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The Effect of Authentic Literacy Experiences as Book Buddies with Hispanic Fourth Graders on Preservice Teachers' Literacy Content Knowledge and Reading Maturity

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THE EFFECT OF AUTHENTIC LITERACY EXPERIENCES AS BOOK BUDDIES

WITH HISPANIC FOURTH GRADERS ON PRESERVICE TEACHERS' LITERACY

CONTENT KNOWLEDGE AND READING MATURITY

A dissertation submitted in partial fulfillment of

the requirements for the degree of

DOCTOR OF EDUCATION

in

CURRICULUM and INSTRUCTION

by

Vivian Lucia Veiga

2014

To: Dean Delia C. Garcia
      College of Education

This dissertation, written by Vivian Lucia Veiga, and entitled The Effect of Authentic Literacy Experiences as Book Buddies with Hispanic Fourth Graders on Preservice Teachers' Literacy Content Knowledge and Reading Maturity, having been approved in respect to style and intellectual content, is referred to you for judgment.

We have read this dissertation and recommend that it be approved.

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Leonard Bliss

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Hilary Landorf

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Joyce C. Fine, Major Professor

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Date of Defense: October 23, 2014

The dissertation of Vivian Lucia Veiga is approved.

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Florida International University, 2014

DEDICATION

First and foremost I would like to dedicate this dissertation to my son, Erik and to my daughter, Leslie. Their love, unconditional support and encouragement with my dissertation process, as well as with all of my many endeavors, qualify them not only for a special place in Heaven but also in my heart! I couldn't have done it without them. I am truly blessed to have such amazing young adults to call my own. Saying thank you doesn't begin to express my love and gratitude but it is a start!

I also dedicate this dissertation to my parents the late Carlos Luis and Ana Aspuru who from a very early age instilled in me a great love and respect for learning as well as a commitment to finish what I began. That commitment to finishing has definitely served me well throughout my life and it as well as the love of learning is reflected in my completion of this great endeavor.

In addition I would also like to dedicate this dissertation to my aunt and uncle the late Estela and Mauricio Almagro who always encouraged me and cheered me on in all of my pursuits.

Finally I would also like to recognize and dedicate this dissertation to my friends Vivian del Rio and Isela Rodriguez without whose unconditional support, assistance and friendship I would not have been able to achieve this great accomplishment. Thank you both from the bottom of my heart.

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ABSTRACT OF THE DISSERTATION

THE EFFECT OF AUTHENTIC LITERACY EXPERIENCES AS BOOK BUDDIES

WITH HISPANIC FOURTH GRADERS ON PRESERVICE TEACHERS' LITERACY

CONTENT KNOWLEDGE AND READING MATURITY

by

Vivian Lucia Veiga

Florida International University, 2014

Miami, Florida

Professor Joyce C. Fine, Major Professor

From a sociocultural perspective, individuals learn best from contextualized experiences. In preservice teacher education, contextualized experiences include authentic literacy experiences, which include a real reader and writer and replicate real life communication. To be prepared to teach well, preservice teachers need to gain literacy content knowledge and possess reading maturity. The purpose of this study was to examine the effect of authentic literacy experiences as Book Buddies with Hispanic fourth graders on preservice teachers' literacy content knowledge and reading maturity.

The study was a pretest/posttest design conducted over 12 weeks. Preservice teacher participants, the focus of the study, were elementary education majors taking the third of four required reading courses in non-probabilistic convenience groups, 43 ($n = 33$ experimental, $n = 10$ comparison) Elementary Education majors. The Survey of Preservice Teachers' Knowledge of Teaching and Technology (SPTKTT), specifically designed for preservice teachers majoring in elementary or early childhood education and the Reading Maturity Survey (RMS) were used in this study. Preservice teachers chose

either the experimental or comparison group based on the opportunity to earn extra credit points (experimental = 30 points, comparison = 15). After exchanging introductory letters preservice teachers and Hispanic fourth graders each read four books. After reading each book preservice teachers wrote letters to their student asking higher order thinking questions. Preservice teachers received scanned copies of their student's unedited letters via email which enabled them to see their student's authentic answers and writing levels.

A series of analyses of covariance were used to determine whether there were significant differences in the dependent variables between the experimental and comparison groups. This quasi-experimental study tested two hypotheses. Using the appropriate pretest scores as covariates for adjusting the posttest means of the subcategory Literacy Content Knowledge (LCK), of the SPTKTT and the RMS, the mean adjusted posttest scores from the experimental group and comparison group were compared. No significant differences were found on the LCK dependent variable using the .05 level of significance, which may be due to Type II error caused by the small sample size. Significant differences were found on RMS using the .05 level of significance.

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CHAPTER I

INTRODUCTION

From a sociocultural perspective (Vygotsky, 1978), knowledge construction is a social process and begins with children's interaction with parents and teachers. Cognitive processes are context specific. This means that individuals learn best when they are allowed to engage in authentic, contextualized activities. From an interactive perspective on reading and writing, meaning is constructed through social negotiation that depends on supportive interaction with others. Students learn the cognitive processes related to reading and writing best through contextualized activity and assisted learning (Englert & Palincsar, 1991) and meaningful enterprise rather than learning in a mechanistic way (Raphael & Englert, 1989). Given that learning within an authentic context is important for students, it may be as important for the learning of preservice teachers in their teacher preparation program.

The purpose of this chapter is to present the background and theory, statement of the problem, goals of this study, research questions, significance, delimitations, definition of terms and summary.

Background and Theory

Discussing the topic of the research base on authenticity and its positive effects on adult learners, Purcell-Gates, Degener, Jacobson, & Soler, (2002) indicated that, in studying adult learners researchers found that when more authentic literacy activities were included in programs for them the adult learners reported reading and writing more often in real life as well as reading and writing more complex texts. Continuing on the

topic of authenticity, Duke et al. (2006) provided an operational definition of authentic literacy activities as:

Those that replicate or reflect reading and writing activities that occur in the lives of people outside of a learning-to-read-and-write context and purpose. Each authentic literacy activity has a writer and a reader – a writer who is writing to a real reader and a reader who is reading what the writer wrote. (p.346)

On the topic of judging authenticity Duke et al. (2006) continued stating:

to judge the authenticity of a literacy activity, we look at two dimensions: purpose or function and text. Authentic purpose or function means that the activity serves a true communicative purpose" … To be authentic, a text (written or read) must be like texts that are used by readers and writers outside of a learning-to-read-or-write context. (p. 346)

Referring to the work of Edelsky (1991) and Purcell-Gates (2002) while looking at authentic reading, writing, and discussion as part of studying the results of an exploratory pen pal project, Gambrell, Hughes, Calvert, Malloy and Igo (2011) indicated that "Authentic literacy tasks can be described as having three dimensions: meaning making, purpose, and ownership" (p. 236). Preservice teachers writing to fourth-grade students about a book that they had both read, as was done in the current study, is an example of an authentic literacy task since meaning making occurred: there was a purpose for writing and ownership of the letters as a result of being the authors of the letters.

In an effort to motivate students to write and to change their attitudes towards writing, Tebo-Messina and Blough (1989) devised a project to give students pen pals, or key pals (since technology was used), as a real audience and found positive effects.

Teale, Zolt, Yokota, Glasswell, and Gambrell (2007) studied the effects of getting students "In2Books," as their program was called, by providing them with adult pen pals in an effort to develop high-level literacy. Other studies have examined the effects of preservice teachers as pen pals to elementary students and found that the relationships made a difference to the children as children learned about letter writing and reading in an authentic context writing real letters to real people, (Berril & Gall, 1999). Children also gained confidence as they learned to take turns speaking during literature circles conducted with their preservice teacher (Day, 2009) but neither study examined the effects on preservice teachers as this study has done. The current study focused on the adult learners, the preservice teachers.

One aspect that may affect preservice teachers' ability to teach reading that of reading maturity, was explored by Theiss, Philbrick, and Jarman (2008-2009). Discussing the use of the *Reading Maturity Survey*, Theiss et al. (2008-2009) questioned whether there is a relationship between preservice teachers' reading maturity, which based on the work of Thomas (2001) is a self-report on one's reading attitudes and habits, and their disposition to teach reading. The researcher wondered how participation in authentic literacy experiences with diverse fourth grade students might affect preservice teacher's reading maturity levels.

In looking at the topic of mentored learning to teach, Wang and Odell (2002), indicated:

Although the direct relationship between teachers' beliefs and their teaching practice is not consistently identified (Wideen, Mayer-Smith, and Moon, 1998), research on both preservice teachers and inservice teachers suggests that their personal dispositions toward teaching have a strong impact on what they are able to learn from their professional development opportunities (Richardson, 1996). (p. 485)

When preservice teachers have professional development opportunities for authentic literacy, based on Vygotsky's (1978) concept of the zone of proximal development, in which students are able to internalize from scaffolded experiences, and the research of Wang and Odell (2002), and extending the concept to reading maturity, it was reasonable to use the *Reading Maturity Survey* as an indicator of what preservice teachers are able to learn from their professional development opportunities.

Facilitating literacy discussions is something that few preservice teachers have the opportunity to practice (Groenke, 2008). Having implemented a carefully designed and prolonged treatment of technology integration in working with future teachers, Pierson (2004) concluded that true integration of technology during their teacher preparation experience will prepare future teachers to meet the challenges that come with the current demands of teaching which include using technology to facilitate communication. The teacher's ability to connect with students is enhanced through the use of technology. Carroll and Bowman (2000) and Medicus and Wood (2000) discussed technology's

potential to engage students more actively with texts and the writing process. In analyzing preservice English teachers' perceptions and classroom practices, Pasternak (2007) found that preservice teachers needed opportunities to experiment with and incorporate technology usage beginning as early as their methods classes for technology to progress and to be considered as a regular part of the curriculum. According to Albion and Ertmer (2002) teachers' beliefs about teaching are likely formed by personal experiences both as a student and later when teaching. In addition the expectations of their peers as well as learners they are working with can also have an effect on teaching beliefs. For teachers to implement widespread use of technology in the classroom, they must believe that it will contribute to student learning (Lambert & Gong, 2010) as well as have experienced it themselves. Based on the above research when literacy discussions and technology practice are incorporated into the learning experiences of preservice teachers they are more likely to subsequently incorporate them into their future teaching.

Wolf, Carey, and Mieras (1996) stated that preservice teachers must be involved with real children in addition to learning about them through books and articles. Learning from their coursework as well as by observing their professors in action, preservice teachers are learners who, in turn, become teachers applying what they have learned and observed in their classroom teaching (Solvie & Kloek, 2007). In working with preservice teachers doing their internship, Holt, McAllister and Ingram (2001) found that through project learning activities preservice teachers developed their abilities to use technology and were effective in significantly enhancing classroom instruction and student learning. Bull et al (2008) suggest that preservice teachers use their knowledge of social media and various technologies in collaboration with teacher education faculty who possess the

expertise in content and pedagogy to mutually find ways to incorporate and adapt social media and communication technologies for classroom use. The ability to teach comes not only from taking classes but also from firsthand experience. Dewey in Dewey, Boydston and Gouinlock (1984), when referring to teachers, wrote, "He has to see on his own behalf and in his own way the relations between means and methods employed and results achieved. Nobody else can see for him," (1984, (p. 57). As Woodcock (2009) stated, "In order to teach students how to do something, teachers need to be doing it themselves." (p.95). Using technology to help facilitate literacy related communications with students, can provide preservice teachers with additional opportunities to gain information about students' literacy levels which can in turn further develop preservice teacher literacy knowledge.

Wold, Grisham, Farnan, and Lenski, (2008) examined the research on critical issues in literacy teacher education during the past 20 years and identified a total of 10 topics that were separated into three overall categories: candidate qualifications, program quality and rigor, and results and verification. The category of candidate qualifications included the topic of practicing skills and refining them in a systematic method as a way of developing literacy expertise. They included fieldwork, along with literacy teacher education courses, under the category of program quality and rigor. These ideas were incorporated three years later into Florida's Educator Accomplished Practices (FEAPs; 2011). The FEAPS set the foundational standards for the state's teacher preparation programs with literacy related concepts emphasized. Having the opportunity to engage in authentic literacy experiences with students helps give preservice teachers the opportunity to practice and develop their literacy skills.

Statement of the Problem

It is important to conduct this study because there is a need for students to develop a high level of literacy skills for today's technological society. It is important that preservice teacher preparation include opportunities to gain technological content knowledge, so that the preservice teachers may teach literacy at high levels to their future students. While there has been research on student gains while engaging in the exchange of letters with adults there has been no research on the effects on preservice teachers of preservice teachers engaging in authentic literacy experiences with students. When there are diverse populations of students the issue of best practices in literacy teacher preparation is an area for study.

The research on contextualized activity and assisted learning with students (Englert & Palincsar, 1991), meaningful enterprise (Raphael & Englert, 1989), and the results of the authentic literacy activities with adult learners (Duke et al., 2006), necessitates that preservice teachers engage in authentic literacy experiences. In addition critical issues in literacy teacher education (Wold et al, 2008), and the need for candidates to develop literacy expertise (Florida Educator Accomplished Practices, 2011), also necessitates that preservice teachers engage in authentic literacy experiences.

Purpose of the Study

Providing preservice teachers, adults themselves, with the opportunity to engage in an authentic literacy experience model such as Book Buddies with Hispanic fourth grade students would suggest that preservice teachers, as adult learners may benefit from an authentic context for practicing their literacy teaching skills.

The purpose of this study was to examine the effect of authentic literacy experiences as Book Buddies with Hispanic fourth graders on preservice teachers' literacy content knowledge and reading maturity. To address the need to offer preservice teachers opportunity to develop their literacy content knowledge and pedagogical knowledge and at the same time enhance their reading maturity, an authentic activity was arranged to exchange via email technology letters about books both they and fourth grade Hispanic students had read. By communicating with real students, the preservice teachers experienced the authentic writing and ideas that students were able to produce.

Research Questions

Question 1: Do preservice teachers who have engaged with authentic literacy experiences with Hispanic fourth graders as Book Buddies exhibit higher mean scores on the subcategory Literacy Content Knowledge (LCK) of *The Survey of Preservice Teachers' Knowledge of Teaching and Technology* than preservice teachers who do not experience being Book Buddies?

Question 2: Do preservice teachers who have engaged with authentic literacy experiences with Hispanic fourth graders as Book Buddies exhibit higher mean scores on the *Reading Maturity Survey* (RMS) than preservice teachers who do not experience being Book Buddies?

