD. Social development of teachers includes both joining a teacher development program and collaborative working with other teachers to rebuild the socially agreed knowledge about being a teacher (Bell & Gilbert, 1996).

The participating teacher (Ms. G), who joined in the second 60 hour session in the HIA TPD to implement English education in her classroom began this study entering her 8th year of

teaching young children. In her first interview of the previous HIA TPD, Ms. G revealed her negative feelings about implementing English education because she was not confident about herself, and doubted that we could learn from each other. Ms. G reported; however, she became more confident as she presented directly to children more and more after practicing with a mentor and/or by herself. She also stated that she was encouraged by children when she found children were interested in learning English and much more actively involved in working with English materials on the regular basis as provided rich English materials on the shelf in the classroom (see Appendix H).

Ms. G said, “Children seem to enjoy learning English by their own choice. I can often observe them to be busy working using English materials, as well as computers. I am glad to see...and several parents told me that their children often sing English songs they never heard before at home. This encouraged me to work harder.” (Notes from the HIA TPD sessions, July 2013).

Ms. G described, “I feel children have unlimited natural potential for learning. I don’t think I did much for them...but I am so surprised...children memorized all the names of animals...memorized much faster than me after listening to the book several times.” (Notes from the HIA TPD sessions, August, 2013).

She also indicated that it was very helpful to practice with a former co-teacher before introducing new songs or lessons to children, and to share our new ideas and children’s progress using text messages or emails (Interview 1, June 2013). Ms. G stated that she agreed to take part in the HIA TPD, working with a mentor, and to implementing the HIA program only in her classroom at her school hoping all the teachers in her school will join together soon. (Interview 1, June 2013). Ms. G’s preliminary feeling was considered as important facts to understand Ms. G’s clear experience from TPD in this study. In the Interviews during her previous HIA TPD (the second HIA TPD), Ms. G stated as follows:

“I am not sure how much I can improve to teach children English, and how we can learn teaching English from each other when we all are ELLs (English as

Second Language learners). I am a little afraid because I have not practiced English for a long time, but I am trying...”

(Interview 1 of the second 60 hour HIA TPD, January 2012).

“Using proper ways, children are working independently or friends with English materials. I feel I am getting better to present new lessons to children. I am still concerned with my pronunciation, though...I am making more effort improving my English skills and pronunciation for myself.”

(Interview 2 of the second 60 hour HIA TPD, May 2012).

In the previous HIA TPD, Ms. G often expressed concerns of her own English skills as described above. On the other hand, in this study, she occasionally conveyed the aspects of collaborative working. Ms. G displayed the desire to improve and was open to new ideas over time during TPD sessions. She indicated that the sustained support by TPD sessions and open-ended questions using Google shared drive kept her motivated and confident.

Ms. G: “At this point, I am somewhat lonely and worried because I have to implement this program by myself at school...but...I miss my co-teacher working together like last time, though...I do know what I should do for children’s English learning”

(Interview 1, June 2013).

Ms. G: “Your essential questions made me think to find answers: what is your next lesson? How do you feel about your lessons you gave last time? How did your children respond? If you want to change your lesson, what will you change in your next lesson...etc?”

(Interview 2, August 2013).

Ms. G: “Learning and teaching are like pieces of puzzles. I was afraid of saying English words because I didn’t want to make mistakes...and to reveal my strong accent. However, one word at a time, one sentence at a time, I practiced with you, then by myself, and then with children in the classroom. Suddenly I found myself to feel much more confident as seeing the completed picture of the puzzle.

(Interview 3, October 2013).

However, we also had challenge moments that required patient, encouragement, understanding, and mutual support. Ms. G was incredibly busy like other early childhood teachers in Korea. She works for more than 9 hours daily at school, has periodic extra duty to ride a school bus with the children in order to look after the children in the bus before and after

school and prepare for countless special events, including 2 weeks of parent conferences after school (Teachers in this school don't have professional days.). Accordingly, we sometimes had to change our regular TPD session time because of the unexpected events, such as doctor's appointments, sickness or the changed bus duty schedule, and urgent parent and teacher conferences (Notes from the HIA TPD sessions, June ~ October 2013).

Therefore, TPD required being flexible so that Ms. G could continue to practice for her teaching and learning without being frustrated. It was necessary to give Ms. G constant encouragement to be engaged in activities of TPD even though the planned lessons were delivered on the other times due to these changes. On the other hand, TPD demanded continuous reminders of the goals of our commitment as well because the frequent unforeseen happenings could interfere with our accomplishment. To perform the multi-roles as a researcher, a mentor, a facilitator of TPD, I had to have intentional active listening, positive attitude, and collaborative mind to impact the growth of her self-confidence and pride in her accomplishments.

The Change in Teacher's Knowledge (Personal/Professional Development).

Teachers' personal development was another important structure we were focusing in the HIA TPD. As the HIA teacher professional development continued, the participating teacher personally developed further by noticing the problems, and seeing the value of their involvement in English education.

Ms. G said, "We used to follow our planned curriculum while the visiting English teacher followed her own English program. For example, we went to children's transportation park as a field trip after discussing and doing some activities related to "transportation" in the classroom, but the English teacher introduced fruits and vegetables to children on that week. Furthermore, at that time we even didn't realize we had a problem..." (Notes from the HIA TPD sessions, July 2013).

Ms. G: "This week children are working with the 7 continents in the classroom, and from next week, we will start studying about Europe. I think I can make an animal racing game, so that children can learn the initial sound of English words using Europe animal objects."

Researcher: “Oh, I see what you mean. I think it is going to be a fun game. Do you know which animals predominantly live in Europe?”

Ms. G: “No, not really now, but I will find out about them.”

Researcher: “I know a few Europe animals: scorpion, walrus, ...mmm, Let me know what you found. Would you mind posting your lesson plan on a shared Google Doc once you are ready by next Monday?”

(Notes from the HIA TPD sessions, October 2013).

Through notes from the HIA TPD sessions, it was found that Ms. G had noticed the current English education curriculum was not connected with the children’s learning process. It also became apparent that her increasing knowledge resulted in her practice of integrating English lessons into the total curriculum.

There was more evidence to confirm the improvement of Ms. G’s English teaching method through the researcher’s classroom observation. She even created lots of English materials related to the content areas, as well as adopted the lessons she had practiced with her former co-teacher in the second 60 hour HIA TPD.

Child 1 was using moveable alphabets to write three letter words from the big box on the shelf. On his rug, there were blue (represents vowels) and red (represents consonants) moveable alphabets showing sun, bon (it should be ‘bun’ in a right word.), gum, and bug. Child 2 and child 3 were using a computer program in English, which was a great tool and very helpful in learning English. Child 4 was listening to the English story using audio CD player, while looking at the picture book called, *Polar Bear, Polar Bear, What Do You Hear?* By Bill Martin Jr. and Eric Carle. Child 5 took a basket from the shelf, and put it on the rug. He laid out a book called, *Good Night, Gorilla* by Peggy Rathmann on the left top of his rug on the floor, and then laid out an elephant object under the book saying, “Good Night, Elephant,” and chose another small object to do the same way until making a zoo (Notes form observations, July and August 2013). Ms. G

sat with the large group of children in a circle, and started to sing a ‘Lady Bug, Lady Bug’ song with them. At this time, all the children had one stick with a picture showing a part of body, each child held up his/her stick matching with a song. (Notes from observations, September 2013).

The notes of observations confirmed the improvement of teachers’ practice, as well as children’s active engagement and improvement step by step over time. Moreover, Ms. G claimed that they became energetic and excited inside and outside of classroom by watching world news and foreign movies, and sharing and practicing with the children (Notes from the HIA TPD sessions, October 2013).

The Needs of the Bilingual Classroom Teacher (Professional development).

Professional development was the third main focus in the HIA TPD. Social, personal, and professional development in TPD is linked together and cannot exit apart (Bell and Gilbert, 1996). Ms. G has improved her own knowledge, and actively practiced a new teaching method while working with a mentor and encouraging each other.

Ms. G and her children were standing hand in hand making a big circle in the classroom. Ms. G explained in Korean, “I will show you what ‘in and out’ mean.” She went inside the circle, and said “This is ‘in’.” She said “This is ‘out’, walking out of the circle. Everyone practiced ‘in and out’ by following Ms. G’s direction. After a few practice, Ms. G told them how to play this game along with the song called “*Walk around the Circle.*” (Notes from classroom observations, June 2013)

Ms. G said, “This is a pencil (showing a pencil). But in Korean, we just say ‘Yigeot-eun yeonpil-ipnida (written in English).’ We don’t add ‘a’ in front of ‘pencil,’ but in English, we use it. Now I will read this book called “*Brown Book,*” to you. Listen carefully, and find out how many times I am saying ‘a’.” (Notes from classroom observations, July 2013)

Ms. G said, “Can you hear the repetition of the same sounds in ‘parang’ and ‘norang’? (‘Parang’ and ‘norang’ in Korean mean blue and yellow.) Yes, we can hear ‘rang’ at the end of these words. This is called ‘Rhyme,’ and there are the same rhyming words in English.” After that, Ms. G continued to give her rhyming lesson to a small group of children while laying out objects (triangle, rectangle, cat, bat...) on the rug in front of them. (Notes from classroom observations, September 2013)

Ms. G showed a large group of children a cover page of a picture book called “*Freight Train*” by Donald Crews, and then asked them in Korean what they were seeing. Child 1 said in Korean, “A train is moving.” Child 2 said in Korean, “A black train is moving.” Ms. G continued to show the pictures of each page of this book, while asking some questions. She came back to the front, and then started to read it in English. (Notes from classroom observations, October 2013)

Through another notes from classroom observations, it was found that visiting Korean English teachers or English native teachers could not imitate Ms. G’s lessons that were delivered to her classroom children without knowing how to approach the young children and speaking their native language. Ms. G, who was able to communicate with children in their native language, could help them understand the meaning of rhyme, and help to enhance their self-concept by doing actions with them that provide opportunities for involvement and success. Thereby, as stated in the review of this study, Collin’s research (2010), which noted the significant influence to more rapid word learning from English story reading through the effects of rich explanation in children’s native languages, was approved in this study.

The Role of the Early Childhood Classroom Teacher (Professional development).

