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Pre-Service Teachers' Confidence in Teaching Reading Acquisition Skills to Struggling Readers and Readers in General

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Abstract

Thirty-one final semester undergraduate, dual preparation, pre-service students at a Pacific university

completed a survey regarding their confidence in teaching reading acquisition skills to early elementary

(Kindergarten through third grade) struggling readers and readers in general. The 36-item survey

included open-ended and forced choice Likert-type rating scale items. We examined participants'

perceptions regarding their confidence in teaching reading and the degree to which numerous factors

contributed to their levels of confidence. It appeared that this particular group of pre-service teachers

was more confident in their ability to teach reading to all students, those who struggle and those who

do not, than similar surveyed participants in the research literature.

Introduction

Lyon (1997; 1998a; 1999) referred to reading difficulties in school age children as a *public health*

epidemic. However, unlike health epidemics such as malnutrition and inadequate medical care, the

reading epidemic cuts across socioeconomic boundaries. For example, 32% of all fourth grade children

who exhibited a reading difficulty were from relatively affluent families whose parents graduated from college (Lyon, 1999). "The consequences of this reading epidemic are harsh when we consider the strong correlation between low achievement in reading and high rates of poverty, school dropout rates, and underemployment" (Snow, Burns, & Griffin, 1998, p. 98). According to the National Institute for Literacy (1992), 40 to 44 million or 21-23 percent of American adults age 16 or older are functioning at Level 1, the lowest literacy level, and nearly half of the adults functioning at Level 1 live in poverty. Seven out of every ten adults who are in state and federal prison systems read at Level 1 or Level 2.

In 1996, the National Assessment of Educational Progress (NAEP, 1996) reported that 40 percent of fourth graders and 30 percent of eighth graders were reading below basic level (Snow, Burns, & Griffin, 1998). In 2003, the national reading results showed no significant change in fourth-grade reading scores since 1992 with 37% reading below basic level even with accommodations permitted (NAEP, 2003). Eighth-graders showed an overall gain since 1992, with 37 percent of fourth graders, accommodations permitted, reading below basic level (NAEP, 2003).

The task of teaching reading to children is considered instructionally more difficult than once believed. Many pre-service teachers were taught that reading was a natural process. However, research over the past 35 years *has not* supported this view (Lyon, 1998b; Moats, 1994; 1999). Instead, we have learned that reading is a complex linguistic task, an acquired skill, and one, which requires instructional/teacher expertise (Moats, 1999). Moats, in *Teaching Reading IS Rocket Science* (1999), purported that, "the demands of competent reading instruction, and the training experiences necessary to learn it, have been seriously underestimated by universities and by those who have approved teacher licensing programs" (p. 11). Moats (1999) further stated that "professional preparation programs are needed to teach a specific fund of knowledge, skills, and abilities that are emerging from evidence based-research" (p. 13). However, teaching specific skills to prospective teachers is only part of the

puzzle. These individuals also need to feel confident in their skills and abilities to implement what they learned with respect to teaching reading.

The National Center for Education Statistics (NCES, 1998) asked teachers of fourth grade students (N = 2547), *How well prepared do you feel to teach reading?* Sixty-seven percent (67%) reported they felt *well prepared,* thirty-two percent (32%) felt *moderately prepared,* and one percent felt *not well prepared*. However, in other studies (Lyon, 1998a) teachers stated they did not feel adequately prepared to teach reading, especially to struggling readers (Lyon, 1998); and that they "rely more on methods (i.e., basal approach, whole language, Orton-Gillingham, etc.) rather than on a conceptual framework to teach the range of skills required of students to learn to read" (Lyon, 1998a, p. 6).

To further complicate issues, programs need to evaluate whether candidates feel equally prepared to teach struggling readers and readers in general. While some students have specific reading disabilities and qualify for special education services, these students comprise only a subset of struggling readers. Struggling readers according to Moje, Young, Readence, and Moore (2000) are those students who are disengaged from activities related to reading in school. They may appear to struggle with reading comprehension, study skills, word recognition/word identification skills, fluency, exhibit low self-efficacy in their reading and lacks intrinsic motivation to read. Therefore, the issue is not one of feeling confident in teaching students with disabilities, but rather all students -- those who struggle and those who do not. Therefore, general education teachers need skills in addressing the needs of struggling readers to ameliorate their risk for future academic failure.