Significance

This study extends the research completed by Teale et al (2007) in the *In2Books* pen pal program which focused on children, to focus on preservice teachers as adult learners and Book Buddies. This study may be significant to faculty and administrators

in Colleges of Education in terms of the development and use of authentic literacy experiences for preservice teachers.

Delimitations

The two delimitations for this study were as follows: The first was that the study was conducted during one semester in which preservice teachers were taking the third of four required reading courses. The delimitation of the preservice teachers being the ones taking the third of four required reading courses was set because there needed to be a common ground amongst the participants. By all being enrolled in the third of four required courses then they had all previously satisfied the requirements of the first two reading courses. By having satisfied the requirements of the first two reading courses they were expected to have the same knowledge base at the beginning of this study. The second delimitation was that there were two specific classes of Hispanic fourth graders. The delimitation of the two specific classes of Hispanic fourth graders was generated by the number of preservice teachers enrolled in the experimental group. If there had been additional preservice teachers that chose to participate in the study then the researcher would have made arrangements for additional fourth graders to participate as fourth grade book buddies.

Definitions of Terms

Authentic literacy tasks. As defined by this researcher authentic literacy tasks are when the preservice teachers and the fourth graders establish a dialogue when a preservice teacher writes a letter to a real reader, a student, and the student responds to that letter.

What made them authentic literacy tasks was the exchange of letters between the preservice teachers and fourth grade students.

Hispanic Students. Hispanic, fourth-grade students whose native language is Spanish as verified by the Miami-Dade County Public Schools "Home Language Survey", Form FM-5196ESH Rev. (09-09) completed by parents at registration and maintained in school records.

Literacy.   For this study the researcher has selected the implicit definition of literacy presented by Cunningham (2000) that consists of three parts "(a) the ability to engage in some of the unique aspects of reading and writing, (b) contextualization to some extent within the broad demands of the society, and (c) some minimal level of practical proficiency" (p. 64).

Literacy Content Knowledge. As defined by this researcher literacy content knowledge is having knowledge about literacy, using a literary way of thinking and knowing different ways and strategies of developing ones' understanding of literacy.

Literacy Teacher Education. As defined by this researcher, based on Cunningham's (2000) implicit definition of literacy, literacy teacher education is education provided to preservice teachers that will enable them (a) to engage in and subsequently be prepared to teach aspects of reading and writing, (b) to contextualize and subsequently be prepared to teach the concept of contextualization based on society's demands and (c) to reach at least a minimal level of practical proficiency in teaching literacy.

Low Socio-Economic Status (SES). Low SES was defined in this dissertation as qualifying for free or reduced lunch and attending a school that is a part of a Title I schoolwide Program. According to the U. S. Department of Education a school is

eligible to participate in a Title I Schoolwide Program when the poverty level (determined by free and reduced meals counts) Aid for Dependent Children [AFDC], census, or Medicaid is at or above 40%. The school attended by the fourth graders in the study was at a 91% free and reduced meals status.

Preservice teachers. Preservice adults enrolled in the third of four reading courses working towards achieving teacher certification.

Reading Maturity. Reading Maturity is defined by the six categories of The Reading Maturity Survey. The six subcategories are: reading attitudes and interests; reading purposes; reading ability; reaction to and use of ideas to apprehend higher-order literacy; kind of materials read; and personal adjustment to reading/transformational reading. (Thomas, 2001).

Traditional Courses. As defined by this researcher, traditional courses are the courses that all preservice teachers studying to become elementary education teachers are required to take as a part of their course of study. The traditional courses at the university where the study was conducted include RED 3313 Language and Literacy Development, RED 4150 Content and Methods of Teaching Beginning Literacy, RED 4311 Content and Methods of Teaching Intermediate Literacy and RED 4110 Content and Methods of Teaching Literacy in Schools.

Summary

In summary, this chapter explained the background and theory, statement of the problem, goals of this study, research questions, significance, delimitations, definition of terms and summary. The next chapter reviews the literature related to the topic.

CHAPTER II

LITERATURE REVIEW

This chapter will review the literature related to defining literacy, literacy teacher education and authentic literacy activities, improving literacy teacher education, expectations for preservice teacher training, incorporating higher level questions, the use of authentic tasks in teacher preparation, what preservice teachers have learned and subsequently implemented, measuring changes in preservice teachers' pedagogical and content knowledge, and reading maturity.

Defining Literacy, Literacy Teacher Education and Authentic Literacy Activities

Working on parameters that must be included in definitions of literacy, Bormuth (1973-1974) indicated that a true definition of literacy had not been established at that point in time, stating "Rather each definition must be designed for the purpose to which it is to be put, and its correctness may be judged only in terms of how well it serves that purpose" (p. 19). In limiting a definition, Bormuth goes on to state that "In the broadest sense of the word, *literacy*, is the ability to exhibit all of the behaviors a person needs in order to respond appropriately to all possible reading tasks" (p. 22). Based on a literature search, subsequent references to literacy only included references to responding to reading until the beginning of the twenty-first century.

Based on a current literature search, it was not until the year 2000 that the aspect of writing was included in references to literacy. In writing about possible definitions of literacy in the new millennium the implicit definition of literacy presented by Cunningham (2000) consists of three parts "(a) the ability to engage in some of the unique aspects of reading and writing, (b) contextualization to some extent within the

broad demands of the society, and (c) some minimal level of practical proficiency" (p. 64). Cunningham's (2000) implicit definition of literacy is the one that this researcher has adapted to arrive at a definition of literacy in teacher education, because the researcher could not specifically locate an existing definition of literacy teacher education.

Literacy Teacher Education as defined by this researcher, based on Cunningham's (2000) implicit definition of literacy, is education provided to preservice teachers that will enable them (a) to engage in and subsequently be prepared to teach aspects of reading and writing, (b) to be able to contextualize and subsequently be prepared to teach the concept of contextualization and (c) to reach at least a minimal level of practical proficiency in teaching literacy.

Regarding authentic literacy activities Duke, Purcell-Gates, Hall & Tower (2006) provide an operational definition stating

> Conceptualize authentic literacy activities in the classroom as those that replicate or reflect reading and writing activities that occur in the lives of people outside of a learning-to-read-and-write context and purpose. Each authentic literacy activity has a writer and a reader – a writer who is writing to a real reader and a reader who is reading what the writer wrote (p. 346).

The current study provided the preservice teachers and the Hispanic fourth graders with authentic literacy activities as they read books and exchanged letters regarding the books that they have both read.

Improving Literacy Teacher Education

This section addresses the literature on improving literacy teacher education. The studies by Tebo-Messina and Blough (1989) and Teale, Zolt, Yokata, Glasswell and Gambrell (2007) were directed at improving K-12 students' writing but lead to this study. In an effort to motivate students to write and to change their attitudes towards writing, Tebo-Messina and Blough (1989) devised a project to give students pen pals, or key pals (since technology was used), as a real audience, and found positive effects. Teale, Zolt, Yokota, Glasswell and Gambrell (2007) studied the effects of getting students "In2" books by providing them with adult pen pals in an effort to develop high-level literacy. They found that students scored significantly higher on standardized reading tests as a result. The classroom teacher in the current study, the researcher, participated in this program and wondered about the effects on preservice teachers if they were paired with her fourth grade students. Other studies have examined the effects of preservice teachers as pen pals to elementary students and found that the relationships made a difference to the children as children learned about letter writing and reading in an authentic context writing real letters to real people, (Berril & Gall, 1999). Children also gained confidence as they learned to take turns speaking during literature circles conducted with their preservice teacher (Day, 2009) but neither study examined the effects on preservice teachers as this study has done.

Changes in learning environments, demographics, and technology have created a need to explore different methods for improving literacy teacher education. In an effort to go beyond the industrial-era model of schooling, in which there is a teacher and

students within the confines of a school building, there is a need to connect students to adult role models in the community (Dede, 2010). According to the U.S. Department of Education's 2010 draft of the *National Educational Technology Plan*, a 21st century model of formal education will prepare students for different learning environments of the future.

From a social perspective (Vygotsky, 1978), knowledge construction is a social process and begins with interaction with parents and teachers. Cognitive processes are context specific. This means that students learn best when they are allowed to engage in authentic, contextualized activities (Mayer, 1996). From a sociocultural perspective on reading and writing, we know that meaning is constructed through social negotiation that depends on supportive interaction with others. Students learn the cognitive processes related to reading and writing best through contextualized activity and assisted learning (Englert and Palincsar, 1991) and meaningful enterprise rather than learning in a mechanistic way (Raphael and Englert, 1989).

In discussing the opportunity of redefining literacy instruction Schmoker (2007) referred to authentic literacy as the "ability to read, write and think effectively" (p. 488) and indicated that an emphasis on authentic literacy skills should be at the top of the education reform agenda. According to Schmoker emphasizing authentic literacy skills could bring about many positive results including a narrowing of the achievement gap, intellectual development and higher test scores. Schmoker went on to state that "Changing to the pursuit of authentic literacy may be the simplest, most productive, and most enjoyable change we could make in our efforts to reduce the achievement gap and

prepare students for life and learning" (p. 492). Duke, et al (2006) and Schmoker (2007) concur on the need for authenticity in literacy activities.

Studying the reading habits and attitudes of elementary preservice teachers Applegate and Applegate (2004) found that the elementary preservice teachers in the research study were "unenthusiastic readers" according to the results of two separate studies. According to the results in the first study 54.3% of the preservice teachers were "unenthusiastic readers" and in the follow-up study 48.4% overall were in the same category. Due to these results Applegate and Applegate (2004) began to refer to what they call the "Peter Effect as the condition characterizing those teachers who are charged with conveying to their students an enthusiasm for reading that they do not have." (p. 556). Applegate and Applegate indicate that institutions preparing teachers have "a serious obligation to address the nature of their students' attitudes toward reading." (p. 561) because the attitudes that teachers project towards reading affects the reading habits and attitudes of their students. They went on to discuss how the preservice teachers will ultimately display those unenthusiastic attitudes towards their future students if something is not done to help reverse that trend.

As one of several ways of addressing the situation of the unenthusiastic preservice teacher readers that they found in their studies Applegate and Applegate (2004) indicate that institutions preparing preservice teachers have an obligation to provide them with "experiences and models that will promote their own engagement in reading." (p. 562).

Nathanson, Pruslow and Levitt (2008) used the Literacy Habits Questionnaire developed by Applegate and Applegate (2004) to survey students who were enrolled in

their university's graduate school of education. The results of their research indicated that only 47% of the students that participated considered themselves as enthusiastic or highly enthusiastic readers which led the researchers to also have concerns about "The Peter Effect" discussed by Applegate and Applegate (2004).

Nathanson, Pruslow and Levitt (2008) suggest including discussions of aliteracy, being able to read but not being interested in doing so, as a part of college courses as a way of bringing the problem into the open and beginning to deal with it.

In an expanded follow-up study across multiple universities on the reading habits and attitudes of 1,025 college students which included a subsection of 348 education majors or preservice teachers Applegate, Applegate, Mercantini, McGeehan, Cobb, DeBoy, Modla and Lewinski (2014) found that overall, education majors that included elementary to secondary in this study, were more enthusiastic readers than their classmates not studying to be teachers. The reading enthusiasm level of the preservice teachers was 51.1% compared to the 44.3% for the non-education majors. While Applegate, et al (2014) indicated that they found some reasons for encouragement due to the overall rise in preservice teachers' reading enthusiasm, as compared to their previous studies, they also state that the huge numbers of unenthusiastic readers are a continuing cause for concern that should be addressed by the education community. According to Applegate, et al (2014) finding ways to develop enthusiastic readers may be the way to break out of the "influence of the Peter Effect" (p. 200) which as previously referenced is the situation where one cannot give what one does not have. In the case of preservice

teachers it refers to being unable to help students develop an enthusiasm for reading that they, the preservice teachers, do not themselves have.

The current study included the opportunity for preservice teachers to correspond with diverse fourth graders as they communicated about the books that both groups were reading. Participation in this study provided preservice teachers with the opportunity to learn through participation in a set of contextualized activities with fourth grade students in experiences that promoted engagement in reading.

Expectations for Preservice Teacher Training

The current study provided preservice teachers with the opportunity to communicate with fourth grade students by means of e-mail correspondence that was conducted throughout the study, providing opportunities for written literacy discussions.

Facilitating literacy discussions is something that few preservice teachers have the opportunity to practice (Groenke, 2008). Corresponding with the diverse, fourth-grade students and using comprehension and writing strategies to enhance real student learning, helps preservice teachers learn to teach with meaning and authenticity. Preservice teachers' ability to connect with students was enhanced through the use of e-mail.

Hinchman and Lalik (2000) examined their own practices as literacy teacher educators who wanted their students to develop a sense of confidence so they could handle varied situations as they arose in literacy education. By examining their teaching approaches in a variety of ways, they identified "power-knowledge formations" which considered the levels of equity and fairness in their discourse in their representations of literacy as they taught literacy skills to their students. According to Albion and Ertmer

(2002) teacher's beliefs are formed by experiences and later reinforced by interactions with other professionals as well as by the expectations of the students in their classrooms. Wolf, Carey, and Mieras (1996) believe that preservice teachers must be involved with real children – moving beyond only reading about them in books and articles.

Learning from their coursework as well as by observing their professors in action, preservice teachers are learners who, in turn become teachers applying what they have learned and observed in their classroom teaching (Solvie & Kloek 2007), while Shoffner (2009) noted the importance of technological content knowledge.

According to Dewey in Dewey, Boydston and Gouinlock, (1984) knowing how to teach comes not only from taking classes but also from firsthand experience: "He has to see on his own behalf and in his own way the relations between means and methods employed and results achieved. Nobody else can see for him," (p. 57). As Woodcock (2009) states, "In order to teach students how to do something, teachers need to be doing it themselves" (p. 95). As one of several ways of addressing the situation of the unenthusiastic preservice teacher readers that they found in their studies Applegate and Applegate (2004) indicate that institutions preparing preservice teachers have an obligation to provide them with "experiences and models that will promote their own engagement in reading." (p. 562).

Wold et al.'s (2008) examination of critical issues in literacy teacher education during the previous twenty years identified a total of ten topics which were separated into three overall categories: candidate qualifications, program quality and rigor, and results and verification. The category of candidate qualifications included the topic of practicing skills and refining them in a systematic method as a way of developing literacy expertise.