Ms. G recognized the important roles of a classroom teacher, which I stated in the review of this study, as a facilitator, a classroom organizer for the prepared learning environment, and an observer in the classroom (Notes from classroom observations & video tapes, July ~ October 2013). First, the shelf for English education in the classroom was well organized with the rich materials in order to meet young children’s needs. Most of the other materials had a control of error for children to check their own work. For example, there are three sets of cards for the visual discrimination activity. Children lay out the picture cards first, and match name cards under them, and then check with the control cards including both pictures and names. By

contrast, there were not any English materials including Montessori English language materials, English books with CDs, or English computer programs in the control group classroom.

Second, Ms. G was able to apply different teaching strategies according to children's needs. The children were free to choose their own materials and worked on activities at their own pace. She presented a new English lesson to the small group of children or worked with an individual child. I could observe some children focusing on three letter decoding (sounding out) while others focusing on the sounds of English alphabets.

Third, Ms. G carried out a role of an observer in the classroom. She introduced 'o' vowel sound material to a child, and stepped back to observe him. She also watched children who were working together right after presenting a letter racing game to three children. In the interview 3 on October 2013, Ms. G said, "I keep forgetting children have natural desire to learn when provided the proper support. I am glad to watch them to use English sentences they learned spontaneously and freely. They are learning faster than I thought."

In the previous HIA TPD, Ms. G stated that she increased her observation skills, and also realized even more how important the observation was, while following the directions of TPD. Therefore, I expected her to show more a detailed observation journal and record keeping for each child. However, there were only a few evidences for observation journal and record keeping related to English teaching. I told Ms. G that observation is watching to learn, and can help her go beyond her expectations or assumption to see the many dimensions of a child that are revealed over time. I also reminded her of watching children carefully and objectively with taking notes when observing. Ms. G responded that she kept forgetting because of her busy schedule of the day although she knew she would learn about strengths/weaknesses of individual

children and the classroom community by observation journal. (Notes from classroom observations, October 2013)

Analysis and Results of the Quantitative Data

In this study, the one-way Analyses of Covariance (ANCOVA) was conducted using the pre-test scores as a covariate to analyze the statistical significance of English teaching methodology on post-test scores of Korean kindergarten children. The independent variables (method) were analyzed for effect on the dependent variables (AD, VA, LS and PA). I used the pre-test scores as a covariate to examine the difference between treatment and control groups on the post-test after adjusting for differences on the pre-test so that I could determine if the groups still had different achievement scores.

Prior to performing the ANCOVA analysis, descriptive analyses were conducted as shown in Table 3. The pre-and post-test scores were examined for extreme values in both the treatment and control groups.

Table 3

Descriptive Statistics: Mean and Standard Deviations (in Parentheses) for AD, VA, LS, and PA

Measure	Group1 (n=21)		Group2 (n=21)	
	M(SD)	Range	M(SD)	Range
Pre AD	10.24(4.73)	17.00	8.57(3.94)	16.00
Post AD	12.24(3.45)	12.00	11.45(3.83)	14.00
Pre VA	2.20(1.50)	5.00	2.43(1.94)	7.00
Post VA	6.24(2.59)	10.00	3.35(2.06)	8.00
Pre LS	2.90(3.11)	14.00	3.24(2.84)	12.00
Post LS	15.81(5.10)	20.00	3.65(3.60)	14.00
Pre PA	6.90(3.66)	15.00	10.38(4.61)	19.00
Post PA	20.95(6.88)	24.00	10.30(5.42)	20.00

Note. Group1 = Treatment Group, Group 2 = Control Group.

As shown in Table 3, the means (with standard deviations) of the pre-test scores of the treatment and control groups for AD were 10.24 (4.73) and 8.57 (3.94), respectively. The means (with standard deviations) of the post-test scores of the treatment and control groups for AD were 12.24 (3.45) and 11.45 (3.83), respectively. The post-test mean scores for AD in both groups were considerably increased. To see the differences between treatment and control groups in AD post-test scores using AD pre-test scores as a covariate, an ANCOVA was performed as shown in Table 4.

Table 4

Tests of Between-Subjects Effects for Auditory Discrimination (AD)

Variable	SS	df	MS	F	Sig.	η^2
Intercept	721.271	1	721.271	55.869	.000	.589
Pre AD	27.269	1	27.269	2.112	.154	.051
Group	2.254	1	2.254	.175	.678	.004
Error	503.491	39	12.910			
Total	6429.103	42				

Note. SS = Sum of Squares; MS = Mean Square; η^2 = Partial Eta Squared.

As shown in Table 4, there were no statistically significant differences between the treatment and control groups on the post-test scores for AD after controlling for the pre-test scores, $F(1, 40) = .175$, $\eta^2 = .004$, $p = .678$. Thus, there was no evidence to say that kindergarten children taught English by a trained classroom teacher using HIA English program demonstrated greater English AD gains than those taught by a trained English teacher using the current method. However, children of both the treatment and control groups improved their AD skills, and the difference in mean gain scores between the treatment and control groups was very small (See Table 3).

As shown in Table 5, when analyzing individual items of AD post-test scores, number 1 (word) and number 8 (phase) were the items that children had the most right choices, and number 12 (sentence) was the item that children had the second most right choices. Although there were words, phases, and sentences used for AD assessment in this study, each set of 12 items contained only one different “word” that the image was depicting. These facts did not seem to affect children’s test scores. Rather, the results showed that the degree of difficulty was most likely to affect children’s test scores. Therefore, the measurement utilized for evaluating AD skills did appear to be effective.

Table 5

Summary of Item Analysis of AD post-tests

Number of Assessment	Number of Students answering correctly (N=42)	Answers
1	39	elephant
2	29	peach
3	30	flower
4	10	shorts
5	30	airplane
6	12	square
7	16	running squirrel
8	39	snowy day
9	10	a basketball player
10	15	Susan is singing.
11	25	Peter is sad.
12	31	The strawberries are in the basket.

As shown in Table 3, the means (with standard deviations) of the pre-test scores of the treatment and control groups for VA were 2.20 (1.50) and 2.43 (1.94), respectively. The means (with standard deviations) of the post-test scores of the treatment and control groups for VA were 6.24 (2.59) and 3.35 (2.06), respectively. The post-test mean score for VA of the treatment group was more greatly increased than that of the control group, although both

were increased. To see the differences between treatment and control groups in VA post-test scores using VA pre-test scores as a covariate, an ANCOVA was performed as shown in

Table 6.

Table 6

Tests of Between-Subjects Effects for Vocabulary Acquisition (VA)

Variable	SS	df	MS	F	Sig.	η^2
Intercept	85.523	1	85.523	36.487	.000	.483
Pre AD	126.945	1	126.945	54.159	.000	.581
Group	101.934	1	101.934	43.488	.000*	.527
Error	91.414	39	2.344			
Total	1271.223	42				

Note. SS = Sum of Squares; MS = Mean Square; η^2 = Partial Eta Squared, * $p < .05$.

As shown in Table 6, there was a statistically significant effect of the HIA English program for young children on the post-test scores for VA after controlling for the pre-test scores for VA, $F(1, 40) = 43.488$, $\eta^2 = .527$, $p = .000$. Therefore, kindergarten children taught English by a trained classroom teacher using HIA demonstrated greater English vocabulary acquisition gains than those taught by a trained English teacher using the current method.

As shown in Table 3, the means (with standard deviations) of the pre-test scores of the treatment and control groups for LS were 2.90 (3.11) and 3.24 (2.84), respectively. The means (with standard deviations) of the post-test scores of the treatment and control groups for LS were 15.81 (5.10) and 3.65 (3.60), respectively. The post-test mean score for LS of the treatment group was more greatly increased than that of the control group, although both were increased. To see the differences between treatment and control groups in LS post-test scores using LS pre-test scores as a covariate, an ANCOVA was performed as shown in Table 7.

Table 7

The Pre- and Post-test Mean Scores of treatment and control groups for LS

Variable	SS	df	MS	F	Sig.	η^2
Intercept	1110.175	1	1110.175	73.959	.000	.655
Pre AD	192.369	1	192.369	12.815	.001	.247
Group	1611.176	1	1611.176	107.335	.000*	.733
Error	585.419	39	15.011			
Total	6306.323	42				

Note. SS = Sum of Squares; MS = Mean Square; η^2 = Partial Eta Squared, * $p < .05$.

As shown in Table 7, there was a statistically significant effect of the HIA English program for young children on the post-test scores for LS after controlling for the pre-test scores for LS, $F(1, 40) = 107.335$, $\eta^2 = .733$, $p = .000$. Therefore, kindergarten children taught English by a trained classroom teacher using HIA demonstrated greater English letter sound recognition gains than those taught by a trained English teacher using the current method.

As shown in Table 3, the means (with standard deviations) of the pre-test scores of the treatment and control groups for PA were 6.90 (3.66) and 10.38 (4.61), respectively. The means (with standard deviations) of the post-test scores of the treatment and control groups for PA were 20.95 (6.88) and 10.30 (5.42), respectively. The post-test mean score for PA of the treatment group was considerably increased, while that of the control group was slightly decreased. To see the differences between treatment and control groups in PA post-test scores using PA pre-test scores as a covariate, an ANCOVA was performed as shown in Table 8.

Table 8

Tests of Between-Subjects Effects for the Phonemic Awareness (PA)

Variable	SS	df	MS	F	Sig.	η^2
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Intercept	994.494	1	994.494	28.253	.000	.420
Pre PA	162.388	1	162.388	4.613	.038	.106
Group	1350.377	1	1350.377	38.364	.000*	.496
Error	1372.764	39	35.199			
Total	12982.090	42				

Note. SS = Sum of Squares; MS = Mean Square; η^2 = Partial Eta Squared, * $p < .05$.

As shown in Table 8, there was a statistically significant effect of the HIA English program for young children on the post-test scores for PA after controlling for the pre-test scores for PA, $F(1, 40) = 38.364$, $\eta^2 = .496$, $p = .000$. Therefore, kindergarten children taught English by a trained classroom teacher using HIA demonstrated greater English PA gains than those taught by a trained English teacher using the current method.

Paired-sample t-tests were conducted to see a significant increase in scores between the pre- and post-test scores of both the treatment and control groups as well as the four sub-categories (AD, VA, LS and PA). I compared the groups on pre-test only and post-test only, and compared post-test with pre-test separately for the two groups. The pre-post differences were significant for the both groups. Increase in achievement was measured by gain scores, which were calculated by subtracting pre-test score from post-test score. The difference in mean gain scores between the treatment and control groups was -0.88 (AD), 3.12 (VA), 12.50 (LS), and 14.13 (PA). Therefore, I conclude the increase of the treatment group (group 1) was generally greater than the control group (group 2) except in the case of the auditory discrimination (AD), which showed a small difference between two groups.