Teachers' levels of confidence is related to Bandura's (1977) conceptualization of self-efficacy in which the behavior of an individual is based upon two factors: (a) a belief about action and outcome, and (b) a personal belief about one's ability to cope with a task. Tschannen-Moran and Woolfolk Hoy (2001) defined teacher efficacy as a teacher's "judgment of his or her capabilities to bring about desired

outcomes of student engagement and learning, even among those students who may be difficult or unmotivated." (p.783)

Bandura (1986) argued that teacher efficacy is situation-specific and subject-specific, meaning that while self-efficacy may be low for teaching reading, it could be quite high for teaching math. So, why is it important to evaluate teachers' levels of self-efficacy with respect to teaching reading? Teachers tend to avoid areas/subjects when self-efficacy is lower (Riggs, 1995). Teachers with higher levels of reported self-efficacy are more likely to set high goals for students, and themselves as teachers, and believe that they have more responsibility for student achievement (Ross, 1994). Teachers with a higher level of self-efficacy appear to be less critical of students who make errors (Ashton & Webb, 1986), work longer with students who appear to be struggling (Gibson & Dembo, 1984), and refer struggling students less often to special education (Meijer & Foster, 1998; Soodak & Podell, 1993). Therefore, it appears that a high level of teacher self-efficacy may be necessary before effective reading instruction can take place.

Purpose of the Study

Therefore, an important component of improving teacher preparation programs in the area of reading instruction may be to address the confidence levels of participants in these programs. Overall, the aforementioned research indicates that confident teachers are more effective teachers and pre-service teachers may not be confident in teaching children how to read, especially children who are struggling readers. Therefore, the purpose of the present study was to examine how confident a group of undergraduate pre-service teachers were in teaching reading acquisition skills to kindergarten through third grade students.

Specific research questions were:

1. How confident were the pre-service teachers in teaching reading acquisition skills to early elementary (Kindergarten through third grade) struggling readers and readers in general?

2. How confident did these teachers feel in teaching specific reading acquisition skills to struggling readers and readers in general?

3. To what degree did various courses and experiences contribute to pre-service teachers' levels of confidence in teaching reading?

Method

Participants

A survey was given to 52 pre-service teachers in a field-based dual preparation program in elementary general and special education (Jenkins, Pateman, & Black, 2002) at a Pacific university at the end of their student teaching semester. These teachers completed university coursework and fieldwork consisted of 84 semester hours of education core classes -- 30 semester hours in special education and 54 semester hours in elementary education. Student teaching consisted of either eight weeks in an elementary setting and eight weeks in a special education setting, or the entire semester in an inclusive setting.

A letter of consent was provided that detailed the intent of the survey, extent of participation, any risks involved, and an explanation that the participant could withdraw from the study at any time or refuse to answer a particular question without penalty or prejudice. Thirty-one pre-service teachers returned their surveys (60%) and participated in the study. See Table 1 for participant characteristics.

Table 1. Participant Characteristics

Program	Male	Female	Number of Years Teaching
Undergraduate Dual Licensure (Elementary and Special Education) Pre-service Students	2	29	(n = 31) 1 female @ 1 year 4 females @ 2 years 1 female @ 8 years 23 females @ 0 years 2 males @ 0 years
			N = 31

Survey Development

The first section of the survey requested demographic information (i.e., gender and years of teaching experience). The survey then contained 36 items that addressed the pre-service teachers' (a) overall confidence level in teaching reading acquisition skills to early elementary (Kindergarten through third grade) general and struggling readers, (b) level of confidence with teaching specific reading acquisition skills, and (c) courses and experiences that contributed to their overall level of confidence. Additionally, open-ended items were included on the survey to solicit information about experiences or projects, and professional development opportunities that contributed to their preparation in teaching reading acquisition skills. Finally, the participants were asked to provide suggestions and/or recommendations for improving future pre-service teacher preparation programs.

Participants were asked to rate their confidence in teaching reading acquisition skills to struggling readers and readers in general using a 4-point forced choice Likert-type scale with 1 indicating not confident at all, and 4 indicating very confident. A rating of *not applicable* (NA) was included. Participants also indicated their level of confidence with specific reading acquisition skills such as understanding phonological awareness skills, literacy development, various reading programs and current research using the same forced choice Likert-type scale. This section of the survey was developed after an extant review of the research literature in the area of pre-service teacher preparation for teaching reading. Items for the instrument came directly from Moats' (1999) recommendations to *The American Federation of Teachers* regarding a research-based core curriculum for pre-service teachers.