Fieldwork, along with literacy teacher education courses, were included under program quality and rigor. (p. 12)

Three years later Florida's Educator Accomplished Practices (2011) set the core standards forming the foundation for the state's teacher preparation programs. It included "Instructional Delivery and Facilitation." It specifies that "The effective educator consistently utilizes a deep and comprehensive knowledge of the subject taught to…"Employ higher-order questioning techniques" (U.S. Department of Education, (6A-5.065 The Educator Accomplished Practices. 2010).

In studying the topic of preservice teachers as writers Morgan (2010) discussed the issue that to teach writing well preservice teachers need to draw on their experiences to support their teaching. Morgan also recommended the idea of preservice teachers having writing experiences similar to that of their future students. According to the results of Morgan's study the preservice teacher participants found that writing like their students would be expected to write was very beneficial for them in helping them understand what children struggle with as they write.

In researching the topic of writing teacher education Morgan and Pytash (2014) conducted a review of 20 years' worth of the research literature on preparing preservice teachers to become teachers of writing. During their research Morgan and Pytash found twelve studies dealing with preservice teachers interacting with students and their writing. According to Morgan and Pytash in reviewing the findings across all twelve studies, they found that researchers had indicated that providing preservice teachers with opportunities to interact with students or with students' written work was an essential component in teaching preservice teachers to become teachers of writing.

The current study not only allowed preservice teachers to write like their future students' could be expected to write; it also provided them with multiple opportunities to read and review authentic student writing written in response to their, the preservice teachers', authentic writing.

Incorporating Higher Level Questions

The Florida Educator Accomplished Practices (FEAP) are currently existing requirements for incorporating higher-order questioning techniques to meet educational goals. In the current study, preservice teachers used Tarlinton's (2003) Revised Bloom's Taxonomy, which included the work of Pohl (2000), as support when creating higher order open-ended comprehension questions in the levels of analyzing, evaluating and creating when composing their book related letters to their fourth grade Book Buddies. The book related letters provided an authentic literacy activity for the preservice teachers to practice incorporating higher-order questioning techniques in their practice.

The Use of Authentic Tasks in Teacher Preparation

This section addresses the use of authentic tasks in teacher preparation. The use of authentic tasks facilitated communication, problem solving, and critical thinking in written language acquisition (Charron, 2007) and was a part of effective classroom skill and strategy instruction (Mohan, Lundeberg and Reffitt, 2008). One authentic task was the use of student-only email which provided academic benefits and cultural exchange opportunities for students from all over the world (Demski, 2008). Studying factors that influenced children in a literacy experience with preservice teachers, Day's (2009) results

suggest that children formed significant relationships, gained personal advocates as well as gaining confidence while participating in and managing literature circles. Monthly face-to-face literature circle meetings were held, either at the university or at the elementary school, during the preservice teachers scheduled class time. Thus, authentic tasks with personal relationships have been shown to support student literacy growth.

In exploring the use of authentic literature with adult learners Nixon-Ponder and Marshall (1996) shared that adult literacy teachers in Ohio were excited and amazed with the changes in their students behaviors. The behaviors they were referring to included attending class on a more regular basis, going to the library on their own time, actively discussing book plots and characters as well as relating those plots and characters to their own personal lives. Nixon-Ponder and Marshall went on to share that what was causing the differences in the students was that the adult literacy teachers had started implementing the practice of having their adult students reading authentic literature. Reading authentic literature was meaningful for the adult learners because according to Ponder-Nixon and Marshall "it connects adult learners with others' feelings and experiences while broadening their view of the world."

In sharing about using the writing of letters to support literacy LeVine (2002) indicated that meaningful communication is ultimately the purpose of reading and writing and that the writing of letters is an authentic form of written communication. Discussing ways of making writing authentic Daniels (2007) wrote about the implementation of a literacy café with students. Daniels stated that "Writing is authentic when the writer feels compelled to share it or when he or she has a personally relevant purpose". (p. 17)

Daniels found that students were motivated to write when taught that writing is not something just for school that it is also used in the real world.

In discussing the case for authentic tasks in content literacy, Parsons and Ward (2011) indicated that the design and implementation of authentic tasks is a way of providing students with experiences which help them see the relevance in their academic work. They also indicate that authentic tasks can be help build students' vocabulary.

Discussing the concept of multiple literacies, using and learning from more than one source, Jewett (2011) pointed out that literacy learning does not happen in isolation from the rest of our lives, it is a part of it. Jewett continued indicating that it is necessary to embed authentic literacy practices in schools. Embedding authentic literacy practices in schools according to Jewett would support students and help make connections between what students learn and use in their daily out of school lives and what they are learning in school. Embedding authentic literacy practices in teacher preparation would support preservice teachers and help them make connections between what they are learning in their methods courses and what they will be using once they are actually teaching.

Discussing the importance of mapping today's literacy landscapes and suggesting steps for immediate implementation, Campbell and Parr (2013) indicated that learning should be taken beyond classroom walls and that teachers should plan for and help establish connections between in-school and out-of-school literacies and ways of learning. Taking learning out of the classroom for preservice teachers and helping them

establish connections between in-school and out-of-school literacies and ways of learning would help make preservice teachers better prepared to teach.

In discussing the concept of literacy on the move Curtis (2013) wrote about having students writing and sharing through authentic activities such as asking students to document their journeys while travelling and then sharing that information with their classmates. Curtis also discussed how new questions generated from the writing and sharing helped engage students in critical thinking. According to Curtis the writing, subsequent reading, as well as the discussions generated from the subsequent questions were all examples of authentically applying literacy skills as a way of engaging children in reading activities. While Curtis was referring to working with children instead of preservice teacher the concept of authentically applying literacy skills also applies to the preservice teachers.

In studying what works for adults with limited literacy Huang (2013) indicated that if adult learners found the materials they were learning were directly applicable to their lives, then they were motivated to learn. Literacy activities that are directly applicable to their lives are authentic literacy activities. While preservice teachers are not considered to have limited literacy the concept of using authentic literacy activities to assist in promoting learning does apply.

The current study paired preservice teachers with diverse Hispanic, fourth-graders in contextualized activities which included reading by both groups and correspondence between the two groups. These authentic literacy tasks provided the

preservice teachers with the opportunity to develop relationships with the fourth-grade students.

What Preservice Teachers Have Learned and Subsequently Implemented

Bryan and Abell (1999) were looking for answers on how the development of professional knowledge by preservice teachers is affected by their experiences while in a teacher education program. Examining preservice teachers' reading beliefs and practices Van Sluys, Laman, Legan and Lewison (2005) found that as individuals forged new understandings they also realized that they could use their new knowledge to help them when encountering new situations. Preservice teachers serving as pen pals to elementary school students learned the possibilities for high level writing when students engage in authentic writing experiences on a daily basis (Moore and Seeger 2009). Studying the influence of a university-school partnership on the literacy instruction efficacy of preservice teachers, Johnson (2010) found that preservice teachers were much more likely to use methods that they had seen in action.

Measuring Changes in Preservice Teachers' Pedagogical And Content Knowledge

Wanting to look, among other things, at changes in preservice teachers' pedagogical and content knowledge, the purpose of Schmidt, et al's (2009/2010) study was to "develop and validate an instrument designed to measure preservice teachers' self-assessment of their Technological Pedagogical Content Knowledge (TPACK) and related knowledge domains included in the framework." (p. 129). Ultimately the work of Schmidt, et al (2009/2010) led to the Survey of Preservice Teachers' Knowledge of Teaching and Technology (SPTKTT) referenced by Abbitt (2011) as among the more

developed tools for assessing preservice teachers' knowledge of many areas including technology and pedagogy.

Reading Maturity

The final section of the literature review is on the concept of using preservice teachers' reading maturity as an indicator of their readiness to become literacy educators. Another element in the development of preservice teachers as they work on developing their readiness to teach literacy is that of reading maturity. Thomas (2001), expanding on the work of Gray and Rogers (1956), developed the *Reading Maturity Survey* and has identified six elements or categories that reflect a reader's reading maturity. The six categories in the Reading Maturity Survey are "reading attitudes and interests; reading purposes; reading ability; reaction to and use of ideas to apprehend (higher-order literacy); kind of materials read; and personal adjustment to reading/transformational reading" (Thomas, 2001, p. 59-60). Discussing the use of the Reading Maturity Survey as a part of evaluating a teacher education program, Theiss, Philbrick and Jarman (2008-2009) questioned whether there is a relationship between preservice teachers' reading maturity and other competency measures. The current study looked at relationships between preservice teachers' results of pre-test / posttest administration of the Reading Maturity Survey because the researcher wondered if there is a connection between the two indicators as a measure of preservice teacher preparedness to teach literacy.

Theiss, Philbrick and Jarman (2008-2009) questioned whether literacy instruction affects the reading maturity of preservice teachers indicating that increased growth in

reading maturity may lead to increased critical thinking abilities, reflection and transformed teaching practices on the part of the preservice teachers.

In looking at the topic of mentored learning to teach, Wang and Odell (2002), indicated that "Although the direct relationship between teachers' beliefs and their teaching practice is not consistently identified (Wideen, Mayer-Smith, & Moon, 1998), research on both preservice teachers and inservice teachers suggests that their personal dispositions toward teaching have a strong impact on what they are able to learn from their professional development opportunities" (Richardson, 1996, p. 485). Based on Vygotsky's (1978) concept of the zone of proximal development's internalization / externalization process, the research of Wang and Odell (2002), and extending the concept to reading maturity, it is reasonable to use the Reading Maturity Survey as an indicator of what preservice teachers are able to learn from their professional development opportunities.

As originally indicated this chapter has included a review of the literature on defining literacy, literacy teacher education, and authentic literacy activities, improving literacy teacher education, expectations for preservice teacher training, incorporating higher level questions, the use of authentic tasks in teacher preparation, what preservice teachers have learned and subsequently implemented, measuring changes in preservice teachers' pedagogical and content knowledge, and reading maturity. This review now leads us to the purpose of this study which was to examine the effect of authentic literacy experiences as Book Buddies with Hispanic, fourth graders on preservice teachers' literacy content knowledge, and reading maturity. This study may contribute to knowledge about the effect of preservice teachers authentic literacy experiences on the

preservice teachers' literacy content knowledge, and reading maturity. This study

extended the research completed by the *In2Books* pen pal program Teale et al, (2007),

which focused on children, to focus on preservice teachers as adult learners and Book

Buddies. This study contributed to the literature on what happens when preservice

teachers learn incorporating a social perspective (Vygotsky, 1978), contextualized

activity and assisted learning (Englert and Palincsar, 1991), meaningful enterprise rather

than learning in an abstract way (Raphael and Englert, 1989), taking into account

Dickinson and Summers (2010, p. 112) findings that "learning tasks need to consider

transferability into practice" as well as the Florida Educator Accomplished Practices

(2011) indicators and standards for teacher preparation programs in achieving educational

goals, and the findings of previously implemented effective practices.

CHAPTER III

Methods

The researcher used the procedures discussed below to investigate the effect of

participating in Book Buddies, an authentic literacy experience, with Hispanic fourth

graders on preservice teachers' literacy content knowledge, and reading maturity. The

chapter is organized into the following sections: instrumentation, participants, research

questions and hypotheses, procedures, data collection, and data analysis used in the study.

This was a quasi-experimental, pretest-posttest comparison study. It examined

whether participating in Book Buddies with Hispanic fourth graders influenced

preservice teachers' literacy content knowledge (LCK), and the reading maturity as

measured by the subcategory Literacy Content Knowledge of the *Survey of Preservice Teachers' Knowledge of Teaching and Technology* (SPTKTT) and by the *Reading Maturity Survey* (RMS), respectively.

Instrumentation

The SPTKTT specifically designed for preservice teachers majoring in elementary or early childhood education and the *Reading Maturity Survey* were used to collect data in this study. Schmidt et al.'s (2009/2010) study to "develop and validate an instrument designed to measure preservice teachers' self-assessment of their Technological Pedagogical Content Knowledge (TPACK) and related knowledge domains included in the framework" resulted in the creation of the SPTKTT (p. 123). Having deleted problematic items after the instrument was reviewed Schmidt et al. (2009/2010) ran a new factor analysis on the revised instrument and "the resulting TPACK instrument exhibited strong internal consistency reliability" (p. 131). The updated reliability scores for internal consistency (alpha) ranged from .78 to .93 for the seven TPACK subscales (Schmidt et al., 2009/2010).

Reviewing current methods and instruments being used to measure TPACK, Abbitt (2011) stated, "the Survey of Preservice Teachers' Knowledge of Teaching and Technology is among the more mature tools designed specifically based on the TPACK framework for assessing knowledge of preservice teachers" (p. 290). Abbitt went on to say, "the survey (SPTKTT) has been demonstrated to be valid and reliable based on the work of Schmidt et al (2009/2010) and provides an efficient tool for research and evaluation relating to TPACK" (p. 291). In this study, Questions 1-46 of the *Survey of*

Preservice Teachers' Knowledge of Teaching and Technology (Schmidt et al., 2009)

were presented in order with categories removed. The *Reading Maturity Survey*

(previously *The Reading Survey* [Thomas, 2001]) is a simple self-report survey

instrument designed to assess reading maturity. The survey contains 60 questions, 10

from each of the six subcategories: reading attitudes and interests; reading purposes;

reading ability; reaction to and use of ideas to apprehend higher-order literacy; kind of

materials read; and personal adjustment to reading/transformational reading. Each

question is answered on a 5-point Likert scale. The score for the *Reading Maturity*

Survey, which can be treated as interval scale data, is the mean of the 60 item scores for

each individual. The subcategory scores for each of the six areas of reading maturity can

also be generated. Split-half reliability was calculated in an earlier study (Thomas, 2001),

when it was given to 82 college students, using the six subcategory scores of the

instrument. The correlation between halves was .85 and when the Spearman-Brown

formula was used to estimate the reliability coefficient for the whole instrument, it was

.92. It has no time limits but is estimated to take approximately 20 minutes to complete.

Permission to use The Reading Maturity Survey was obtained from author Matt Thomas.

Regarding construct validity: According to Thomas (2013) "As the construct has

emerged over the past 50 years, relatively few reading scholars have employed

definitions or working descriptions addressing the concept of reading maturity." (p. 148).