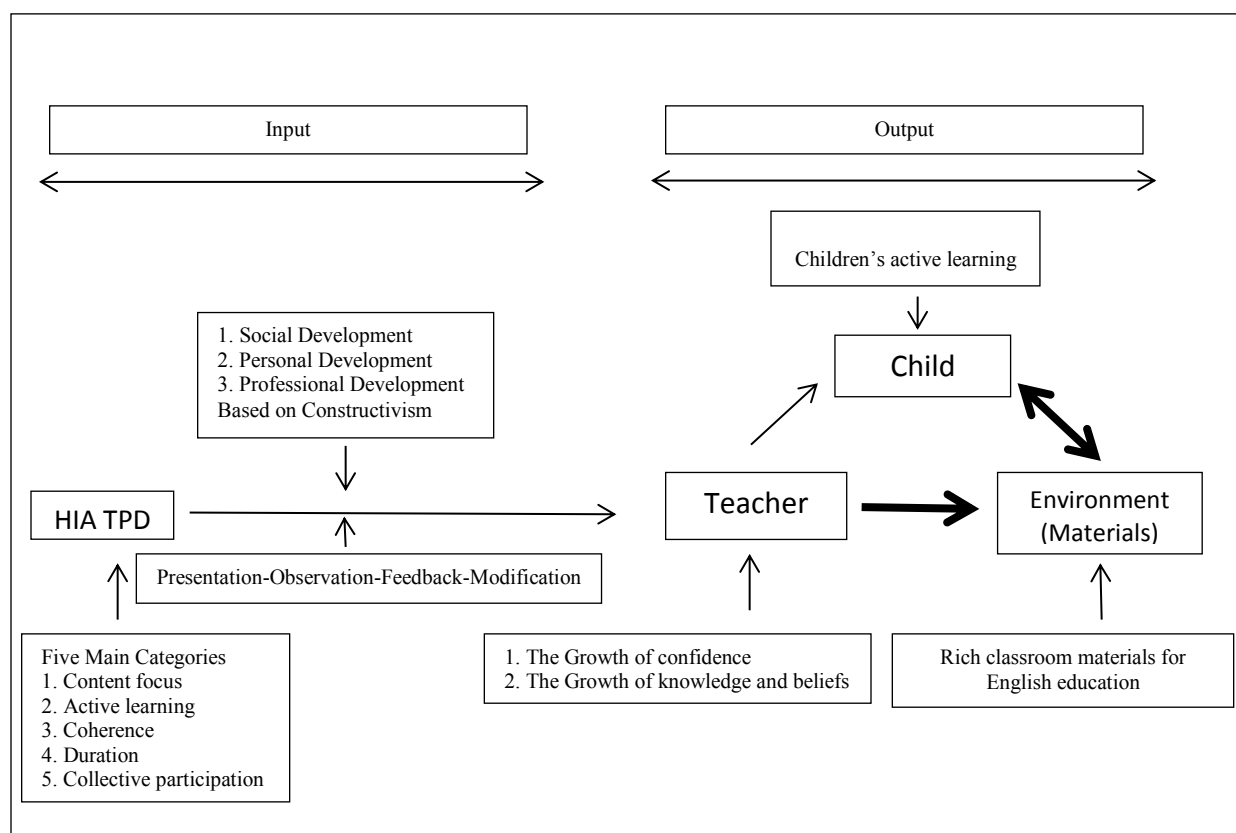
Summary of Results

During the HIA TPD in this study, as shown in Figure 2, the researcher focused on promoting the teacher's social, personal, and professional development. Constructivism was the psychological foundation of this research in an effort to support the early childhood teacher in

conducting an HIA English program as EFL in her classroom. The HIA TPD utilized five main categories: content focus, active learning, coherence, duration, and collective participation. The results in this study showed that the HIA TPD intervention generated growth of the participating teacher's confidence, and positive change of her knowledge and skills, which improved the learning environment by providing the rich English materials and a wide range of experiences for using English: these factors ultimately impacted the young children's learning of English, especially in the area of VA, LS, and PA.

Figure 2

The Input and Output of the HIA TPD



CHAPTER FIVE: DISCUSSION, IMPLICATIONS, AND CONCLUSIONS

Discussion

Given that teaching and learning English have been long-standing major concerns for Koreans, it is essential that Korea adopt effective and efficient means of teaching English to its populace. Because of the importance of English language acquisition to the Koreans, adoption of an English language program should, ideally, be at the national level. In previous studies, many Korean researchers have stated that the need for a systematic TPD program for the early childhood English education in Korea was urgent (An, 2010; Cheon et al, 2002; Kang, 2009; M. Lee, 2005; Park, 2003). They also argued that young children would increase their interest and motivation in learning English through integrated English education which would include the content areas by their classroom teachers (Choi, 2009; H. Lee, 2010; Shin, 2008). The reality is that there have been an insufficient number of empirical studies of early childhood TPD which included English teaching methodology (Cho & Lee, 2009, Y. Lee, 2012; Ma, 2007). In response to that documented need, the TPD program utilizing HIA had been designed and tested to determine its impact on early childhood classroom teachers' pedagogical methodology and English acquisition by young children (ages 3~6) in Korea.

Many researchers argued that phonological awareness of young children was an important indicator of future reading achievement (Anthony & Lonigan, 2004; Cho & McBride-Chang, 2005; Hulme et. al., 2002; McBride-Cang, Bialystok, Chong, & Li, 2004; Richardson, 2004; Shaywitz, 2003). The researcher investigated how two groups of Korean kindergarten children who received the HIA method or the current method of English instruction conducted in the areas of AD, VA, LS, and PA skills changed over time. The one-way ANCOVA was performed using the pre-test scores as a covariate to analyze the statistical significance of

English teaching methodology on the post-test scores of Korean kindergarten children. The results of this study showed that there was a significant effect of the HIA methodology on VA, LS and PA skills development after controlling for the pre-test scores, but not on AD.

Answering the Study Questions

To answer the study questions, a pragmatic parallel (concurrent) mixed methods using triangulation strategy was employed. As mentioned earlier, the guiding question of this study was: How does the early childhood teacher practice her learning and teaching with guidance from a mentor using the HIA English program to enhance young Korean children's learning of English both inside and outside her classroom?

Answering for Question One. The first research question of this study was: In what ways did TPD using the HIA English methodology impact the early childhood teacher's English instructional practice in teaching English to young Korean children? In accordance with the most current recommendations for effective professional development practice, social, personal, and professional growth opportunities, and knowledge based instruction were applied to the HIA TPD as its fundamental framework. This theoretical foundation of learning is called constructivism was the psychological underpinning to support the participant teacher's growth of social, personal, and professional aspects during the HIA TPD.

Findings of this study clearly revealed that the HIA TPD program could serve as a means of effective TPD with positive impact on the growth of teachers' English instructional practice and Korean young children's English learning as a foreign language. In short, the major results obtained in this study were as follows:

First, the participating teacher's social relationship with a mentor nurtured through the program impacted the growth of her self-confidence through collaborative work. We had the

opportunity to discuss skills, problems, experiences, and children's needs, as well as to share the common English curriculum materials. Many educators found in their studies that building professional learning groups through TPD enabled teachers to obtain a wider range of ideas and were more likely to apply new methods learned from TPD when working with the students (Barnes, 2006; Belzer, 2005; Meskill, 2005). The researcher also found that establishing a strong connection with Ms. G was very important in order to practice a new method. When I observed her to be frustrated because of her busy schedule, through continued conversation and discussion, we were able to minimize stress and classroom disruption. When children in her classroom were observed to use English material in a wrong way or not to choose important materials, Ms. G and I discussed ways to solve the problems using SKYPE, Google drive or texting. Sometimes we had to create new lessons to motivate children to use English materials after observing the classroom interactions. Ms. G also had chances to watch video clips I created for the English lessons to remind her of the purpose of certain activities. Collaborative working between Ms. G and a mentor of TPD was effective.

Second, the participating teacher's Montessori background and interest in an integrated English education program aligned with the current Korean early childhood curriculum had a strong influence on her personal growth. Her improvement in content knowledge also contributed to her personal development and self-evaluation of being an effective teacher.

H. Lee's study (2010) revealed that as English teachers for young children, the early childhood teachers were most qualified because they understood the development stages of young children and the current Korean early childhood curriculum, and had appropriate teaching skills. However, the early childhood teachers would have to improve their proficiency in English for maximum effectiveness. In the present study, Ms. G could use her strong teaching skills to

practice integrating the new English curriculum based on Montessori language method, with which she was already familiar, while teaching children Korean in her classroom. The results from this research showed Ms. G improved her teaching skills of English teaching mythology, as well as personal development of English pronunciation and English proficiency. When teachers are more knowledgeable and well prepared for teaching including ELLs and EFLs through TPD, they will be more confident so that they can be more motivated and effective teachers in the classroom.

Third, the participating teacher has shown better understanding of her multiple responsibilities as an important facilitator of both children's learning and that of other professionals, as a constructor of the prepared learning environment, and as the observer of what the children were learning as they were pursuing their own individual active learning. In the HIA TPD model, the participating teacher's active learning included practicing lessons with a mentor and obtaining feedback from the researcher (a mentor) after the mentor's observations of the classroom and videotaped lessons.

By giving Ms. G the opportunities to watch her own classroom performance using taped videos, she could assess both herself and the children's learning, an outcome of teacher utilization of video feedback which Belzer (2005) mentioned in her study. Ms. G also realized that the well prepared learning environment promoted children's learning. For example, she observed children learning names of various parts of trains, while listening to stories about transportation using CD player, or using a three parts of cards of train she developed (one set for pictures only, another set for labels only, and the last set for pictures with labels). Ms. G maintained a well-equipped classroom so that children could choose books, moveable alphabets

with objects, sandpaper letters with the picture cards, a computer program, and etc. at their own pace and according to their individual interest.

In addition, Ms. G broadened the range of considerations of the total school environment and cultural differences, as well as the linguistic differences between English and Korean, as she planned classroom activities. This broader perspective also further enhanced her professional development. Ms. G's English lessons presented to children included discussions of the differences between the English and Korean languages as well as the differences between Asian and Western cultures, such as greetings at the grace and courtesy education time, or table manners at lunch time, or whenever she had an opportunity within the context of the total curriculum.