Thomas goes on to state

Casale (1982, pp. 4-5) extrapolated the following definition from Gray and

Rogers (1956), the "chief populists of the term:" Reading maturity is a state of

reading ability typically reached in adult life as a product of overall development, instruction, experience, and years of extensive reading. Its chief features are accurate, high-level comprehension, objective thinking, and the ability to speak back fluently and analytically that which has been read with little or no prompting. (pp 148-149)

Using the set of subcategories identified by Gray and Rogers (1956) and influenced by the works of others including Casale and Manzo, in 2001 Thomas identified the following "six categories of reading maturity: reading attitudes and interests; reading purposes; reading ability; reaction to and use of ideas to apprehend (higher-order-literacy); kind of materials read; and personal adjustment to reading/transformational reading" (Thomas, 2001, p. 150)

On the topic of "How can progress toward reading maturity be measured or monitored?" Thomas (2013) stated that the construct of reading maturity is still in the process of being defined and references the work of Casale (1982). Casale's work (as cited in Thomas, 2013, p. 152) states the classic paradox of not adequately measuring a construct for lack of construct definition, and not defining a construct for lack of adequate measurement, have challenged efforts to define and measure reading maturity.

Thomas' (2001) *Reading Maturity Survey* and (2013) "working description of the reading maturity construct" (p. 157) that includes the six aforementioned categories of reading maturity are a step in the right direction towards addressing the current situation of a lack of specific construct validity due to a lack of construct definition.

Participants

Preservice Teacher Participants

The participants, and focus of the study, were obtained using criterion sampling. The sample was made up of non-probabilistic convenience groups, 43 ($n = 33$ experimental, $n = 10$ comparison) undergraduate preservice teachers (PSTs) who were enrolled in the third of four required reading education courses in their programs at a state research university in the southeastern part of the United States. Preservice teachers chose to be in the experimental or comparison group based on the opportunity to earn extra credit points (experimental = 30 points, comparison = 15). Preservice teachers in both the experimental and control groups received the same coursework and instruction from their professors.

Fourth Grade Student Participants

Two pre-existing classes each of 19 fourth-grade students in a large public school district in the same area as the university, the researcher's students and another fourth grade class, were participants. The fourth grade student participants were all Hispanic, fourth-grade students whose native language is Spanish as verified by the Miami-Dade County Public Schools "Home Language Survey", Form FM-5196ESH Rev. (09-09) completed by parents at registration and maintained in school records. All of the fourth graders were at a low socio-economic status (SES) as determined by their free and reduced lunch application status based on school records.

No data were collected from the fourth-grade students. There were no control or experimental groups for the fourth grade students because they were not the focus of the study. The training received by the students in order to participate in this study consisted of reviewing the friendly letter format, reminders to read their books and letters carefully as well as reminders to answer the questions received from their preservice teachers as thoroughly as possible.

Research Questions and Hypotheses

Question 1: Do preservice teachers who have engaged with authentic literacy experiences with Hispanic fourth graders as Book Buddies exhibit higher mean adjusted scores on the subcategory Literacy Content Knowledge (LCK) than preservice teachers who do not experience being Book Buddies? **Hypothesis 1:** Preservice teachers who have authentic literacy experiences with Hispanic fourth graders as Book Buddies will exhibit higher mean adjusted scores on the Literacy Content Knowledge (LCK) subcategory of the *Survey of Preservice Teachers' Knowledge of Teaching and Technology* (SPTKTT) posttest than preservice teachers who do not experience being Book Buddies when controlling for the SPTKTT pretest.

Question 2: Do preservice teachers who have engaged with authentic literacy experiences with Hispanic fourth graders as Book Buddies exhibit higher mean adjusted scores on the *Reading Maturity Survey* (RMS) than preservice teachers who do not experience being Book Buddies? **Hypothesis 2**: Preservice teachers who have authentic literacy experiences with Hispanic fourth graders as Book Buddies will exhibit higher

mean adjusted scores on the *Reading Maturity Survey* (RMS) than preservice teachers who do not experience being Book Buddies as measured by the RMS posttest when controlling for the RMS pretest.

Procedures

Procedures for the Experimental Group

Pretest/ posttests of SPTKTT and the RMS were given before and after the treatment of the study to the preservice teachers in the experimental Book Buddies group. Information from the SPTKTT pretest- posttest was used to determine changes in preservice teachers' literacy content knowledge. Information from the Reading Maturity survey pretest-posttest was used to determine changes in reading maturity.

Preservice teachers in the experimental group wrote a letter of introduction to students using the friendly letter sample provided to them by the researcher, received a letter of introduction from the student, read the four selected books, three narrative and one informational text (see Appendix D for a list of book titles and authors) and corresponded about the books with the student via electronic mail. A total of four books, three narrative and one informational text, provided by the researcher; were read and a total of five letters per participating preservice teacher were exchanged as a part of the study. (See Appendix E for the Preservice Teachers as Book Buddies Timeline for additional information.)

The researcher provided the experimental group of preservice teachers with a set of question stems (see Appendix F for the new revised upper levels of Bloom's

Taxonomy) analyzing, evaluating and creating to use as support when creating higher

order open-ended comprehension questions. The experimental group included higher

order, open-ended comprehension questions in their book related letters to the fourth

grade students. The added practice of creating higher order open-ended comprehension

questions as a part of an authentic literacy experience with the fourth graders provided

preservice teachers with authentic practice and reasons for creating higher order

comprehension questions. In addition later being able to see first-hand how the fourth

graders responded to their questions also gave the preservice teachers authentic examples

of how the fourth graders had understood and responded to their questions. Both the

creating of the questions and the reading of the responses to the questions provided the

experimental group of preservice teachers with additional opportunities to further develop

their literacy content knowledge as well as giving them a glimpse of the fourth graders

reading maturity. The preservice teachers' reflections and comparisons of the responses

could in turn also lead to increased reading maturity as they internalize the process of

creating higher order comprehension questions and seeing first-hand what the responses

to those questions were.

Procedures for the Comparison Group

Pretest/ posttests of SPTKTT and the RMS were given before and after the study

to the preservice teachers in the comparison group. Information from the SPTKTT

pretest- posttest was used to determine changes in preservice teachers' literacy content

knowledge. Information from the Reading Maturity survey pretest-posttest was used to

determine changes in reading maturity. (See Appendix E for the Preservice Teachers as Book Buddies Timeline for additional information.)

Steps for Reviewing Letters from Preservice Teachers to Fourth Graders

The process for reviewing letters from the preservice teachers to the fourth graders consisted of the following steps: The researcher checked incoming emails for letters from preservice teachers to fourth graders. The researcher then opened emailed letter(s) from preservice teachers. The letters were reviewed twice by the researcher: The first time for ethical appropriateness and the second time for connections to the text.

The steps for reviewing for ethical appropriateness by the researcher consisted of the following steps: Read the letter to determine ethical appropriateness. The review for ethical appropriateness consisted of reading the letter to verify that the preservice teacher had not included contact information such as a phone number, email or any other way that the preservice teacher and the fourth graders could establish direct contact. Any personal information shared was on the level of what it would be appropriate for any teacher, preservice or otherwise, to share with a student. Appropriate information was considered to be at the level of what was indicated in the suggested friendly letter: First name, hobbies, pets, etc. Inappropriate information would include personal contact information, inappropriate / offensive language, personal details about the preservice teacher's life that would not be considered appropriate to share with a fourth grader. Any questions to the fourth grader of a personal / intimate nature would also have been considered inappropriate.

The letters from the preservice teachers to the fourth graders were then reviewed a second time. The second review was a review for connections to the text. The review of letters for connections to the text consisted of the following steps: Read the letter to confirm that the book that was indicated as being the one written about was actually the book that was being written about. The researcher had read all of the books included in the research project to be familiar with the material in question. The researcher verified that the letter included references to the text referenced in the subject and that the letters included higher order thinking skills questions for the fourth graders to respond to.

Any letters from preservice teachers to fourth grade students that did not meet the review criteria for ethical appropriateness and for connections to the text were returned to the preservice teacher for revision. In the case of the preservice teacher including their last name on the letter, which was the most common item, the researcher removed the last name from the letter before printing it and reminded the preservice teacher to not include their last name.

Once the researcher completed the review for ethical appropriateness and connections to the text the researcher logged the information in on the researcher's log documenting that the preservice teacher's letter had been received and reviewed. The researcher then printed and prepared to distribute the letter to the fourth grade student.

Distribution of Preservice Teachers' Letters to Fourth Graders

The researcher and the second classroom teacher participating, a recent doctoral graduate herself, distributed the letters to the fourth grade students. The researcher and

the second classroom teacher distributed the letters to their respective fourth graders and answered any questions posed by the fourth graders. Fourth graders were also provided assistance in reading the letter when necessary as indicated by the fourth grader.

Reviewing Letters from Fourth Graders to Preservice Teachers

The process for reviewing letters from the fourth graders to the preservice teachers consisted of the following steps: The letters were reviewed twice by the researcher: For ethical appropriateness and for connections to the text.

The steps for the researcher's review for ethical appropriateness consisted of the following: The researcher read the letter to determine ethical appropriateness. The review for ethical appropriateness consisted of reading the letter to verify that the fourth grader had not included contact information such as a phone number, email or any other way that the fourth grader and the preservice teacher could establish direct contact. Any personal information shared was on the level of what it would be appropriate for any student, to share with a teacher, preservice or otherwise. Appropriate information was considered to be at the level of what was indicated in the suggested friendly letter: First name, hobbies, pets, etc. Inappropriate information would include personal contact information, inappropriate / offensive language, and personal details about the fourth grader's life that would not be considered appropriate to share with any teacher. Any questions to the preservice teacher of a personal / intimate nature would also have been considered inappropriate. Any letters from the fourth grade students to the preservice teachers that did not meet the review criteria for ethical appropriateness were returned to

the fourth grade student for revision after the researcher reviewed appropriate procedures and clarified any misunderstandings on the part of the fourth graders.

The letters from the fourth graders to the preservice teachers were then reviewed a second time by the researcher. The second review was a review for connections to the text. The review of letters for connections to the text consisted of the following steps: The researcher read the letter to confirm that the book that was indicated as being the one written about was actually the book that was being written about. The researcher had read all of the books included in the research project to be familiar with the material in question.

The researcher verified that the letter included connections and references to the text referenced in the letter. In doing so the researcher looked for responses to the higher order thinking skills questions from the preservice teachers. The fourth graders were encouraged, but not required to go back and add additional information and responses in their letters. The reason for this was so that the preservice teachers would have authentic literacy experiences by being able to see exactly what the students had written. This way the preservice teachers would get an authentic record of their fourth grade student's understanding and interpretation of the preservice teacher's questions. The scanned responses also gave preservice teachers authentic insight into their fourth grade student's writing and communication skills.

The researcher provided oral feedback to the students regarding their letters and responses. The researcher met with students individually, or in groups if the students

preferred a group setting and conferenced with them about their answers. This way the fourth grade students had feedback about their work.

Once the researcher completed the review for ethical appropriateness and connections to the text the researcher logged the information in on the researcher's log indicating that the student had responded to the text. The researcher then scanned the fourth grade student's letter and forwarded it by email to their preservice teacher.

Preservice teachers were permitted to respond to the students' response letters. At the conclusion of the study posttests of SPTKTT and the RMS were given to preservice teachers in the experimental group. See Appendix E for the Preservice Teachers as Book Buddies Timeline for additional information. See Appendix G for sample letters between preservice teachers and fourth graders.

Data Collection

Pretest/ posttests of SPTKTT and the RMS were given before and after the treatment of the study to the preservice teachers in both groups, experimental Book Buddies and the comparison group. Information from the SPTKTT pretest- posttest was used determine changes in preservice teachers' literacy content knowledge. Information from the Reading Maturity survey pretest-posttest was used to determine changes in reading maturity.

Data Analysis

A series of analyses of covariance (ANCOVA; McNeil, Newman, & Kelly, 1996) were used to determine whether there were significant differences in the dependent variables between the experimental and comparison groups. This quasi-experimental study applied ANCOVA in testing the two hypotheses. Using the appropriate pretest scores as covariates for adjusting the posttest means of the subcategories LCK, of the SPTKTT and of the RMS the mean adjusted posttest scores from the experimental group and comparison group were compared. A significance level of $p < .05$ was set a priori. The statistical analyses of all of the collected data were compared utilizing the Statistical Package for the Social Sciences 21st edition (SPSS).

Summary

In summary this chapter explained the instrumentation, participants, research questions and hypotheses, procedures, data collection and data analysis used in the study.

CHAPTER IV

RESULTS

This chapter presents the hypothesis test results for each research hypothesis from this study and the demographics of the participants. The results of each question and hypothesis are presented in the order that they were stated and a summary of research findings concludes the chapter.

Sample Demographics

There were 43 preservice teachers (*n* = 33 experimental, *n* = 10 comparison) who

completed all parts of the data collection procedures. Demographic information of this

sample is presented in Table 1.

Thirty-seven of the 38 experimental group preservice teachers established contact,

by means of a letter, with their book buddie. Of the 37 who initiated contact, three

preservice teachers ended up dropping the course and did not complete the project. A

fourth preservice teacher chose to change her participation to the comparison group

instead. Overall, 33 of 38 initial members of the experimental group completed the study

and took the SPTKTT and the RMS posttests after having participated in multiple

authentic literacy experiences as Book Buddies with Hispanic fourth graders. Of the 10

preservice teachers who initially signed up for the comparison group, two ended up

dropping the course and did not complete the project. Two preservice teachers changed

their initial participation from experimental group to comparison group so ultimately 10

preservice teachers ended up participating in the comparison group.

Table 1
Study Participants Demographics based on the Survey of Preservice Teachers'
Knowledge of Teaching and Technology (SPTKTT) Pretests

Demographic	Treatment Group *n=33*	Comparison Group *n=10*
Sex		
Men	2	1
Women	31	9
Age Range		

18-22	16	5
23-26	11	5
27-32	4	-
32+	2	-
Major		
Elementary Education	28	9
Other	4	1
No response	1	-
Area of Specialization		
Early Childhood Ed. w/Special Ed	1	3
English & Language Arts	5	2
Health	1	-
Instructional Strategist: Mild/Moderate (K8) Endorsement	3	1
Mathematics	2	-
Science – Basic	1	-
Other : Multiple areas of specialization	11	4
Educational Computing Minor	3	-
Undergraduate Status		
Sophomore	1	-
Junior	11	6
Senior	21	4

The information contained in Table 1 comes from the preservice teachers'
responses to the demographics section of the *Survey of Preservice Teachers' Knowledge
of Teaching and Technology (SPTKTT) Pretests.* The demographics section of the
SPTKTT included the following categories: the sex, age range, major, area of
specialization, educational computing minor and undergraduate status of the preservice
teachers.