The research outcomes of the present study indicated that it was possible for the early childhood teacher, Ms. G to deliver a comprehensive and effective English program as EFL, Which was integrated into the Montessori curriculum and was in full compliance with the current Korean early childhood education curriculum and standards.

It is also clear that the teacher's social, personal, and professional development positively impacted which, in turn, enhanced her knowledge and skills, and finally resulted changes in teaching practices and in improved student learning of English.

Answering of Question Two. The second research question of this study was: How did Korean kindergarten children who received the HIA method perform in comparison to those who received the current method of English instruction in the areas of auditory discrimination, vocabulary acquisition, letter sound recognition, and phonemic awareness skills?

Overall, kindergarten children taught English by a trained classroom teacher using the HIA English program demonstrated greater English language gains than those taught by a trained

English teacher using the current method in the areas of VA, LS, and PA skills. However, in the area of AD, kindergarten children in both groups increased their scores at the similar rate although the difference was small. The result of this study showed that there were a statistically significant effect in three areas; VA, LS, and PA, when judging by this result.

Accordingly, as shown in Figure 2, The HIA TPD in this study promoted the teacher's social, personal, and professional development based on constructivism, while the HIA TPD utilized five main categories: content focus, active learning, coherence, duration, and collective participation. The outcome of the HIA TPD intervention yielded growth of the participating teacher's confidence, and positive change of her knowledge and skills, which improved the learning environment by providing the rich English materials and a wide range of experiences for using English: these factors ultimately impacted the young children's learning of English, especially in the area of VA, LS, and PA.

Implications

This empirical mixed method research was implemented in a real-world educational environment in a Montessori kindergarten in Korea and employed TPD with one typical kindergarten teacher who taught English to her students by integrating it within the prescribed curriculum of the government. For further study, a case study including all the teachers who are teaching young children (Ages 3~6) in one school or different schools or different grade levels is suggested.

This research could provide the rationale for Korea's educational leadership to replicate the research using a larger group of teachers and children over a wider age range. The results, when replicated, could provide a model for reform efforts pertaining to the teaching and learning of English within kindergartens and elementary schools. As a result of her participation in the

research, the HIA educated teacher, Ms. G, can be a leader of other teachers at her school in implementing the HIA English program through TPD, and then all the teachers of the participating school may be leaders in the movement for more access to integrated English language instruction for all Korean children. As the teachers are more proficient, the school-aged children will have more access to highly effective English language learning and thus be more prepared to compete in the global marketplace as adults.

In addition, as both the skills of teaching and learning English as EFL cannot be acquired in a short period of time, it is definitely critical for teachers to have the sustained support of all levels of school administration when a HIA TPD program is instituted. Because the implementation of a comprehensive English learning program involves the entire school and every effort should be made to include faculty, supervisors and parents for all grades and disciplines in the planning and implementation process.

Additionally, it will be much more efficient and beneficial for Korean's English education program for young children if the pre-service early childhood education teachers can take classes relevant to the integrated English education method in their respective colleges or universities. As mentioned previously in Chapter one, the newly revised early childhood curriculum called '*Nurigwajeong*' in Korea focuses on holistic, integrated education based on the five fundamental areas: physical activity and health, communication, social relationships, artistic experience, and natural exploration. The kindergarten schools are required to follow this curriculum in Korea, and thus, are implementing it according to monthly themes related to '*Nurigwajeong*.' The HIA English program based on Montessori language curriculum carefully considered the monthly themes of '*Nurigwajeong*.' Faculties from both English and the early childhood education departments in the colleges or universities can model collaborative teaching

by adopting the HIA English model. To adequately train teachers, this collaborative effort will require two consecutive semesters of study and an internship in a school with a successful integrated English program.

With the projected increase in interest in teaching English to school children, investing in comprehensive, high quality professional development using this model is cost effective and can yield significant dividends by improving teaching across all subjects, improving staff collaboration and support, and increasing children's interest in learning English. Regional planning for effective professional development activity needs to be a priority of the government and school districts.

Suggestions for future studies are as follow: (1) a case study including all teachers who are teaching young children in one school or different schools, (2) a case study including different grade levels, (3) a case study including the pre-service early childhood education teachers who can take classes relevant to the integrated English education method in their respective colleges or universities, and (4) a case study using different methods to measure my results of quantitative data.

Closing Statement

The HIA TPD method described in this study is based primarily on the application of the Montessori Method to the teaching of English as EFL for young Korean children along with a teacher continuing education model based on empirical studies. This mixed method study, while limited in numbers of participants, suggests a way of teaching English that is cost effective, efficient, and generalizable to other populations. Children in the treatment group made significant gains in English language acquisition over the control group. The participating

teacher learned to teach in an interdisciplinary manner and experienced first-hand the benefits of peer collaboration in implementing new teaching strategies and subject matter.

It is recommended that the early childhood teachers continue to use the TPD model used in this project; with on-going support from administrators, parents, and policy-makers.

Implementing the integrated English education, along with a comprehensive professional development initiative, will help build strong teacher communities. It is also recommended that pre-service teachers have opportunities to take classes related to the integrated English education. Finally, continued study of the application of the integrated early childhood English curriculum and the English curriculum of older students would be essential to the wider adoption of the HIA TPD model.

References

- An, Y. (2010). *A study on teachers' understanding for teaching English by homeroom teachers and instructors in preschool* (Dissertation, Dongduk Women's University, South Korea).
- Anthony, J. L., & Lonigan, C. J. (2004). The nature of phonological awareness: Converging evidence from four studies of preschool and early grade school children. *Journal of Educational Psychology, 96*, 43-55.
- Anvari, S. H., Trainor, L. J., Woodside, J., & Levy B. A. (2002). Relations among musical skills: Phonological processing and early reading ability in preschool children. *Journal of Experimental Child Psychology, 83*(2), 111-130.
- Bae, M. (2010). Current condition and perspectives of directors and teachers toward early English education for infants. *Journal of Korea Contents Association, 11*(6), 94.
- Bagby, J. H. (2007). Montessori education and practice: A review of the literature, 1996-2006. *Montessori Life, 16*(1), 72-79.
- Bagby, J. H. and Jones, N. (2010). Montessori education and practice: A review of the literature, 2007-2009. *Montessori Life, 22*(1), 44-48.
- Barnes, C. J. (2006). Preparing pre-service teachers to teach in a culturally responsive way. *Negro Educational Review, 57*(1-2), 85-100.
- Ban, K., & Seo, H. (2009). A study of perception and actual fact for the early English language learning of the young children by the social and economic status of the preschooler's parents. *Humanities Publications, 14*(1), 121-148.
- Bell, B., & Gilbert, J. (1996). *Teacher development: A model from science education*. Routledge.
- Retrieved online on July 25, 2012 from
<http://www.eric.ed.gov/ERICWebPortal/recordDetail?accno=ED395763>

- Belzer, A. (2005). Improving professional development systems: Recommendations from the Pennsylvania adult basic and literacy education professional development system evaluation. *Adult Basic Education, 15*(1), 33-55.
- Bird, A. (2007). *The role of music in the English language development of Latino prekindergarten learners* (Doctoral dissertation, University of Southern California, Los Angeles).
- Boo, K. (2003). A review of literature on early English education for pre-third grade students in Korea. *Foreign Languages Education, 10*(1), 133-154.
- British Council (2013). The English Effect. Retrieved online on January 21, 2014 from <http://www.britishcouncil.org>
- Brown, H. D. (2007). *Principles of language learning and teaching*. New York: Longman.
- Buck, G., Mast, C., Ehlers, N., & Franklin, E. (2005). Preparing teachers to create a mainstream science classroom conducive to the needs of English-Language Learners: A feminist action research project. *Journal of Research in Science Teaching, 42*(9), 1013-1031.
- Campabello, N., De Carlo, M. J., O'Neil, J., & Vacek, M. J. (2002). *Music enhances learning* (Doctoral dissertation, Saint Xavier University). Retrieved from ERIC Document Reproduction Service. (No. ED 471 580)
- Center for Applied Linguistics. (2007). Foreign Language directory. Retrieved online on March 5, 2012 from <http://www.cal.org/CALWebDB/FLAD>
- Centofanti, J. M. (2002). *A single-subject multiple baseline and feminist intertextual deconstruction of gender differences among kindergartners in learning the alphabet using clay and a tactual/kinesthetic multiple intelligences and Montessori pedagogy*

- (Doctoral dissertation, Texas Tech University). Retrieved from <http://repositories.tdl.org/ttu-ir/handle/2346/20669>
- Cha, J. (2004). *A study on parents' perception and the status of early age English education: Comparative study between kindergarten and private institutes* (Dissertation, National University, South Korea).
- Cheon, H., Choi, M., Jwa, S., & Seo, H. (2002). Research trends and content analysis on the status of English Education for young children in Korea, *Child Study, 11*, 20-33.
- Cheung, H., Chen, H. C., Lai, C. Y., Wong, O. C., & Hills, M. (2001). The development of phonological awareness: Effects of spoken language experience and orthography. *Cognition, 81*(2001), 227-241.
- Cho, B. (2004). Issues concerning Korean learners of English: English education in Korea and some common difficulties of Korean students. *The East Asian Learner, 1*(2), 31-36.
- Cho, J-R., & McBride-Chang, C. (2005). Levels of phonological awareness in Korean and English: A 1-year longitudinal study. *Journal of Educational Psychology, 97*, 564-571.
- Cho, M., & Lee, M. (2009). A study on teachers' perception about English education in early childhood education. *Korea Journal of Child Care and Education, 57*(1), 23-51.
- Cho, Y. (2011). *The difference of the children's native language abilities & English abilities by Montessori early childhood education and common early childhood program* (Dissertation, Catholic University of Daegu, South Korea).
- Choi, J. (2009). *English education in early childhood*. Dongmunsa.
- Choi, J., & Son, S. (2011). Relationship of experience of taking early childhood English education courses in college to awareness of early childhood English education, interest and attitude in early childhood teachers. *Children's Media Research, 10*(1), 165-183.