Tests of Hypotheses

Table 2 presents the means and standard deviations of the pretest and posttest
scores of the individual dependent variables as well as those of the posttest scores
adjusted by the pretest scores in the ANCOVA of the participants in the experimental and

comparison groups. The dependent variables were literacy content knowledge, and reading maturity.

Literacy content knowledge as defined by this researcher is having knowledge about literacy, using a literary way of thinking and knowing different ways and strategies of developing ones understanding of literacy.

Reading Maturity is defined by the six categories of The Reading Maturity Survey. The six subcategories are: reading attitudes and interests; reading purposes; reading ability; reaction to and use of ideas to apprehend higher-order literacy; kind of materials read; and personal adjustment to reading/transformational reading. (Thomas, 2001).

For this study the researcher has selected the implicit definition of literacy presented by Cunningham (2000) that consists of three parts "(a) the ability to engage in some of the unique aspects of reading and writing, (b) contextualization to some extent within the broad demands of the society, and (c) some minimal level of practical proficiency" (p. 64).

Referring to reading maturity Thomas (2013) stated

Casale (1982, pp. 4-5) extrapolated the following definition from Gray and Rogers (1956), the "chief populists of the term:" Reading maturity is a state of reading ability typically reached in adult life as a product of overall development, instruction, experience, and years of extensive reading. Its chief features are

accurate, high-level comprehension, objective thinking, and the ability to speak

back fluently and analytically that which has been read with little or no

prompting. (pp 148-149)

Table 2

Pretest, Posttest, and Adjusted Posttest Scores and Standard Deviations
as a Function of Group Membership

Source	Pretest			Posttest			Posttest Value Adjusted by the Covariate (pretest)	
	M	*SD*	*SE**	*M*	*SD*	*SE**	*M*	*SE**
LCK								
	13.15	1.87	.33	13.06	1.68	.25	13.03	.25
Experimental								
	12.90	2.28	.72	13.30	1.49	.46	13.38	.46
Comparison								
RMS								
	253.97	28.7	5.00	265.85	28.72	2.85	264.2	2.85
Experimental								
	245.90	41.68	13.18	248.40	42.68	5.20	253.82	5.20
Comparison								

Note. *Standard error is used since these are estimated values. LCK
stands for Literacy Content Knowledge, and RMS stands for Reading
Maturity Survey.

There were two research questions in this study. The following are the research

questions, hypotheses and results for each of the research questions.

Research Question 1

Do preservice teachers who have engaged with authentic literacy experiences

with Hispanic, fourth graders as Book Buddies exhibit higher mean scores on the

subcategory Literacy Content Knowledge (LCK) as compared to preservice teachers who

do not experience being Book Buddies?

Using SPSS Statistics 21 (2012), an analysis of covariance was carried out testing the null hypothesis that there was no difference between the means scores on the LCK posttest adjusted by the LCK pretest score between preservice teachers who participated in the reading buddies activity and those who did not. Table 3 is the source table for this statistical test.

Table 3

Analysis of Covariance of Literacy Content Knowledge as a Function of Using Book Buddies

Source	df	SS	MS	F	p	η^2
LCK pretest	1	26.546	26.546	12.727	.001	.241
Treatment (T)	1	.896	.896	.429	.516	
Error	40	83.433	2.086			
Total	42	110.419				

No significant differences were found on the dependent variable LCK using the .05 level of significance. The null hypothesis was not rejected.

Hypothesis 1: Preservice teachers who have authentic literacy experiences with Hispanic fourth graders as Book Buddies will exhibit higher mean adjusted scores on the Literacy Content Knowledge (LCK) subcategory of the *Survey of Preservice Teachers' Knowledge of Teaching and Technology* (SPTKTT) posttest than preservice teachers who do not experience being Book Buddies when controlling for the SPTKTT pretest could not be accepted. Next we go to research question number 2.

Research Question 2

Do preservice teachers who have engaged with authentic literacy experiences with Hispanic fourth graders as Book Buddies exhibit higher mean scores on the *Reading*

Maturity Survey (RMS) as compared to preservice teachers who do not experience being

Book Buddies?

An analysis of covariance was carried out testing the null hypothesis that there

was no difference between the means scores on the RMS posttest adjusted by the RMS

pretest score between preservice teachers who participated in the reading buddies activity

and those who did not. Table 4 is the source table for this statistical test.

Table 4
Analysis of Covariance of Reading Maturity as a Function of Using Book Buddies

Source	df	SS	MS	F	P	η^2
RMS pretest	1	32,107.144	32,107.144	120.032	.000	.750
Treatment (T)	1	819.101	819.101	3.062	.044	.071
Error	40	10,699.499	267.487			
Total	42	45,143.116				

Significant differences were found on Reading Maturity using the .05 level of

significance. The null hypothesis was rejected. The difference was very small however

since only .07 of the difference was due to the treatment.

Based on the above results Hypothesis 2: Preservice teachers who have authentic

literacy experiences with Hispanic fourth graders as Book Buddies will exhibit higher

mean adjusted scores on the *Reading Maturity Survey* (RMS) than preservice teachers

who do not experience being Book Buddies as measured by the RMS posttest when

controlling for the RMS pretest was accepted.

Conclusion

A series of analyses of covariance (ANCOVA; McNeil, Newman, & Kelly, 1996)

were used to determine whether there are significant differences in the means of post-

treatment scores of experimental and control groups of the Literacy Content Knowledge

(LCK), of the SPTKTT, and Reading Maturity when the posttest scores were adjusted using the analogous pretest scores. Significant differences between adjusted group means were not found on any of the dependent variables using the .05 level of significance for the Literacy Content Knowledge (LCK), of the SPTKTT. Significant differences between adjusted group means were found on the dependent variable using the .05 level of significance for Reading Maturity. The difference was very small however since only .07% of the variance was due to the treatment.

CHAPTER V

DISCUSSION

The purpose of this chapter is to integrate the results of this study with existing theory and research by discussing the results of the study, sharing the researcher's conclusions about the research findings as they relate to the literature review, identifying implications of the study, suggesting recommendations and providing a conclusion. The chapter is organized by sections and connects back to previous sections of the dissertation. The sections are purpose of the study, findings, discussion of results, limitations and recommendations for future research.

Purpose of the Study

The purpose of this study was to examine the effect of authentic literacy experiences as Book Buddies with Hispanic, fourth graders on preservice teachers' literacy content knowledge and reading maturity. The work of Purcell-Gates, Degener, Jacobson and Soler (2002), which discussed the topic of the research base on authenticity and its positive effects on adult learners, led to the research questions asked in this dissertation project. Their work also provided the operational definition of authentic literacy activities used in this study.

Other researchers also influenced the conceptualization of this study. One was Theiss et al. (2008-2009) whose work focused on the relationship between preservice teachers' reading maturity (a self-report on one's reading attitudes and habits) and their disposition to teach reading. Another researcher, Abbitt (2011), discussed tools for assessing preservice teachers' knowledge in many areas including technology and

pedagogy. He emphasized the need for educators to measure preservice teachers' readiness to teach. These, along with others, provided the framework for the study.

Findings

The findings for Question 1 were that preservice teachers who have authentic literacy experiences with Hispanic, fourth graders as Book Buddies did not exhibit higher mean scores on the subcategory Literacy Content Knowledge (LCK) on the *Survey of Preservice Teachers' Knowledge of Teaching and Technology* (SPTKTT) posttest than preservice teachers who did not experience being Book Buddies when controlling for the SPTKTT pretest. No significant differences between adjusted group means were found on the dependent variable using the .05 level of significance for literacy content knowledge.

The findings for Question 2 were that preservice teachers who have authentic literacy experiences with Hispanic fourth graders as Book Buddies exhibited higher mean scores on the *Reading Maturity Survey* (RMS) than preservice teachers who do not experience being Book Buddies as measured by the RMS posttest when controlling for the RMS pretest. Significant differences between adjusted group means were found on the dependent variable using the .05 level of significance for Reading Maturity. The difference was very small, however since only .07% of the variance was due to the treatment.

Discussion of Results

This study was designed from a sociocultural perspective, (Vygotsky, 1978), that individuals learn best from contextualized experiences. The contextualized experiences in the study were reading and writing to a real reader and writer, the Hispanic fourth

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graders which replicated real life communication. Given that the results were not significant for Literacy Content Knowledge, there are several aspects that need to be considered. These aspects include the issue of sample size, the instrumentation that was used, the preparation of the preservice teachers based on the two previous reading courses, the methodology, duration of the study, and the literacy constructs the researcher was hoping the preservice teachers would develop.

Sample Size

The study informs the field of reading research that a larger sample of preservice teaches is needed to determine if the procedures used in the study would have an effect on preservice teachers. The sample size in the current study was insufficient because to get a power of .8 would have required a minimum of 37 subjects in each group. A power analysis tells us that to obtain a power of .80 at alpha=.05 with a medium effect size, we would need at least 128 participants. This is a minimum value. If you do not have equal group sizes the required N would actually be larger. Therefore future studies should have at least 128 participants.

Instrumentation

Another aspect that needs to be taken into consideration in the results is that of the instrumentation that was used in the study. The questions that were used to gather responses for the Literacy Content Knowledge (LCK) section of the research study came from a subsection of the *Survey of Preservice Teachers' Knowledge of Teaching and Technology* (SPTKTT). These questions however only constituted a small subset that of literacy content knowledge, from the overall SPTKTT. In retrospect another instrument

that had been specifically designed to measure literacy content knowledge as the main

focus of the research may have provided a more detailed and accurate reflection of the

initial levels of literacy content knowledge and of the changes, if any, in that literacy

content knowledge after the treatment. By using such a limited set of questions it was not

possible to gather the richness of detail that the topic actually needs to be properly

addressed. In addition the SPTKTT is set up in a Likert Scale format with the

participants self-reporting on their responses. The researcher notes that this is not in any

way a negative reflection on the *Survey of Preservice Teachers' Knowledge of Teaching*

and Technology instrument which has been tested and found to have both content and

construct validity and reliability and when used in its entirety should present an accurate

reflection of what it was intended to measure.

What the researcher intended to measure is not what the *Survey of Preservice*

Teachers' Knowledge of Teaching and Technology was developed to measure. For the

purposes of what the researcher was attempting to measure a more open ended format

might have done a better job of capturing both initial levels and subsequent changes, if

any, in literacy content knowledge. At this time the researcher is not familiar with such

an instrument but it would be beneficial to do additional research to see if such an

instrument is available before repeating this research study on a larger scale.

The Preparation of the Preservice Teachers Based on the Two Previous Reading Courses

Another factor that should be taken into consideration is the preparation of the

preservice teachers based on the two previous reading courses. Since the preservice

teachers that participated in the current study had already completed two previous reading

courses, it could be argued that they already had rather extensive literacy content

knowledge. If they already had extensive literacy content knowledge from their two

previous courses, then it may have taken a much richer set of experiences, beyond the

scope of this research study, to significantly impact the preservice teachers' level of

literacy content knowledge in their third reading course and this study to further enhance

their literacy content knowledge. This is an aspect that should be taken into

consideration for future studies as a part of preservice teachers' initial reading

preparation.

Methodology in Terms of the Results

In terms of the methodology that was used, the format followed the basic format

of the *In2Books* research project by Teale and Gambrell (2007). Specifically, the

students and, in this case, preservice teachers exchanged letters related to the books they

had all read with the researcher acting as the reviewer / filter before either group,

preservice teachers or Hispanic fourth graders seeing what the other had written. The way

the *In2Books* project was implemented when the researcher participated in it with her

previous students was there were a total of five books which were read and a set of six

letters (one introductory letter and five letters related to books) written and responded to

over the course of an entire school year. As a part of the *In2Books* program students'

letters were reviewed by the teacher and students were required to go back, edit and

revise their letters after feedback from the teacher until they had addressed all of the

questions asked by their *In2Books* pen pal. The focus of the *In2Books* program was on the students, not the adult pen pals.

In the current study however a total of four books were read and a set of five, one introductory letter and four book-related letters, were written over a twelve week period. A set of letters refers to the preservice teachers writing a letter and the Hispanic fourth grader responding to that letter.

As with the *In2Books* program the researcher personally read and reviewed each letter before the intended recipients, preservice teachers and / or fourth grade students, actually saw it. The letters from the preservice teachers were reviewed for ethical appropriateness and for connections to the text as was also done in the *In2Books* program. Letters from the students were all reviewed for ethical appropriateness.

In terms of connections to the text for the letters from the students, the procedures used in this study varied in that students, although encouraged, were not required to go back and make any corrections / adjustments to their letters. The reason for this was because the preservice teachers as a part of their authentic literacy experience were supposed to receive authentic letters so that they could see what the students were actually creating themselves without help from a more knowledgeable other, the teacher / researcher. This process also allowed the preservice teachers to see how their book buddies had interpreted their higher order thinking skills questions. In order to maintain authenticity, students were not required to revise their letters to the preservice teachers.

Duration of the Study

In terms of the duration of the study it could be that the twelve week length of the study was insufficient to generate a significant change in the preservice teachers' literacy content knowledge. It could be that if more time had been allowed per book and set of letters, the preservice teachers would have had more time to craft even more carefully-constructed higher order thinking questions for their fourth grade book buddies to respond to. The same could be said for the fourth graders, if they had been allowed more time to read their books and letters and then write their responses, the results might have been richer in content and quality of responses. If the study were to be repeated, it might be beneficial to conduct any future studies over a longer period of time such as several semesters.

Literacy Constructs the Researcher was Hoping the Preservice Teachers Would Develop

In terms of the literacy constructs that the researcher was hoping that the preservice teachers would develop in retrospect there was not enough in the letter-exchanges for there to have been a noticeable impact on literacy content knowledge, or reading maturity. The preservice teachers were provided question stems with the higher levels of Bloom's taxonomy so that they could use them to assist them in creating higher thinking skills questions for their fourth grade book buddies. There was however no actual instruction provided to the preservice teachers by the researcher regarding the importance of creating and using higher order thinking questions with students. They also had no formal opportunity to ask the researcher and or discuss any questions they may have had regarding creating higher order thinking skills questions. In addition in

terms of the authentic letters that they received from their fourth grade book buddies there were no formal discussions where the letters could be discussed in terms of connections to the text, responses to the higher order thinking skills questions or even evaluated on any sort of rubric.