- Chung, H. (2000). An analysis for effects of mother's perception for early childhood English education and involvement in her child's learning process on children's English study. *English Linguistic Science*, 4, 495-506.
- Collins, M. F. (2010). ELL preschoolers English vocabulary acquisition from storybook. *Early Childhood Research Quarterly*, 25(1), 84-97.
- Cohen, J. (2004). Full-day kindergarten key to closing achievement Gap. *Recorder*, 109, 7.
- Conner, I. M. , Green, B. G. & Munroe, K. (2005). A Study of the Reliability and Validity of the Rigby ELL Assessment Kit Benchmark Tests. Harcourt Achieve. Retrieved from http://rigby.hmhco.com/HA/correlations/pdf/e/ELLAsses_ERIA_web.pdf
- Cooper, A. C. (2009). *Perceived efficacy level of elementary ESL teachers* (Doctoral dissertation, Walden University). Dissertation Abstracts International. (UMI No. 3128611)
- Creswell, J. W. (2003). *Research design: quantitative, qualitative, and mixed methods approaches* (2nd ed.). Thousand Oaks, CA: Sage Publications.
- Creswell, J. W., Plano Clark, V. L., Gutmann, M. L., & Hanson, W. E. (2003). Advanced mixed methods research designs. In A. Tashakkori & C. Teddlie (Eds.), *Handbook of mixed methods in social and behavioral research* (pp. 209-240). Thousand Oaks, CA: Sage.
- Crain, W. (2011). *Theories of development: concepts and applications* (6th ed.). Upper Saddle River, NJ: Prentice Hall.
- Desimone, L. M. (2009). Improving impact studies of teachers' professional development: Toward better conceptualizations and measures. *Educational Researcher*, 38(3), 181-199.
- Devich, H. K. (2000). *Education as a tool for social change: Case study of an Arizona inner-city charter school* (Doctoral dissertation, University of San Francisco). Available from ProQuest Dissertations and Theses database. (UMI No. 9968763)

- Dewey, J. (1924). *Democracy and education*. New York: Macmillan.
- Driscoll, M. (2005). *Psychology of learning for instruction* (3rd ed.). Boston, MA: Allyn and Bacon.
- Ehrman, M. E., Leaver, B. L., & Oxford R. L. (2003). *A brief overview of individual differences in second language learning*. Elsevier Ltd.
- Ellis, A. K., & Fouts, J. T. (2001). Interdisciplinary curriculum: The research base. *Music Educators Journal*, 87(5), 22-25.
- Eslami, Z., & Fatahi, A. (2008). Teachers' sense of self-efficacy, English proficiency, and instructional strategies: A study of nonnative EFL teachers in Iran. *Teaching English as a Second or Foreign Language E-Journal*, 11(4). Retrieved from <http://tesl-ej.org/ej44/al.html>
- Farrell, T.S.C. (2006). The teacher is an octopus: Uncovering preservice English language teachers' prior beliefs through metaphor analysis. *RELC Journal*, 37(2), 236-248.
- Feuer, M. J., Towne, L., & Shavelson, R. J. (2002). Scientific culture and educational research. *Educational Researcher*, 31(8), 4-14.
- Fillmore, L. W. (1991). When learning a second language means losing the first. *Early Childhood Research Quarterly*, 6, 232-346.
- Frykholm, J., & Glasson, G (2005). Connecting science and mathematics instruction: Pedagogical context knowledge for teachers. *School Science and Mathematics*, 105(3), 127- 141.
- Gandara, P., Maxwell-Jolly, J., & Driscoll, A. (2005). *Listening to teachers of English language learners: A survey of California teachers' challenges, experiences, and professional development needs*. Santa Cruz, CA: Center for the Future of Teaching and Learning.

- Gebhard, M., Demers, J., & Castillo-Rosenthal, Z. (2008). Teachers as critical text analysts: L2 literacies and teachers' work in the context of high-stakes school reform. *Journal of Second Language Writing, 17*, 274-291.
- Garet, M., Porter, A. C., Desimone, L., Birman, B. F., & Yoon, K. S. (2001). What makes professional development effective? Results from a national sample of teachers. *American Educational Research Journal, 38*(4), 915-945.
- Gebhard, M., Demers, J., & Castillo-Rosenthal, Z. (2008). Teachers as critical text analysts: L2 literacies and teachers' work in the context of high-stakes school reform. *Journal of Second Language Writing, 17*, 274-291.
- Gibbs, J. E. (2003). An online professional development program for K-12 teachers: *Measures of effectiveness* (Dissertation). ProQuest Dissertations and Theses. (UMI No. 305335664) Retrieved from <http://search.proquest.com/docview/305335664?accountid=2909>.
- Glenn, C. M. (2003). The longitudinal assessment study (LAS): Eighteen year follow up. Final report. Retrieved from ERIC database. (ED478792)
- Gromko, J. E. (2005). The effect of music instruction on phonemic awareness in beginning readers. *Journal of Research in Music Education, 53*(3), 199-209.
- Gu, C., & Lee, M. (2002). The effects of use of English language center in times of free choice activities on kindergarteners' understanding of English. *Journal of Future Early Childhood Education, 9*(1), 29-50.
- Guba, E. G., & Lincoln, Y. S. (1988). Do inquiry paradigms imply inquiry methodologies? In D. M. Fetterman (Ed.), *Qualitative approaches to evaluation in education* (pp. 89-115). New York: Praeger Publishers.

- Han, K. (2002). *Analysis on the actual state of English special activity in kindergartens* (Dissertation, Ewha Womans University, South Korea).
- Hanson, W. E., Creswell, J. W., Clark, V. L. P., Petska, K. S., & Creswell, J. D. (2005). Mixed methods research designs in counseling psychology. *Journal of Counseling Psychology, 52*(2) 224–235.
- Harris, E. M. (2004). *Evaluation of the reorganization of Northboro Elementary School in Palm Beach County, Florida: a ten year perspective* (Doctoral Dissertation, Union Institute and University). Retrieved from: Proquest database. (UMI No. 3155995)
- Harris, M. (2008). The effects of music instruction on learning in the Montessori classroom. *Montessori Life, 3*, 24-31.
- Hmelo-Silver, C. E. (2004). Problem-based learning: What and how do students learn? *Educational Psychology Review, 16*(3), 235-266.
- Hmelo-Silver, C. E., Duncan, R. G., & Chinn, C. A. (2007). Scaffolding and achievement in problem-based and inquiry learning: A response to Kirschner, Sweller, and Clark (2006). *Educational Psychologist, 42*(2), 99-107.
- Huerta, M., & Jackson, J. (2010). Connecting literacy and science to increase achievement for English Language Learners. *Early Childhood Education Journal, 38*(3), 205-211.
- Hulme, C., Hatcher, P. J., Nation, K., Brown, A., Adams, J., & Stuart, G. (2002). Phoneme awareness is a better predictor of early reading skill than onset-rime awareness. *Journal of Experimental Child Psychology, 82*, 2-28.
- Ibeji, N. O. (2002). *Improving early reading skills of first grade students with learning disabilities using Montessori learning strategies* (Doctoral dissertation, Union Institute

- and University). Available from ProQuest Dissertations and Theses database. (UMI No. 3059928)
- International TOSEL Committee. (2011). TOSEL (Test of the Skills in the English Language), Native English examination made in Korea. Managed by the educational broadcasting system (EBS). Retrieved from <http://www.koreabrand.net/html/en/forprintKnow.html>
- Jang, Y., & Won, G. (2008). *Theory and practice for the English education in early childhood*. Educational Academy.
- Jeong, G. (2011). *English teachers' awareness of early English education in kindergarten* (Dissertation, Geumo University of Technology, South Korea).
- Jeong, S. (2005). *Status and recognition of English education in early childhood* (Dissertation, Dongguk University, South Korea).
- Jeong, M., Lee, Y., Park, S. (2011). A study on the development of 5-year-olds' images of English speakers based on drawings. *The Journal of Early Childhood Education*, 15(4), 77-97.
- Johnson, R. B., Onwuegbuzie, A. J., & Turner, L. A. (2007). Toward a definition of mixed methods research. *Journal of Mixed Methods Research*, 1(2), 112-133.
- Kang, M. (2009). *Study on understanding of teachers on early-childhood English education and an analysis of early-childhood English education curriculum* (Dissertation, Sahmyook University, South Korea).
- Kabilan, M. & Rajab, B. (2010). The utilisation of the Internet by Palestinian English language teachers focusing on uses, practices and barriers and overall contribution to professional development. *International Journal of Education and Development using ICT*, 6(3), 56-72.

- Kathleen, C. (1990). The whys and hows of the multi-age primary classroom. *American Educator: The Professional Journal of the American Federation of Teachers*, 14(2), 28-32.
- Karabenick, S. A., & Clemens Noda, P. A. (2004). Professional development implications of teachers' beliefs and attitudes toward English language learners. *Bilingual Research Journal*, 28(1), 55-75.
- Kendler, B. S., & Grove, P. A. (2004). Problem-based learning in the biology curriculum. *The American Biology Teacher*, 66(5), 348-354. Retrieved from <http://search.proquest.com/docview/218993804?accountid=2909>
- Kendrick, C. M. (2000). *Differentiation of instructional and curricular practices for gifted students in Montessori classrooms* (Doctoral dissertation, Baylor University). Available from ProQuest Dissertations and Theses database. (UMI No. 1400415)
- Kim, D., & King, K. P. (2011). Implementing podcasts and blogs with ESOL teacher candidates' preparation; Interpretations and implications. *International Forum of Teaching and Studies*, 7(2), 5-19.
- Kim, E. (2003). The effect of English teaching methods and age on English achievement and interest levels in early childhood English education. *Children's Education*, 12(2), 177-195.
- Kim, J. (2004). *A study of teachers' recognition about early English education in kindergartens* (Dissertation, Korea National University of Education, South Korea).
- Kim, J. (2011). An Extended positioning analysis of a traveling kindergarten English teacher story. *Studies in Foreign Language Education*, 25(2), 127-145.
- Kim, M. (2007). *Study on the perception of parents, directors, and teachers about the early childhood English education* (Dissertation, Chungang University, South Korea).