For this study the researcher selected the implicit definition of literacy presented by Cunningham (2000) that consists of three parts "(a) the ability to engage in some of the unique aspects of reading and writing, (b) contextualization to some extent within the broad demands of the society, and (c) some minimal level of practical proficiency" (p. 64).

In terms of Cunningham's implicit definition of literacy the preservice teachers did participate in literacy experiences in the process of reading and writing for contextualized purposes with at least a minimal level of practical proficiency.

Based on Duke et al's (2006) operational definition of authentic literacy and this researcher's definition of authentic literacy tasks, the preservice teachers did engage in authentic literacy activities with their fourth grade book buddies. Based on the results however it would appear that engaging in authentic literacy tasks without the benefit of specific instruction and discussion related to those authentic literacy tasks does not have a significant impact on literacy content knowledge as evidenced by the results.

In conclusion in terms of the preservice teachers' reading maturity, the authentic literacy activities appear to have only had a very minimal impact. Based on these results it again appears that engaging in authentic literacy tasks without the benefit of specific instruction and discussion related to those authentic literacy tasks will only minimally impact the literacy construct of reading maturity.

Limitations

There was one limitation for this study. The one limitation was that the numbers of preservice teachers enrolled in the reading courses was limited to the number of preservice teachers meeting the condition of taking the third of four required reading classes at any one time. This was lower than anticipated due to unknown reasons. Three sections of the reading class were offered during the term the study was conducted. Every preservice teacher in all three sections of the class participated. All pre-service teachers in all three sections were pre-and post-tested. The preservice teachers that did not volunteer to be in the experimental group were assigned to the control group. Even with participation in the study from all three groups of preservice teachers, the sample size was insufficient because to get a power of .8 would have required a minimum of 37 subjects in each group. A power analysis tells us that to obtain a power of .80 at alpha=.05 with a medium effect size we would need at least 128 participants. This is a minimum value. If you do not have equal group sizes the required N would actually be larger.

Significant differences were found on the reading maturity dependent variable using the .05 level of significance. The study however lacked statistical power due to the small sample size. Considering the importance of having all preservice teachers become effective reading teachers and literacy educators in general, there would be value in replicating the study with a larger group of participants which leads to recommendations for future research.

Recommendations for Future Research

The researcher recommends conducting this study with the following changes to the study itself. The recommendations for future research include a larger group of participants, including discussion about the authentic literacy experiences, duration of the study, a change in instrumentation used for one of the instruments and how it would be used.

A Larger Group of Participants

The researcher recommends conducting the study again with a larger group of participants. A power analysis tells us that to obtain a power of .80 at alpha=.05 with a medium effect size we would need at least 128 participants. This is a minimum value. If you do not have equal group sizes the required N would actually be larger. So to ascertain that any future study would have statistical power a larger sample size is necessary.

A larger group of participants could be achieved by implementing the study across multiple terms. In terms of fourth grade student book buddies the additional preservice teacher participants would require additional book buddies. The need for additional book buddies might be addressed by establishing connections and making arrangements for additional teachers in the grade level to participate with their classes. In the case of multiple semesters different classes at the same school could participate as a way of having additional fourth graders to serve as book buddies.

Including Discussion in the Authentic Literacy Experiences

In the future the researcher hopes to work with graduate or undergraduate students to engage them in authentic experiences to develop their teaching skills. In implementing future authentic experience opportunities for preservice teachers, the researcher also recommends that discussion with the preservice teachers about the authentic literacy exchanges be included as a part of future studies. The current study lacked the built-in procedures of discussion with the preservice teachers regarding their authentic literacy experiences with the fourth graders.

The rationale for including a discussion aspect is that several preservice teachers notified the researcher that in addition to reading their own letters from their book buddies they had on occasion shared the fourth graders' responses with other preservice teachers they knew in both the experimental and control groups. Some preservice teachers reported that, as they shared, they also compared students' responses, discussing a variety of aspects including levels of writing and understanding or lack thereof of the questions that had been posed. Some preservice teachers reported being excited about being able to read and compare authentic student responses, both those of their book buddies and those of their classmates' book buddies. On occasion some preservice teachers indicated to the researcher that they had been able to learn a lot about their students, particularly their academic levels, based on the responses included in the book buddies' letters.

Writing the higher order thinking skills questions and having the opportunity to see the students' responses allowed preservice teachers to have authentic literacy experiences by seeing and also comparing authentic children's responses. This gave them insight into how children think. Based on the additional comments provided to the researcher by some preservice teachers, some of them benefitted from having had authentic literacy experiences with Hispanic fourth graders by seeing authentic student responses to their higher order thinking questions and from sharing and discussing those responses with their classmates.

For future studies the researcher, based on the comments received from some preservice teachers, suggests building in and formalizing the discussion aspect of the responses from the students so structured discussions can take place with preservice teachers. In this way the literacy constructs, literacy content knowledge and reading maturity, that the researcher had hoped to develop in the preservice teachers could be formally addressed as discussions and interactions about the students' letters occur between the preservice teachers and their professors. This process would allow the preservice teachers to analyze and reflect in a structured, guided approach that could potentially lead to increased literacy content knowledge and reading maturity as they analyze and discuss not only their own authentic literacy experiences but also those of their fellow participants. Future studies could be mixed methods to include a qualitative aspect regarding the format, aspects, and results of the discussions that would take place when including formalized discussions.

A Change in Instrumentation for a Separate but Related Study

The researcher recommends discontinuing the use of *The Survey of Preservice Teachers' Knowledge of Teaching and Technology* (SPTKTT) because as previously indicated it was not intended to measure what the researcher was trying to measure. The researcher instead recommends consideration of the use of Applegate and Applegate's (2004) *Literacy Habits Questionnaire* which was developed while studying the reading habits and attitudes of elementary preservice teachers. Having conducted two separate studies and finding large percentages of what they termed "unenthusiastic readers" in their preservice teacher study participants Applegate and Applegate (2004) began to refer to what they call the "Peter Effect as the condition characterizing those teachers who are charged with conveying to their students an enthusiasm for reading that they do not have." (p. 556).

Based on the information the researcher has obtained about the *Literacy Habits Questionnaire* the researcher would have used that instrument for the current study if the researcher had been aware of its existence when the current study began. Having just recently become aware of its existence the researcher recommends its use in future studies such as the one that was carried out in this research project.

As one of several ways of addressing the situation of the unenthusiastic preservice teacher readers that they found in their studies, Applegate and Applegate (2004) indicate that institutions preparing preservice teachers have an obligation to provide them with "experiences and models that will promote their own engagement in reading." (p. 562).

Based on the observations made by some of the preservice teacher participants to the researcher in the current study engaging in authentic literacy experiences with their book buddies was an experience that promoted their own engagement in reading.

The researcher also recommends a possible future research study using the Literacy Habits Questionnaire (LHQ) (Applegate and Applegate, 2004) in conjunction with the updated Reading Maturity Survey (Thomas 2001, 2007, 2011). The updated survey includes a Next Steps Planning form which encourages the user to begin taking the next steps in working towards reading maturity.

The researcher recommends using the Reading Maturity Survey With Next Steps Planning (RMS – NSP)   and the Literacy Habits Questionnaire (LHQ), independently as a way of identifying possible gaps in preservice teachers literacy habits and reading maturity. Keeping in mind Applegate and Applegate's (2004 and 2014) recommendations for promoting engagement in reading and Thomas' (2013) suggestion that teacher education courses "in literacy education should discuss the importance of teaching toward reading maturity rather than only to avoid illiteracy." (p.155) and that "mature reader profiles…should be the highest goal of literacy education" (p. 155).

Preservice teachers could complete the RMS -NSP and the LHQ at the beginning and at the end of their first, or any, required reading course. The group results would give professors an indication of their students' areas of strength as well as areas of need. At that point the professors using their knowledge of the content of the four required reading courses so as not to unnecessarily duplicate instruction, the professors could identify their preservice teachers' areas of need. Having identified areas of need the

professors can make a decision as to what the best course of action would be to assist their preservice teacher students in becoming even more effective literacy educators.

Another option would be using the *Reading Maturity Survey With Next Step Planning* (Thomas, 2013) as an ongoing class assignment placing some of the responsibility of working through the process on the preservice teachers.

Conclusion

This chapter integrated the results of this study with existing theory and research by discussing the results of the study, sharing the researcher's conclusions about the research findings as they related to the literature review, identifying implications of the study, suggesting recommendations and providing a conclusion. The chapter was organized by sections and connected back to previous sections of the dissertation. The sections were purpose of the study, findings, discussion of results, limitations and recommendations for future research .

Finally, while the findings for reading maturity were not considered to have statistical power due to the small sample size the research study did allow preservice teachers to engage in authentic literacy experiences with fourth graders. It gave them opportunities to put into practice what they have been learning in their methods courses having allowed them to see and compare children's authentic responses to their higher order comprehension questions.

These experiences gave them insight into how children think. By participating in the research study and by the impromptu sharing of some preservice teachers with others, preservice teachers gained further insights into what awaits them in the real world when

they go from being preservice teachers to inservice teachers. Their experiences also potentially gave them insight as to their level of preparedness in their process of striving to become teachers. Giving preservice teachers the opportunity to participate in authentic literacy experiences is a worthwhile pursuit as we endeavor to help prepare preservice teachers as they strive to become inservice teachers.

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APPENDICES

Appendix A

Book Bloggers – Friendly Letter

Preservice Teachers

Book Buddies – Friendly Letter

City, State ZIP

Date

Dear _____,

My name is _____ and I'm in school to become a teacher. So far my school year has been great! On weekdays I work on _____. What do you do in school? Tell me about your favorite subject.

I spend most of my weekends at _____. My favorite thing to do during my free time is _____. What are some of the things you do for fun? I have been playing lots of _____. Do you play any sports/games?

I have a pet _____whose name is _____. Do you have a pet? If yes please tell me all about it. If you don't have a pet but could pick anything as your pet what would it be? Why?

I hope that school has been going well for you too. We are going to have a great time as Book Bloggers. I can't wait to start reading our first book.

Your friend,

Signature

Appendix B

Survey of Preservice Teachers' Knowledge of Teaching and Technology

Version 1.1: (updated September 1, 2009)

Survey of Preservice Teachers' Knowledge of Teaching and Technology

Denise A. Schmidt, Evrim Baran, and Ann D. Thompson

Center for Technology in Learning and Teaching

Iowa State University

Matthew J. Koehler, Punya Mishra, and Tae Shin

Michigan State University

Usage Terms: Researchers are free to use the TPACK survey, provided they contact Dr. Denise Schmidt (dschmidt@iastate.edu) with a description of their intended usage (research questions, population, etc.), and the site locations for their research. The goal is to maintain a database of how the survey is being used, and keep track of any translations of the survey that exist.

Version 1.1: (updated September 1, 2009). This survey was revised to reflect research results obtained from its administration during the 2008-2009 and 2009-2010 academic years. This document provides the latest version of the survey and reports the reliability scores for each TPACK domain. (This document will be updated as the survey is further developed).

The following papers and presentations highlight the development process of this survey:

Schmidt, D. A., Baran, E., Thompson A. D., Koehler, M. J., Mishra, P. & Shin, T. (2009-10).

Technological Pedagogical Content Knowledge (TPACK): The Development and Validation of an Assessment Instrument for Preservice Teachers. *Journal of Research on Technology in Education, 42*(2), 123-149.

Schmidt, D. A., Baran, E., Thompson A. D., Koehler, M. J., Mishra, P. & Shin, T. (2009). The Continuing Development, Validation and Implementation of a TPACK Assessment Instrument for Preservice Teachers. Paper submitted to the 2010 Annual Meeting of the American Educational Research Association. April 30-May 4, Denver, CO.

Schmidt, D., Baran, E., Thompson, A., Koehler, M.J., Shin, T, & Mishra, P. (2009, April). *Technological Pedagogical Content Knowledge (TPACK): The Development and Validation of an Assessment Instrument for Preservice Teachers.* Paper presented at the 2009 Annual Meeting of the American Educational Research Association. April 13-17, San Diego, CA.

Schmidt, D., Baran, E., Thompson, A., Koehler, M.J., Mishra, P., & Shin, T. (2009, March). *Examining preservice teachers' development of technological pedagogical content knowledge in an introductory instructional technology course.* Paper presented at the 2009 International Conference of the Society for the Information and Technology & Teacher Education. March 2-6, Charleston, SC.

Shin, T., Koehler, M.J., Mishra, P. Schmidt, D., Baran, E., & Thompson, A., (2009, March). Changing technological pedagogical content knowledge (TPACK) through course experiences. Paper presented at the 2009 International Conference of the Society for the Information and Technology & Teacher Education. March 2-6, Charleston, SC.

How do I use the survey? The questions you want are most likely questions 1-46 starting under the header "TK (Technology Knowledge)". In the papers cited above, these

categories were removed so that participants were not oriented to the constructs when answering the survey questions. The items were presented in order from 1 through 46, however. The other items are more particular to individual study and teacher education context to better understand results found on questions 1-46. You are free to use them, or modify them. However, they are not the core items used to measure the components of TPACK.

Note: For the purposes of this study the researcher only used questions 1-46.

How do I score the survey? Each item response is scored with a value of 1 assigned to strongly disagree, all the way to 5 for strongly agree. For each construct the participant's responses are averaged. For example, the 6 questions under TK (Technology Knowledge) are averaged to produce one TK (Technology Knowledge) Score.

Reliability of the Scores (from Schmidt et al, 2009).

TPACK Domain Internal Consistency (alpha)

Technology Knowledge (TK) .86
Content Knowledge (CK)
Social Studies .82
Mathematics .83
Science .78
Literacy .83
Pedagogy Knowledge (PK) .87
Pedagogical Content Knowledge (PCK) .87
Technological Pedagogical Knowledge (TPK) .93
Technological Content Knowledge (TCK) .86
Technological Pedagogical Content Knowledge (TPACK) .89

Thank you for taking time to complete this questionnaire. Please answer each question to the best of your knowledge. Your thoughtfulness and candid responses will be greatly appreciated. Your individual name or identification number will not at any time be associated with your responses. Your responses will be kept completely confidential and will not influence your course grade.