- Kim, M. S. (2007). *Survey research on parents' recognition and actual condition on the early English education* (Dissertation, University of Suwon, South Korea).
- Kramer, B., Walker, A., & Brill, J. (2007). The underutilization of Internet and communication technology-assisted collaborative project-based learning among international educators: A delphi study. *Educational Technology Research and Development, 55*(5), 527-543.
- Lee, G., Jang, Y., Jung, M., & Hong, Y. (2003) Innovations in early childhood education for cultivating creative and holistic human resources. *Ewha Education Edition, 2003*(2), 1-112.
- Lee, H. (2010). *The effects of English learning using Montessori Method on preschool children's interest and achievement* (Dissertation, Soongsil University, South Korea).
- Lee, J. (2009). *A study of the English class model for young children using a thematic approach* (Dissertation, Andong University, South Korea).
- Lee, M. (2005). Extra-curricular activities in early childhood educational institutions: A survey with analysis of student teacher's perceptions. *Korean Journal of Child Education and Care, 5*(2), 111-127.
- Lee, S. (2012). A study on the characteristics of children learning English through the analysis of their discourse. *The Journal of Language and Literature, 31*, 101-124.
- Lee, Y. (2012). Exploring Korean 5-year-olds' overall English skills with WIDA. *Journal of Korea Practice Association for Early Childhood Education, 17*(2), 21-33.
- Lillard, A. (2005). *Montessori: The Science behind the genius*. Oxford University Press.
- Lillard, A., & Else-Quest, N. (2006). The early years: Evaluating Montessori education. *Science, 313*(5795), 1893-1894.

- Lindlof, T. R., & Taylor, B. C. (2002). *Qualitative communication research methods* (2nd ed.). Sage Publications, Thousand Oaks, CA.
- Loeffler, M. H. (1992). Montessori and constructivism. In M. H. Loeffler (Ed.), *Montessori in contemporary American culture* (pp.101-113). Portsmouth, NH. Heinemann Educational Books, Inc.
- Luehmann, A. L. (2008). Using blogging in support of teacher professional identity development: A case study. *The Journal of the Learning Sciences*, 17, 287-337.
- Ma, S. (2007). Trends in the research of English education for young children. *The Korea Association of Yeolin Education*, 12(5), 185-208.
- Marceau, G. (2003). Professional development in adult basic education. *New Directions for Adult and Continuing Education*, 98, 67-76.
- McBride-Chang, C., & Bialystok, E., Chong, K., & Li, Y. P. (2004). Levels of phonological awareness in three cultures. *Journal of Experimental Child Psychology*, 89, 93-111.
- Mertens, D. M. (2010). *Research and evaluation in education and psychology* (3rd ed.). Thousand Oaks, CA: Sage Publications.
- Meskill, C. (2005). Infusing English language learner issues throughout professional educator curricula: The training all teacher project. *Teachers College Record*, 107(4), 739-756.
- MonRodriguez, L. (2003). An analysis of a public school prekindergarten Montessori bilingual program. Dissertation, Sam Houston State University. Retrieved from: Proquest database
- Moll, I. (2004). Towards a constructivist Montessori education. *Perspectives in education*, 22(2), 37-49.
- Montessori, M. (1912). *The Montessori method*. New York: F. A. Stokes.

- Montessori, M. (1946). *Education for a New World*. Currently in print: 1946, Madras, India: Kalakshetra Publications; 1989, Oxford, England: Clio Press.
- Montessori, M. (1965). *Dr. Montessori's own handbook*. New York: Schocken. (original work published 1914)
- Montessori, M. (1967). *The Absorbent Mind*. New York: Dell Publishing Co, Inc.
- Ministry of Education, Science, and Technology. (2012). Revised kindergarten curriculum in 2013.
- Miron, G. (1996). Free choice and vouchers transform schools. *Educational Leadership*, 54(2), 77-80.
- Morse, J. M. (2003). Principles of mixed methods and multi method research design. In A. Tashakkori & C. Teddlie (Eds.), *Handbook of mixed methods in social and behavioral research* (pp. 189-208). Thousand Oaks, CA: Sage.
- O'Hara, S. & Pritchard, R. H. (2008). Meeting the challenge of diversity: Professional development for teacher educations. *Teacher Education Quarterly*, 35(1), 43-61.
- Onwuegbuzie, A. J., & Teddlie, C. (2003). A framework for analyzing data in mixed methods research. In A. Tashakkori & C. Teddlie (Eds.), *Handbook of mixed methods in social and behavioral research* (pp. 351-383). Thousand Oaks, CA: Sage.
- Paneque, O., & Barbetta, P. (2006). A study of teacher efficacy of special education teachers of English language learners with disabilities. *Bilingual Research Journal*, 30(1), 171-193.
- Park, C., & Shin, H. (2008). A study on the effect of child's English education activity through multicultural approach on child's mother tongue and English ability and attitude. *The Journal of Korean Infant Childcare*, 55, 69-95.

- Park, J. (2009). 'English fever' in South Korea: Its history and symptoms. *English Today*, 25(1), 50-57.
- Park, J. K. (2003). World English and teacher development for Korean teachers of English. *Academic Journal of Honam University*, 23, 11-22.
- Patton, M. Q. (2002). *Qualitative research and evaluation methods*. Thousand Oaks, CA: Sage.
- Pearson R. W. (2010). *Statistical persuasion*. Thousand Oaks, CA: Sage.
- Peng, H. (2009). *A comparison of the achievement test performance of children who attended Montessori schools and those who attended non-Montessori schools in Taiwan* (Doctoral Dissertation, Indiana State University, Indiana). Available from ProQuest Dissertations and Theses database. (UMI No. 3394721).
- Perkins, D. H., & Unger, C. (1999). Teaching and learning for understanding. In Reiguluth, C. M. (Ed.). *Instructional design theories and models: A new paradigm of instructional theory* (pp. 91-114). Mahwah, NJ: Lawrence Erlbaum Associates.
- Porter, A. C., Blank, R. K., Smithson, J. L., & Osthoff, E. (2007). Place-based randomized trials to test the Effects on instructional practices of a mathematics/science professional development program for teachers. *ANNALS of the American Academy of Political and Social Science*, 599(1), 147-175.
- Rathunde, K., & Csikszentmjhalyi, M. (2003). Middle school students' motivation and quality of experience: A comparison of Montessori and traditional school environments. *American Journal of Education*, 111(3), 341-371.
- Reichardt, C. S., & Cook, T. D. (1979). Beyond qualitative versus quantitative methods. In T. D. Cook & C. S. Reichardt (Eds.), *Qualitative and quantitative methods in evaluation research* (pp. 7-32). Beverly Hills, CA: Sage.

- Richardson, S. O. (1997). The Montessori preschool: Preparation for writing and reading. *Annals of Dyslexia*, 47(1), 239-256.
- Richardson, S. O. (2004). Research validates Montessori approach to teaching language. *Montessori Life* (Summer, 2004), 16(3), 46-48.
- Rodriguez, L. (2002). *An analysis of a public school prekindergarten bilingual Montessori program*. Sam Houston State University.
- Roessingh, H., & Johnson, C. (2005). Online teaching and learning in TESL professional development. *The Quarterly Review of Distance Education*, 6(2), 107-115.
- Savery, J. R. (2006). Overview of problem-based learning: Definitions and distinctions. *Interdisciplinary Journal of Problem-based Learning*, 1(1), 3. doi: 10.7771/1541-5015.1002
- Shaywitz, S. (2003). *Overcoming dyslexia*. New York: Random House.
- Shim, M. (2009). *An analysis of early childhood English education in terms of the integrated education* (Dissertation, Ajou University, South Korea).
- Shin, J. (2008). *Building an effective international community of inquiry for EFL professionals in an asynchronous online discussion board* (Dissertation, University of Maryland, Baltimore). Available from ProQuest Dissertations and Theses database. (UMI No. 3311374)
- Seabolt, B. E. (2008). *A comparison of two delivery formats of ESL professional development* (Dissertation, Texas A&M University). Available from ProQuest Dissertations and Theses database. Retrieved from <http://search.proquest.com/docview/304814499?accountid=2909>

- Standing, E. M. (1984). *Maria Montessori: Her life and work*. New York, NY: Penguin Group Incorporated.
- Starfall Education. Retrieved from <http://www.startfall.com>
- Tashakkori, A., & Teddlie, C. (Eds.). (2003). *Handbook of mixed methods in social and behavioral research*. Thousand Oaks, CA: Sage.
- Tesch, R. (1990). *Qualitative research: Analysis types and software tools*. New York: Falmer.
- Teddlie, C., & Tashakkori, A. (2010). Overview of contemporary issues in mixed methods research. In A. Tashakkori & C. Teddlie (Eds.), *Handbook of mixed methods in social & behavioral research* (pp. 1-41). Thousand Oaks, CA: Sage.
- Trochim, W. (2006). *Research methods knowledge base*. Atomic Dog Publishing. Retrieved from <http://www.socialresearchmethods.net/kb/copynote.php>
- Tucker, C. M., Porter, T., Reinke, W. M., Herman, K. C., Ivery, P. D., Mack, C. E., & Jackson, E. S. (2005). Promoting teacher efficacy for working with culturally diverse students. *Preventing School Failure, 50*(1), 29-34.
- Vaughn, M. S. (2002). A delicate balance: The praxis of empowerment at a Midwestern Montessori school. *Communication Education, 51*(2), 183–201.
- Verdugo, R.R., & Flores, B. (2007). English-language learners: Key issues. *Education and Urban Society, 39*(2), 167-193.
- Walker, A., Recker, M., Robertshaw, M. B., Osen, J., Leary, H., Ye, L., & Sellers, L. (2011). Integrating technology and problem-based learning: A mixed methods study of two teacher professional development designs. *Interdisciplinary Journal of Problem-Based Learning, 5*(2), 70-94.

- Walton, P., Baca, L., & Escamilla, K. (2002). A national study of teacher education: Preparation for diverse student populations. *Center for Research on Education, Diversity, and Excellence (CREDE)*. Retrieved from <http://www.crede.ucsc.edu/research/pdd/2.les.html>
- Webster, N. L., & Valeo, A. (2011). Teacher preparedness for a changing demographic of language learners. *TESL Canada Journal*, 28(2), 105-128.
- Woolfolk Hoy, A. (2004). *What do teachers need to know about self-efficacy?* Paper presented at AERA, San Diego, CA.
- Yang, O., Kim, J., Kim, H., & Kim, S. (2001). The status of English education in private kindergartens in Korea. *The Journal of the Early Childhood Studies*, 22 (4), 299-313.
- Yim, H. (2008). *A study on understanding of teachers on early childhood English education* (Dissertation, Chung-Ang University, South Korea).
- Yoo, J. (2011). *A study on the teachers' perception and practice of English education at early childhood institutions* (Dissertation, Incheon University, South Korea).
- Youngs, C. S., & Youngs, G. A. (2001). Predictors of mainstream teachers' attitudes toward ESL students. *TESOL Quarterly*, 35(1), 97-120.
- Vygotsky, L. (1978). *Mind in Society: The Development of Higher Psychological Processes*. MA: Harvard University Press.