DEMOGRAPHIC INFORMATION

1. Your FIU e-mail address
2. Gender
a. Female
b. Male
3. Age range
a. 18-22
b. 23-26
c. 27-32
d. 32+
4. Major
a. Elementary Education (ELED)
b. Other
5. Year in College
a. Freshman
b. Sophomore
c. Junior
d. Senior
6. Are you completing an educational computing minor?
a. Yes
b. No
7. Are you currently enrolled or have you completed a practicum experience in a PreK-6 classroom?
a. Yes
b. No
8. What semester and year (e.g. Spring 2008) do you plan to take the following? If you are currently enrolled in or have already taken one of these literacy blocks please list semester and year completed

RED 3313 Language and Literacy Development	
RED 4150 Content and Methods of Teaching Beginning Literacy	
RED 4311 Content and Methods of Teaching Intermediate Literacy	

RED 4110 Content and Methods of Teaching Literacy in Schools		
Student teaching		

Technology is a broad concept that can mean a lot of different things. For the purpose of this questionnaire, technology is referring to digital technology/technologies. That is, the digital tools we use such as computers, laptops, iPods, handhelds, interactive whiteboards, software programs, etc. Please answer all of the questions and if you are uncertain of or neutral about your response you may always select "Neither Agree or Disagree".

	Strongly Disagree	Disagree	Neither Agree or Disagree	Agree	Agree Strongly
TK (Technology Knowledge)					
1. I know how to solve my own technical problems.					
2. I can learn technology easily.					
3. I keep up with important new technologies.					
4. I frequently play around with technology.					
5. I know about a lot of different technologies.					
6. I have the technical skills I need to use technology.					
CK (Content Knowledge)					
Mathematics					
7. I have sufficient knowledge about mathematics.					
8. I can use a mathematical way of thinking.					
9. I have various ways and strategies of developing my understanding of mathematics.					

	Strongly Disagree	Disagree	Neither Agree or Disagree	Agree	Agree Strongly
Social Studies					
10. I have sufficient knowledge about social studies.					
11. I can use a historical way of thinking.					
12. I have various ways and strategies of developing my understanding of social studies.					
Science					
13. I have sufficient knowledge about science.					
14. I can use a scientific way of thinking.					
15. I have various ways and strategies of developing my understanding of science.					
Literacy					
16. I have sufficient knowledge about literacy.					
17. I can use a literary way of thinking.					
18. I have various ways and strategies of developing my understanding of literacy.					
19. I know how to assess student performance in a classroom.					
20. I can adapt my teaching based-upon what students currently understand or do not understand.					
21. I can adapt my teaching style to different learners.					
22. I can assess student learning in multiple ways.					
23. I can use a wide range of teaching approaches in a					

	Strongly Disagree	Disagree	Neither Agree or Disagree	Agree	Agree Strongly
classroom setting.					
24. I am familiar with common student understandings and misconceptions.					
25. I know how to organize and maintain classroom management.					
PCK (Pedagogical Content Knowledge)					
26. I can select effective teaching approaches to guide student thinking and learning in mathematics.					
27. I can select effective teaching approaches to guide student thinking and learning in literacy.					
28. I can select effective teaching approaches to guide student thinking and learning in science.					
29. I can select effective teaching approaches to guide student thinking and learning in social studies.					
TCK (Technological Content Knowledge)					
30. I know about technologies that I can use for understanding and doing mathematics.					
31. I know about technologies that I can use for understanding and doing literacy.					
32. I know about technologies that I can use for understanding and					

	Strongly Disagree	Disagree	Neither Agree or Disagree	Agree	Agree Strongly
doing science.					
33. I know about technologies that I can use for understanding and doing social studies.					
TPK (Technological Pedagogical Knowledge)					
34. I can choose technologies that enhance the teaching approaches for a lesson.					
35. I can choose technologies that enhance students' learning for a lesson.					
36. My teacher education program has caused me to think more deeply about how technology could influence the teaching approaches I use in my classroom.					
37. I am thinking critically about how to use technology in my classroom.					
38. I can adapt the use of the technologies that I am learning about to different teaching activities.					
39. I can select technologies to use in my classroom that enhance what I teach, how I teach and what students learn.					
40. I can use strategies that combine content, technologies and teaching approaches that I learned about in my coursework in my classroom.					
41. I can provide leadership in helping others to coordinate					

	Strongly Disagree	Disagree	Neither Agree or Disagree	Agree	Agree Strongly
the use of content, technologies and teaching approaches at my school and/or district.					
42. I can choose technologies that enhance the content for a lesson.					
TPACK (Technology Pedagogy and Content Knowledge)					
43. I can teach lessons that appropriately combine mathematics, technologies and teaching approaches.					
44. I can teach lessons that appropriately combine literacy, technologies and teaching approaches.					
45. I can teach lessons that appropriately combine science, technologies and teaching approaches.					
46. I can teach lessons that appropriately combine social studies, technologies and teaching approaches.					

Survey of Preservice Teachers' Knowledge of Teaching and Technology

(with categories deleted)

Thank you for taking time to complete this questionnaire. Please answer each question to the best of your knowledge. Your thoughtfulness and candid responses will be greatly appreciated. Your individual name or identification number will not at any time be associated with your responses. Your responses will be kept completely confidential and will not influence your course grade.

DEMOGRAPHIC INFORMATION

1. Your FIU e-mail address
2. Gender
a. Female
b. Male
3. Age range
a. 18-22
b. 23-26
c. 27-32
d. 32+
4. Major
a. Elementary Education (ELED)
b. Other
5. Year in College
a. Freshman
b. Sophomore
c. Junior
d. Senior
6. Are you completing an educational computing minor?
a. Yes
b. No
7. Are you currently enrolled or have you completed a practicum experience in a PreK-6 classroom?
a. Yes
b. No
8. What semester and year (e.g. Spring 2008) do you plan to take the following? If you are currently enrolled in or have already taken one of these literacy blocks please list semester and year completed

RED 3313 Language and Literacy Development	
RED 4150 Content and Methods of Teaching Beginning Literacy	
RED 4311 Content and Methods of Teaching Intermediate Literacy	
RED 4110 Content and Methods of Teaching Literacy in Schools	
Student teaching	

Technology is a broad concept that can mean a lot of different things. For the purpose of this questionnaire, technology is referring to digital technology/technologies. That is, the digital tools we use such as computers, laptops, iPods, handhelds, interactive whiteboards, software programs, etc. Please answer all of the questions and if you are uncertain of or neutral about your response you may always select "Neither Agree or Disagree".

		Strongly Disagree	Disagree	Neither Agree or Disagree	Agree	Agree Strongly
1.	I know how to solve my own technical problems.					
2.	I can learn technology easily.					
3.	I keep up with important new technologies.					
4.	I frequently play around with technology.					
5.	I know about a lot of different technologies.					
6.	I have the technical skills I need to use technology.					
7.	I have sufficient knowledge about mathematics.					
8.	I can use a mathematical way of thinking.					
9.	I have various ways and strategies of developing my understanding of mathematics.					
10.	I have sufficient knowledge about social studies.					
11.	I can use a historical way of thinking.					
12.	I have various ways and strategies of developing my understanding of social studies.					
13.	I have sufficient knowledge about science.					
14.	I can use a scientific way of					

		Strongly Disagree	Disagree	Neither Agree or Disagree	Agree	Agree Strongly
	thinking.					
15.	I have various ways and strategies of developing my understanding of science.					
16.	I have sufficient knowledge about literacy.					
17.	I can use a literary way of thinking.					
18.	I have various ways and strategies of developing my understanding of literacy.					
19.	I know how to assess student performance in a classroom.					
20.	I can adapt my teaching based- upon what students currently understand or do not understand.					
21.	I can adapt my teaching style to different learners.					
22.	I can assess student learning in multiple ways.					
23.	I can use a wide range of teaching approaches in a classroom setting.					
24.	I am familiar with common student understandings and misconceptions.					
25.	I know how to organize and maintain classroom management.					
26.	I can select effective teaching approaches to guide student thinking and learning in mathematics.					
27.	I can select effective teaching approaches to guide student thinking and learning in literacy.					
28.	I can select effective teaching approaches to guide student					

		Strongly Disagree	Disagree	Neither Agree or Disagree	Agree	Agree Strongly
	thinking and learning in science.					
29.	I can select effective teaching approaches to guide student thinking and learning in social studies.					
30.	I know about technologies that I can use for understanding and doing mathematics.					
31.	I know about technologies that I can use for understanding and doing literacy.					
32.	I know about technologies that I can use for understanding and doing science.					
33.	I know about technologies that I can use for understanding and doing social studies.					
34.	I can choose technologies that enhance the teaching approaches for a lesson.					
35.	I can choose technologies that enhance students' learning for a lesson.					
36.	My teacher education program has caused me to think more deeply about how technology could influence the teaching approaches I use in my classroom.					
37.	I am thinking critically about how to use technology in my classroom.					
38.	I can adapt the use of the technologies that I am learning about to different					

		Strongly Disagree	Disagree	Neither Agree or Disagree	Agree	Agree Strongly
	teaching activities.					
39.	I can select technologies to use in my classroom that enhance what I teach, how I teach and what students learn.					
40.	I can use strategies that combine content, technologies and teaching approaches that I learned about in my coursework in my classroom.					
41.	I can provide leadership in helping others to coordinate the use of content, technologies and teaching approaches at my school and/or district.					
42.	I can choose technologies that enhance the content for a lesson.					
43.	I can teach lessons that appropriately combine mathematics, technologies and teaching approaches.					
44.	I can teach lessons that appropriately combine literacy, technologies and teaching approaches.					
45.	I can teach lessons that appropriately combine science, technologies and teaching approaches.					
46.	I can teach lessons that appropriately combine social studies, technologies and teaching approaches.					

Appendix C

The Reading Maturity Survey

The Reading Maturity Survey

Overview

"The Reading Maturity Survey (previously *The Reading Survey;* Thomas, 2001) is a simple self-report survey instrument designed to assess reading maturity. In their seminal work with reading maturity, Gray and Rogers (1956) initially attempted to examine a set of subcategories that they felt best constituted the reading maturity construct. In more recent efforts to define and measure the reading maturity construct, the author of *The Reading Maturity Survey* interpreted, applied, and in some cases extended or adjusted these into six subcategories influenced also some by the work of Casale (1982), Manzo and Casale (1981, 1983a, 1983b), and Manzo, Manzo, Barnhill, and Thomas (2000)). These categories are labeled as follows: reading attitudes and interests; reading purposes; reading ability; reaction to and use of ideas to apprehend (higher-order literacy); kind of materials read; and personal adjustment to reading/transformational reading. *The Reading Maturity Survey* has six subcategories, one for each of these six elements of reading maturity"* (Thomas, 2001).

The survey contains 60 questions, 10 from each of the six subcategories. Each question is answered on a 5-point Likert scale (5 = "a lot like me", 3 = "somewhat like me", and 1 = "not like me"). The score for *The Reading Maturity Survey*, which can be treated as interval scale data, is the mean of the 60 item scores for an individual. The subcategory scores for each of the six areas of reading maturity can also be generated. Split-half reliability was calculated in an earlier study (Thomas, 2001), when it was given to 82 college students, using the six subcategory scores of each instrument. The correlation between halves was .85

and when the Spearman-Brown formula was used to estimate the reliability

coefficient for the whole instrument, it was .92. It has no time limits but is

estimated to take approximately 20 minutes to complete.

The high internal reliability of *The Reading Maturity Survey* (.92) provides some

validity and a sense of coherence to the six subcategories of reading maturity that

the author of the instrument developed under the influence of Gray and Rogers'

(1956) foundational study; it is clear that these fairly diverse six categories do

appropriately and meaningfully fit together. This may reasonably be said to

contribute a new degree of clarification and coherence to current understanding of

the reading maturity construct. As such *The Reading Maturity Survey* provides a

reliable and simple way for at least starting to measure reading maturity, allowing

the topic to now be more easily revisited and examined by educational

practitioners (Thomas, 2001).

"For practical use of this survey with individuals and groups, it is recommended

that each respondent's responses/scores be examined individually in order to

begin identifying self-reported strengths and weaknesses relative to the various

aspects of the reading maturity construct. To compare means between individuals

may not be helpful, but to identify relative high and low scores on particular items

for an individual may allow for the sensible formation of subsequent "action plans"

to continue building on strengths and addressing weaknesses with the long-term

goal of promoting growth toward reading maturity. (Thomas, 2001).

Permissions

The Reading Maturity Survey was written by Matt Thomas, Ph.D., University of Central Missouri. For more information on this instrument, including permission to copy and use (for free), please contact him at: mthomas@ucmo.edu or 660-543-8729. Thanks.

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    analysis of a broad spectrum battery for assessing "progress toward reading

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    subtypes: Implications for literacy theory, assessment, and practice. *Reading

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    text-dependent and higher-order literacy variables with reference to stage theories

    of intellectual development. *Dissertation Abstracts International,* (UMI No.

    3010626)

The Reading Maturity Survey http://faculty.ucmo.edu/readingmaturity/

The Reading Maturity Survey

The Reading Maturity Survey
Name/ID: _____ Age: _____ Date: _____

Directions: Please rate/characterize yourself as a reader on each item. Use the five point scale where one (1) is the lowest and five (5) is the highest.