Appendix A

Teacher Demographic Information (교사 인적사항)

Name: _____

INSTRUCTIONS: Please complete each of the following items as accurately as possible. Where a choice is given, circle the best response.

1. Gender: Male Female
2. Highest Earned Degree:
 - a. High School
 - b. 2-year college
 - c. Bachelor's
 - d. Master's
 - e. Ed. Specialist
 - f. Doctorate
 - g. Others _____
3. Position(s) at D Kindergarten School during the HIA teach professional development project: _____
4. Total number of years of teaching at D Kindergarten School: _____
5. Total number of years of teaching English at D kindergarten School: _____
6. Total number of years of teaching young children (Ages 3~6) before teaching at D Kindergarten School: _____
7. Total number of years of teaching young children (Ages 3~6) in the Montessori School before D Kindergarten School: _____
8. Do you have a teacher certificate? Yes _____ No _____
If yes, what type and what year did you receive it? _____
9. Do you have AMS (American Montessori Society) teacher certificate? Yes ____ No ____

If yes, what type and what year did you receive it? _____

10. Have you ever attended a teacher professional development? Yes ____ No ____

If yes, what type of teacher professional development did you attend?

11. Have you learned English at the institute, in addition to high school or college?

If yes, when (years) and where did you learn English?

Appendix B

Teacher Interview Questions

1. How do you feel about the integrated English education through the HIA teacher professional development?
2. What do you think about the teachers' role in implementing the integrated English education?
3. Describe the procedure you undertake to practice an integrated English education in your classroom.
4. What do you think are the most important issues that may affect you and your students in learning English? Which of the issues you mentioned on your list could be solved or diminished by on-going education?

Appendix D

CLASSROOM TEACHER LESSON PLAN**Lesson Name:** _____**Lesson Area:** _____**Goals:** _____

Previous Learning: _____

Procedures:**Variation/Extension:****Reflection and Self-Evaluation:**

Appendix E: Performance Assessment

Auditory discrimination: Assessing with Rhyming cards, I–spy, Moveable alphabets

1=Introduce, 2=Needs to Improve, 3=Improving, 4=Satisfactory Progress, 5=Outstanding		
	July, 2013	October, 2013
Rhyming		
Initial Sounds Discrimination		
Ending Sounds Discrimination		
Discriminates between vowel sounds (: a, i, o, u, e)		

Letter Sound Recognition: Assessing with Sandpaper Letters with Matching Objects and Picture cards.

1=Introduce, 2=Needs to Improve, 3=Improving, 4=Satisfactory Progress, 5=Outstanding		
	July, 2013	October, 2013
1 st box - a, c, m, s, t		
2 nd box - b, f, g, h, o		
3 rd box - d, i, k, l, n		
4 th box - j, e, p, r, u		
5 th box - q, v, w, x, y, z		

Vocabulary acquisition: Assessing with Pictures and Objects (An Assessment Tool: Three Period lessons)

1=Introduce, 2=Needs to Improve, 3=Improving, 4=Satisfactory Progress, 5=Outstanding		
	July, 2013	October, 2013
Numbers 1-20		
Animals		
Fruits & Vegetables		
Colors		
Human Body		

Phonemic Awareness: Assessing with Moveable alphabets, 5 vowel sounds cards, pink books, picture/label cards, Sentence strips with pictures

1=Introduce, 2=Needs to Improve, 3=Improving, 4=Satisfactory Progress, 5=Outstanding		
	July, 2013	October, 2013
Moveable Alphabet: Encode(write)		
Pink Books: a, i, o, u, e Decode (sound out)		
Picture/Label Cards Blend (read)		
Sentence Strips w/Pictures		

Appendix F1: **Auditory Discrimination Assessment (For an assessing teacher)**

Student ID #:	Gender: F(), M()	Birth Date:	Age:
Teacher Name:		Examiner:	
School:		Date:	

Please write each child's raw score in the blank. (각각의 아이가 쓴 답을 그대로 기록하세요.)

1 ()	2 ()	3 ()	4 ()
5 ()	6 ()	7 ()	8 ()
9 ()	10 ()	11 ()	12 ()

Directions: I am going to say a word and choose the right picture. Listen twice.

- 지시사항: 1 번 부터 12 번까지는 잘 듣고 알맞은 그림을 찾아 동그라미 하세요. 문제는 두번씩 들려줍니다.

1. elephant (B)
2. peach (C)
3. flower (A)
4. shorts (A)
5. airplane (B)
6. square (B)
7. running squirrel (C)
8. snowy day (B)
9. a basketball player (C)
10. Susan is singing. (B)
11. Peter is sad. (A)
12. The strawberries are in the basket. (A)

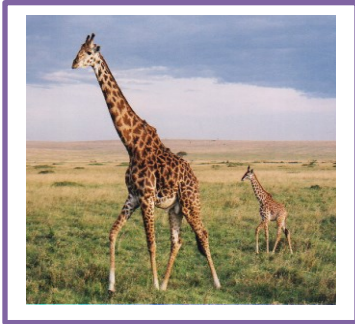
Appendix F1-1: AD Assessment (For a student): a copy of online computer test

Auditory Discrimination Assessment (듣기평가)

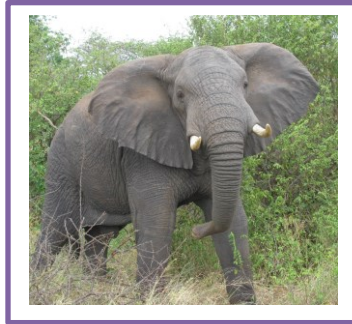
Directions: I am going to say words, phrases or sentences, and choose the right picture. Listen twice.

- 지시사항: 1 번부터 12 번까지는 잘 듣고 알맞은 그림을 찾아 동그라미 하세요. 문제는 두번씩 들려줍니다.

1.



(A)



(B)



(C)

2.



(A)



(B)



(C)

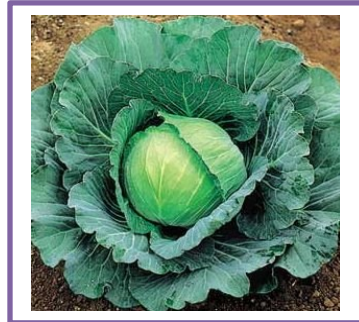
3.



(A)



(B)



(C)

4.



(A)



(B)



(C)

5.



(A)

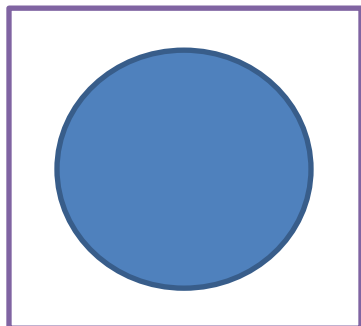


(B)

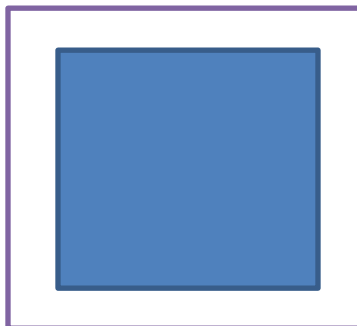


(C)

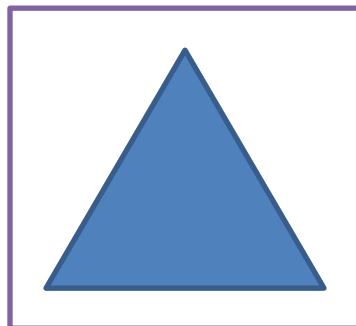
6.



(A)

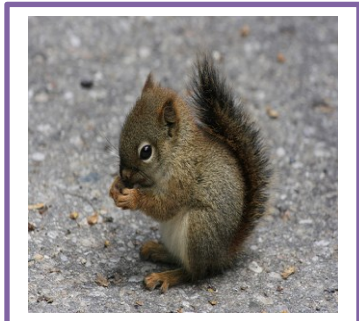


(B)



(C)

7.



(A)



(B)

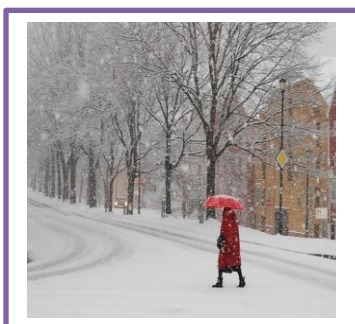


(C)

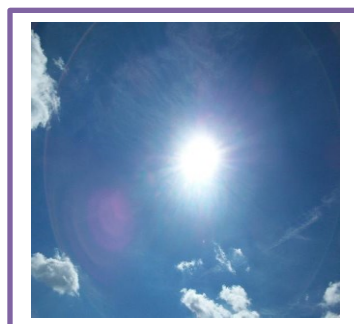
8.



(A)



(B)



(C)

9.



(A)

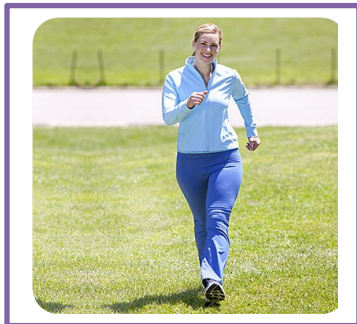


(B)



(C)

10.



(A)

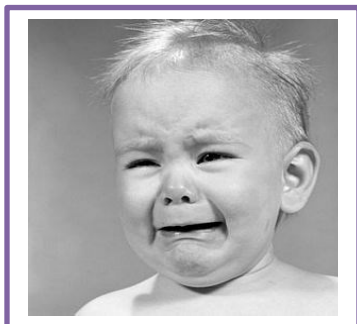


(B)



(C)

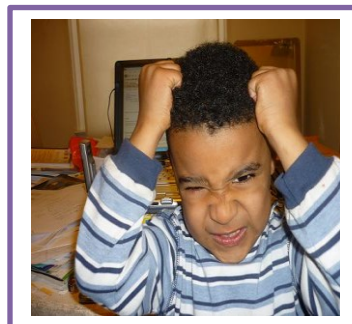
11.



(A)



(B)



(C)

12.