Section 1
1. I enjoy reading.
not like me   somewhat like me   a lot like me
1   2   3   4   5

2. I have a high interest in reading.
not like me   somewhat like me   a lot like me
1   2   3   4   5

3. I feel that reading can be exciting.
not like me   somewhat like me   a lot like me
1   2   3   4   5

4. Reading can be stimulating.
not like me   somewhat like me   a lot like me
1   2   3   4   5

5. Reading is an important part of my life.
not like me   somewhat like me   a lot like me
1   2   3   4   5

6. I read frequently.
not like me   somewhat like me   a lot like me
1   2   3   4   5

7. I have a wide variety (or breadth) of reading interests.
not like me   somewhat like me   a lot like me
1   2   3   4   5

8. I like to read about many different things.
not like me   somewhat like me   a lot like me
1   2   3   4   5

9. I read extensively on certain topics (or with depth).
not like me   somewhat like me   a lot like me
1   2   3   4   5

10. I enjoy reading to learn a lot about something that interests me.
not like me   somewhat like me   a lot like me
1   2   3   4   5

Section 2

1. I feel that I read for valuable reasons.
not like me   somewhat like me   a lot like me
1   2   3   4   5

2. One of the reasons that I read is for pleasure.
not like me   somewhat like me   a lot like me
1   2   3   4   5

3. One of the reasons I read is to learn more about things that interest me.
not like me   somewhat like me   a lot like me
1   2   3   4   5

4. One of the reasons I read is to gain new knowledge.
not like me   somewhat like me   a lot like me
1   2   3   4   5

5. One of the reasons I read is to improve my understanding of life.
not like me   somewhat like me   a lot like me
1   2   3   4   5

6. One of the reasons I read is to understand others better.
not like me   somewhat like me   a lot like me
1   2   3   4   5

7. One of the reasons I read is to understand myself better.
not like me   somewhat like me   a lot like me
1   2   3   4   5

8. I try to actively engage myself with what I am reading.
not like me   somewhat like me   a lot like me
1   2   3   4   5

9. I read with purpose.
not like me   somewhat like me   a lot like me
1   2   3   4   5

10. I read flexibly.
not like me   somewhat like me   a lot like me
1   2   3   4   5

Section 3

1. I can read proficiently.
not like me   somewhat like me   a lot like me
1   2   3   4   5

2. I understand most of what I read.
not like me   somewhat like me   a lot like me
1   2   3   4   5

3. When I read, I feel like I get a good grasp of the literal meaning being presented.
not like me   somewhat like me   a lot like me
1   2   3   4   5

4. I am comfortable with my reading ability.
not like me   somewhat like me   a lot like me
1   2   3   4   5

5. I feel like I have the ability to see implied meanings in what I read.
not like me   somewhat like me   a lot like me
1   2   3   4   5

6. I don't mind reading out loud.
not like me   somewhat like me   a lot like me
1   2   3   4   5

7. I feel like I can "read the lines" efficiently.
not like me   somewhat like me   a lot like me
1   2   3   4   5

8. I feel like I can "read between the lines" efficiently.
not like me   somewhat like me   a lot like me
1   2   3   4   5

9. I can read fluently.
not like me   somewhat like me   a lot like me
1   2   3   4   5

10. My school grades and test scores would indicate that I have good reading
comprehension abilities.
not like me   somewhat like me   a lot like me
1   2   3   4   5

Section 4

1. While I read something, I often think of other things that I already know about the
topic.
not like me   somewhat like me   a lot like me
1   2   3   4   5

2. Reading prompts me with new ideas and insights.
not like me   somewhat like me   a lot like me
1   2   3   4   5

3. I often make generalizations and personal conclusions about what I have read.
not like me   somewhat like me   a lot like me
1   2   3   4   5

4. Reading helps me make decisions about things.
not like me   somewhat like me   a lot like me
1   2   3   4   5

5. When I read, I combine ideas I already have with ideas that I read to form new personal understandings.

not like me   somewhat like me   a lot like me

1   2   3   4   5

6. I read with an inquiring attitude.

not like me   somewhat like me   a lot like me

1   2   3   4   5

7. I ask myself questions while I am reading.

not like me   somewhat like me   a lot like me

1   2   3   4   5

8. When I evaluate the main idea of what I am reading, I look for supporting points.

not like me   somewhat like me   a lot like me

1   2   3   4   5

9. When I am reading, I often recognize ideas that may have personal or societal value.

not like me   somewhat like me   a lot like me

1   2   3   4   5

10. I construct new ideas from what I read.

not like me   somewhat like me   a lot like me

1   2   3   4   5

Section 5

1. I read intellectually challenging material.

not like me   somewhat like me   a lot like me

1   2   3   4   5

2. I enjoy reading material that goes beyond "easy-reading."

not like me   somewhat like me   a lot like me

1   2   3   4   5

3. I like to read things that make me think.
not like me   somewhat like me   a lot like me
1   2   3   4   5

4. There are rich ideas in the materials that I read.
not like me   somewhat like me   a lot like me
1   2   3   4   5

5. I enjoy reading about things that stimulate my mind.
not like me   somewhat like me   a lot like me
1   2   3   4   5

6. I often read materials that are at relatively difficult reading levels.
not like me   somewhat like me   a lot like me
1   2   3   4   5

7. I enjoy reading materials that help me better understand other people.
not like me   somewhat like me   a lot like me
1   2   3   4   5

8. I often read things that broaden my understanding of the world.
not like me   somewhat like me   a lot like me
1   2   3   4   5

9. I am intellectually enriched by most of what I read.
not like me   somewhat like me   a lot like me
1   2   3   4   5

10. I enjoy reading materials that teach me things I did not know before.
not like me   somewhat like me   a lot like me
1   2   3   4   5

Section 6

1. Reading often helps me change my perspective about things.
not like me   somewhat like me   a lot like me
1   2   3   4   5

2. Reading often makes me want to make personal changes in my life.
not like me   somewhat like me   a lot like me
1   2   3   4   5

3. When I learn something valuable from credible reading sources, I usually apply it to the actions my life.
not like me   somewhat like me   a lot like me
1   2   3   4   5

4. Reading can transform my actions.
not like me   somewhat like me   a lot like me
1   2   3   4   5

5. Reading can transform my thinking.
not like me   somewhat like me   a lot like me
1   2   3   4   5

6. Reading can transform my values.
not like me   somewhat like me   a lot like me
1   2   3   4   5

7. I can recall instances in which I have been personally transformed from things I have read.
not like me   somewhat like me   a lot like me
1   2   3   4   5

8. Reading makes me carefully consider changes I should make in my life.
not like me   somewhat like me   a lot like me
1   2   3   4   5

9. Reading often causes me to be personally reflective.
not like me   somewhat like me   a lot like me
1   2   3   4   5

10. Some of my character is shaped by what I read.
not like me   somewhat like me   a lot like me
1   2   3   4   5

Reading Maturity Survey
Tabulation Sheet

Name/ID: _____

Tabulations

Section 1: Interest in Reading

Sum Score: _____

Section 2: Purposes for Reading

Sum Score: _____

Section 3: The Recognition and Reconstruction of Meaning

Sum Score: _____

Section 4: Reaction To and Use of Ideas to Apprehend (Higher-Order Literacy)

Sum Score: _____

Section 5: Kinds of Materials Read

Sum Score: _____

Section 6: Personal Adjustment to Reading/Transformational Reading

Sum Score: _____

Total of Sum Scores: _____/60 =

TOTAL READING MATURITY SCORE _____

The Reading Maturity Survey was written by Matt Thomas, Ph.D., University of Central Missouri. For more information on this instrument, including permission to copy and use (for free), please contact him at: mthomas@ucmo.edu or 660-543-8729. Thanks.

Appendix D

List of Books Read
by
Book Buddies and Hispanic Fourth Graders

List of Books Read
by
Book Buddies and Hispanic Fourth Graders

Narrative Texts:

- *Flat Stanley's Worldwide Adventures #9: The US Capital Commotion* by Jeff

  Brown

- *The Chocolate Touch* by Patrick Skene Catling

- *Charlotte's Web* by E. B. White

Informational Text:

- *Life in the Rainforest* (Smart Words Reader) by Christine A. Caputo

Appendix E

Preservice Teachers as Book Buddies Timeline

Preservice Teachers as Book Buddies Timeline Vivian Veiga - Dissertation Project Spring 2014	
Dates	**Events**
January 10th – 17th, 2014	Researcher • Meets with professors and preservice teachers • Obtains signed consent forms • Administers both pretests to preservice teachers • Distributes materials to experimental group preservice teachers
January 20th – 24th, 2014	• Friendly email letter from experimental group preservice teachers to researcher for fourth grade book buddies *
January 27th – 31st, 2014	• First (1st) book related email letter from experimental group preservice teachers to researcher for fourth grade book buddies *
February 10th – 14th, 2014	• Second (2nd) book related email letter from experimental group preservice teachers to researcher for fourth grade book buddies *
February 24th – 28th, 2014	• Third (3rd) book related email letter from experimental group preservice teachers to researcher for fourth grade book buddies *
March 10th – 14th, 2014	• Fourth (4th) book related email letter from experimental group preservice teachers to researcher for fourth grade book buddies *
March 17th – 22nd, 2014	Researcher • Administers both posttests to preservice teachers • Emails roster of experimental and comparison group preservice teachers to professors for awarding of extra credit points as applicable.

Appendix F

From Revised Bloom's Taxonomy
by
D. Tarlinton (2003)

Questions for Analyzing

- Which events could not have happened?
- If. … happened, what might the ending have been?
- How is...similar to...?
- What do you see as other possible outcomes?
- Why did...changes occur?
- Can you explain what must have happened when...?
- What are some or the problems of...?
- Can you distinguish between...?
- What were some of the motives behind..?
- What was the turning point?
- What was the problem with...?

Questions for Evaluating

- Is there a better solution to...?
- Judge the value of...
- What do you think about...?
- Can you defend your position about...?
- Do you think...is a good or bad thing?
- How would you have handled...?
- What changes to.. would you recommend?
- Do you believe...?
- How would you feel if. ..?
- How effective are. ..?
- What are the consequences..?
- What influence will....have on our lives?
- What are the pros and cons of....?
- Why is ....of value?
- What are the alternatives?
- Who will gain & who will lose?

(Pohl, *Learning to Think, Thinking to Learn*, p. 13
- 14)

Questions for Creating

- Can you design a...to...?
- Can you see a possible solution to...?
- If you had access to all resources, how would you deal with...?
- Why don't you devise your own way to...?
- What would happen if...?
- How many ways can you...?
- Can you create new and unusual uses for...?
- Can you develop a proposal which would...?

(Pohl, ***Learning to Think, Thinking to Learn***, p. 14)

Source:
Tarlinton, D. (2003, July 14). Revised Bloom's Taxonomy. Retrieved July 20, 2011, from http://www.kurwongbss.qld. edu.au/thinking/Bloom/blooms.htm

Appendix G

Sample Letters from Preservice Teachers
and
Hispanic Fourth Graders' Responses

Dear _____,

I just finished reading the book <u>Flat Stanley's Worldwide Adventures</u> and I loved it! This story was about the US Capital. I really enjoyed this book because it was the first Flat Stanley book I ever read. My favorite part of the story was when Stanley met with the President and helped him realize that he was a hero and that he deserved the medal of honor. The most interesting part for me was when I read the different places Stanley had been like Mount Rushmore or the Egyptian pyramids. What was your favorite part of the story? If Stanley would have ran away for a longer time, what do you think the consequences could have been? What do you think are the pros and cons of being Flat Stanley? What do you think makes a hero?
I hope to hear from you soon!

Your Friend,

_____

Dear _____

    What is your favorite subject? These are the answers to your questions

1. when Stanley climbs up the Washington Monument

2. His parents would have left

3. The pros it that you can go under doors and the cons are that wind can blow you away

4. That he goes on lots of adventures

              Your friend,

_____, _____ _____
Date: February 6, 2014

Dear _____,

How are you? Sorry that it took a while for me to write you back. I read *Flat Stanley* and it was a really good book. Even though I considered it pleasure-reading, it contained a lot of cool and important facts such as the Lincoln Memorial, the US Capitol. Did you notice any other fun facts that are in the book? I was fascinated that Stanley was flat *and* that the President of the United States was a woman! How cool is that? Like Stanley, I would've been disappointed that my parents made me be a flag in the parade. I loved this book and can't wait to read the next. A few questions I have for you are:

1. What do you think the turning point was for Stanley?

2. How would you have handled meeting the mayor of the state?

3. What would happen if you were chosen to get an award from the President of the United States? How would you feel?

Until next time, have a Great Week!

Sincerely,
_____ ☺

Dear _____ How are you today? Well there are the answers to your questions: 1 I think the turning point in Stanly was when he became Flat. 2 I've would have handled it by Telling him or her the truth. 3 I would have felt honored to get an award from a President. What is your favorite color. Your friend

VITA

VIVIAN LUCIA VEIGA

Born, Habana, Cuba

1993-1995	B.S. in Education Florida Memorial College Miami, FL
1996 – Present	Teacher Kensington Park Elementary Miami, FL
1998 – 1999	Council for Exceptional Children (CEC) Mainstreaming Teacher of the Year – Kensington Park Elementary Miami, Florida Council for Exceptional Children (CEC) Mainstreaming Teacher of the Year, First Runner Up, District - Miami-Dade County
1998- 2000	M.S. in Education Advanced Professional Studies in Teaching and Learning University of Miami, Miami, Florida
2000 - Present	Mentor and Candidate Support Provider for National Board University of Miami's Project SUCCEED Network Mentoring and Induction for New Teachers (MINT) New Educator Support Team (NEST) Miami, Florida
2001	Middle Childhood Generalist National Board for Professional Teaching Standards Miami, Florida
2002	Participant – National Air & Space Administration - NASA Educator Workshop (NEW) Kennedy Space Center Cocoa Beach, Florida
2007 - Present	Instructional Strategies That Work (ISTW): Became ER&D Trainer Educational Research & Dissemination Summer and Winter Institutes. Tampa and Orlando, Florida

2008 – 2012	Project RISE National Board Certified Teacher School site grant coordinator/ Prof. Development Trainer Miami-Dade County Public Schools
2010	Middle Childhood Generalist Recertification National Board for Professional Teaching Standards Miami, Florida
2012	AFT TEACH National Trainer / National Trainer Academy 2012 for Instructional Strategies That Work for All Disciplines (ISTWAD), and Reading Comprehension Instruction (RCI) Trainer, Maritime Institute Baltimore, Maryland
2013 – Present	Board Member of the UTD Teaching Excellence Foundation, Inc. Board - United Teachers of Dade Miami, Florida
2007 – 2014	Doctoral Candidate Florida International University Miami, Florida

PRESENTATIONS

Veiga, V. (2001, May) Co-Presenter - *University of Miami's Science for All Project: Measurement Unit* Presentation for selected San Francisco Bay Area Teachers and selected University of California at Berkeley faculty and staff. Loma Linda Elementary, San Francisco, CA.

Veiga, V. Co-Presenter (2002, April) - *University of Miami, Science for All Project* American Educational Research Association (AERA) and National Association for Research in Science Teaching (NARST) National / International Conferences, New Orleans, LA.

Veiga, V. (2002, October) Co-Presenter - *Working Inclusively to Reach Excellence with Diverse Abilities (WIRED)*, Miami-Dade County Public Schools -   Instructional Technology Conference Version 10 Miami Beach Convention Center, Miami, FL.

Veiga, V. (2002, May) Presenter - *Setting Up for Success (In Co-Teaching / Inclusion)* Detroit Public Schools System, Detroit, MI.