(A)



(B)



(C)

Appendix F2: Vocabulary Acquisition Assessment (For an assessing teacher)

Student ID #:	Gender: F(), M()	Birth Date:	Age:
Teacher Name:		Examiner:	
School:		Date:	

Please write each child's raw score in the blank. (각각의 아이가 쓴 답을 그대로 기록하세요.)

1 ()	2 ()	3 ()	4 ()
5 ()	6 ()	7 ()	8 ()
9 ()	10 ()	11 ()	12 ()
13 ()	14 ()	15 ()	16 ()
17 ()	18 ()	19 ()	20 ()

** Please show one picture at a time using separate picture sets, and ask “What is this in English?”
(따로 준비된 사진 카드 세트를 이용하여 하나씩 보여주면서, “이것은 영어로 무엇입니까”
라고 질문합니다.)

Directions: I want you to tell me what it is in English.

- 지시사항: 다음의 그림을 보고 이것이 무엇인지 영어로 말해 보세요.

1. three	2. twelve	3. fifteen	4. eight
5. duck	6. frog	7. giraffe	8. turtle
9. pear	10. cucumber	11. grapes	12. pumpkin
13. yellow	14. gray	15. brown	16. blue
17. elbow	18. leg	19. ear	20. nose

Appendix F3: Letter Sound Recognition Assessment (For an assessing teacher)

Student ID #:	Gender: F(), M()	Birth Date:	Age:
Teacher Name:		Examiner:	
School:		Date:	

Instructions

- Show the student page, and says “I want you to tell me the sounds for these letters.” Start from top on the left. Ask “put your finger on the first letter, and tell me what this sound is.” (학생용 실제 평가 용지를 보여주세요 그리고 “이 알파벳의 소리를 나에게 알려 주세요.”라고 말한다. “왼쪽 상단에서 시작하여 아래로 내려가면서 진행한다. “첫번째 글자를 손가락으로 가르쳐 보세요. 이 글자의 소리가 무엇인지 알려주세요.”라고 말한다.)
- Please write each child’s raw score in the blank next to the letters. (알파벳 옆에 아이가 말하는 답을 적어주세요.)

✓=correct response (sound)

×= incorrect response o=no response

c	
a	
m	
t	
s	
b	
f	
g	
h	
o	
d	
i	
k	

l	
n	
j	
e	
p	
r	
u	
q	
v	
w	
x	
y	
z	

- Total number correct: _____ of 26.

Appendix F4: **Phonemic Awareness Assessment (For an assessing teacher)**

Student ID #:	Gender: F(), M()	Birth Date:	Age:
Teacher Name:		Examiner:	
School:		Date:	

Please write each child's raw score in the blank. (각각의 아이가 쓴 답을 그대로 기록하세요.)

1 ()	2 ()	3 ()	4 ()
5 ()	6 ()	7 ()	8 ()
9 ()	10 ()	11 ()	12 ()
13 ()	14 ()	15 ()	16 ()
17 ()	18 ()	19 ()	20 ()

Phonemic Awareness Assessment (For an assessing teacher)

Beginning Sound Recognition

Phoneme Matching

Directions: Listen to the words carefully. Two words have the same beginning sounds, but one word has the different beginning sound. Choose the picture with the different beginning sound.

- 지시사항: 1 번, 2 번, 3 번은 두개의 그림의 단어는 첫소리가 같고 하나의 단어는 첫소리가 다릅니다. 잘 듣고 첫소리가 다른 그림을 골라 동그라미 하세요. 문제는 두 번씩 들려줍니다.
 1. cup, sun, cake
 2. fox, book, fan
 3. monkey, hat, ham

Phoneme Isolation

Directions: Listen carefully, and choose the same beginning sound with the picture.

- 지시사항: 4 번, 5 번, 6 번은 잘 듣고 이 그림의 첫소리와 같은 글자를 골라 동그라미하세요. 문제는 두 번씩 들려줍니다.
 4. watermelon /w/, /g/, /v/
 5. nest /b/, /n/, /s/
 6. penguin /d/, /h/, /p/

Ending Sound Recognition/Phoneme Isolation

Directions: Listen carefully, and choose the same ending sound with the picture.

- 지시사항: 7 번, 8 번, 9 번은 잘 듣고 이 그림의 끝소리와 같은 글자를 골라 동그라미하세요. 문제는 두 번씩 들려줍니다.
 7. ant /t/, /e/, /k/
 8. mop /n/, /p/, /o/
 9. desk /s/, /d/, /k/

Middle Sound Recognition/Phoneme Isolation

Directions: Listen carefully, and choose the same middle sound with the picture.

- 지시사항: 10 번, 11 번, 12 번은 예로 들려주는 그림의 단어를 잘 듣고 이 그림의 중간소리와 같은 단어의 그림을 A, B, C 에서 골라 동그라미하세요. 문제는 두 번씩 들려줍니다.
 10. dog (B): A. lid B. hog C. bag
 11. red (A): A. bed B. rug C. cat
 12. man (C): A. cot B. nut C. can

Phoneme Encoding (Phoneme Segmentation)

Directions: Listen each word carefully, and write what you hear. You will hear each word twice.

- 지시사항: 13~16 번은 그림의 단어를 잘 듣고, 아래에 제시된 알파벳을 이용하여 빈 칸에 그 이름을 쓰세요. 필요하다면 이 알파벳을 두번 사용할 수 있습니다. 문제는 두번씩 들려줍니다.

- 13. dig
- 14. pot
- 15. van
- 16. hut

Phoneme Blending

Directions: Read the following words aloud. If you want, you can say each sound, and then blend them together to make the word.

- 지시사항: 17~20 번은 아래에 제시된 단어를 소리내어 읽어보세요. 원한다면, 각각의 소리를 말해 본 후, 다시 한꺼번에 단어를 읽어 볼 수 있습니다.

- 17. jam
- 18. bug
- 19. zip
- 20. wet

Appendix G:

The Example of the Integrated Early Childhood English Program: June, 2013
(Theme: Animals near Us, the Role of Money)

Songs (Listening & Speaking)	<ol style="list-style-type: none"> 1. Be My Echo 2. How are you? 3. Good Morning 4. Walk around circle
Story Telling (Listening)	Brown Bear, Brown Bear, What Do You See? (by Eric Carle)
Poem & Poetry (Speaking)	<ol style="list-style-type: none"> 1. Brown Bear, Brown Bear, What Do You See? (Art Activities, Booklet Making) 2. Bubble Gum (Numbers 1-10)
Auditory Discrimination (Listening)	What Sound is This?
Visual Discrimination (Vocabulary)	<ol style="list-style-type: none"> 1. Picture/Object Matching 2. Big/ Little Sorting 3. Alphabet Matching Game (Moveable Alphabets)
Phoneme Awareness	<ol style="list-style-type: none"> 1. Sound Game 2. a, c, m, s, t (Sandpaper Letters) & Objects 3. Moveable Alphabets & Pictures
Culture Area	Matching (penny, nickel, dime, quarter) Money Bingo Game Money Rubbing
Technology (startfall.com)	<ol style="list-style-type: none"> 1. ABCs 2. Calendar

Appendix H: The Examples of Materials

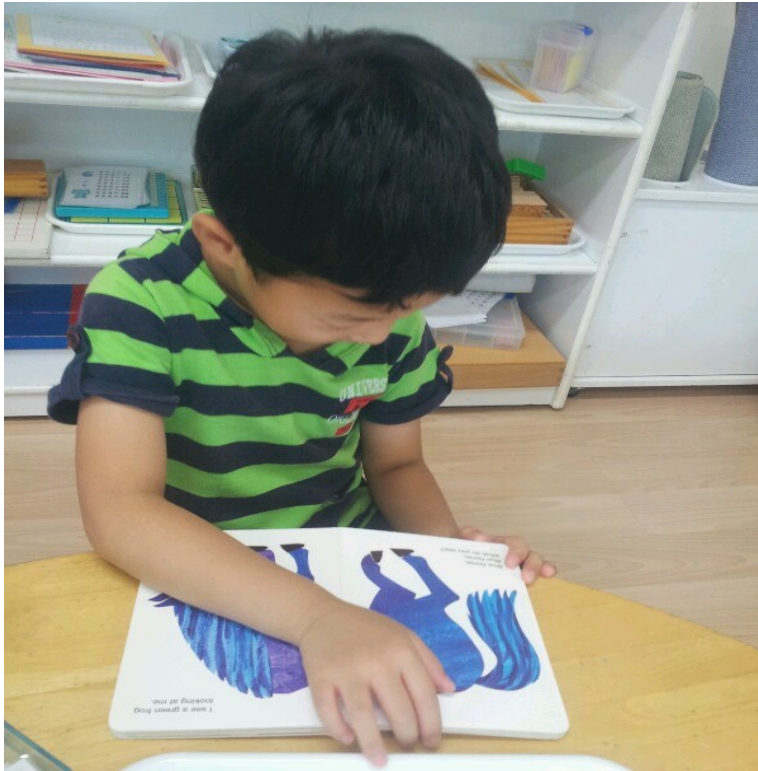
Zoo Animals (Visual Discrimination: Picture to Object Matching):
Ms. G's classroom, July 1, 2013



Technology: Starfall English Program



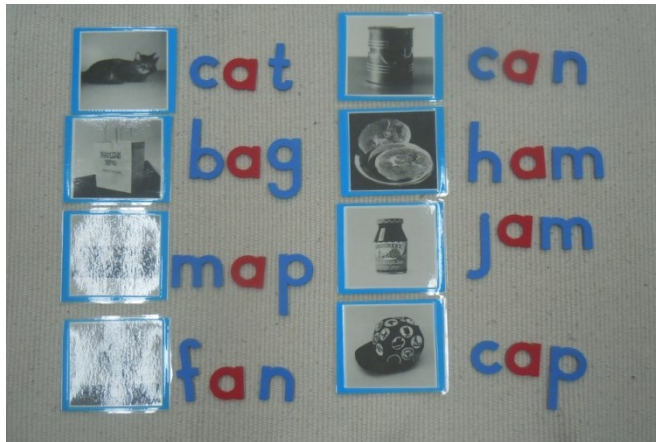
Children's English Books



Big/Little



Moveable Alphabets & Picture cards



Sandpaper Letters



Sandpaper Letters



Visual Discrimination (Pictures & Objects)



Moveable Alphabets: Ms. G's classroom (July, 24, 2013)