The pre-service participants were then asked to indicate how much various courses and experiences (i.e., college coursework, field experiences, student teaching and mentor teachers' knowledge) contributed to their confidence in teaching reading acquisition skills to students in general and to struggling readers. A 4-point forced choice Likert-type rating scale was also used in this section with a

rating of '1' indicating that the experience did not contribute at all to their level of confidence, while a rating of '4' indicated that the experience strongly contributed to their level of confidence. A rating of *not applicable* (NA) was also included; thus, accounting for the different numbers of responses to different questions (See Results).

The final section of the survey consisted of open-ended questions about (a) specific experiences or projects that contributed to the participants' preparation to teach reading acquisition skills, (b) workshops that prepared them, and (c) suggestions and/or recommendations for improving the pre-service teacher preparation program.

Critique of Survey

Prior to administering the survey, 30 graduate students enrolled in a research design course were given the survey to critique. After individuals examined the survey and gave specific handwritten suggestions, a group discussion took place. One discussion point was how the survey should be structured for reporting one's confidence level in teaching students in general versus struggling readers (side-by side columns to simultaneously compare their levels of confidence versus separate pages). The side-by-side format was decided upon as well as relocating the *not applicable* (NA) response category from flush left to flush right. Changes were also made regarding clarifying the wording of instructions, and highlighting key words in the instructions.

Pilot Test

A pilot test was then conducted to determine (a) ease of completing the actual survey, and (b) stability of responses. Twelve participants (drawn from the 30 class members who critiqued the survey) participated in the pilot test. A second distribution of the survey to the same twelve participants occurred approximately two weeks later. Nine of the twelve participants returned their completed surveys.

Test-retest reliability. It was important to determine whether the measure was reliable (consistent over time, indicating no substantial change from one measurement to the next) before actually distributing the surveys. Therefore, test-retest reliability was calculated using a *Pearson's r* correlation for each item. Thirty-one of 36 items correlated at levels statistically significant at the .05 level. The 4 items that had low test-retest correlations asked about special education and elementary education coursework contributing to confidence in teaching struggling readers and readers in general. Because participants in the pilot test were not in dual preparation programs, the items were retained under the assumption that these questions *would* be relevant (and subsequently more reliable) for study participants.

Results

We used a paired samples t-test (an alpha level of .05 for all statistical tests) to analyze the participants' overall confidence, confidence in teaching specific reading acquisition skills, and the degree to which college coursework, field experiences, and professional development experiences contributed to their levels of confidence with respect to teaching struggling readers and readers in general.

Overall Confidence

How confident overall were the pre-service teachers in teaching reading acquisition skills to early elementary (Kindergarten through third grade) readers in general and struggling readers? A paired samples t-test revealed that there were no statistically significant differences between participants' confidence levels with respect to teaching reading to struggling readers (M = 3.15, SD = .53) and readers in general (M = 3.11, SD = .50); t(26) = 1.00, p = .33.

Confidence with Specific Reading Acquisition Skills

The pre-service teachers responded to how confident they felt in teaching specific reading acquisition skills. Participants' confidence levels were the same for struggling readers and readers in

general in (a) literacy development, (b) phonological awareness skills, (c) strengths to become a skilled

reader, (d) content of instruction, and (e) formal and informal assessment procedures.

Table 2. Confidence Levels in Specific Reading Acquisition Skills

Specific Reading Acquisition Skill	Level of confidence for struggling readers	Level of confidence for students in general
understanding literacy development	(M = 3.03, SD = .62)	(M = 3.03, SD = .56)
understanding the development of phonological awareness skills	(M = 2.90, SD = .71)	(M = 2.90, SD = .61),
understanding the strengths required to become a skilled reader	*(M = 3.07, SD = .64)*	(M = 3.07, SD = .64),
understanding the content of instruction (phonemes, phonetics, morphology, syntax and pragmatics)	(M = 2.83, SD = .75)	(M = 2.83, SD = .70)
understanding formal and informal assessment procedures	(M = 3.03, SD = .67)	(M = 3.03, SD = .67)

There were only slight, non-statistically significant differences in understanding of various reading

methods and programs for struggling readers (M = 2.90, SD = .71) and readers in general (M = 2.87, SD =

.68), t(29) = 1.00, p = .33; and understanding of current research for struggling readers (M = 2.80, SD =

.66) and readers in general (M = 2.77, SD = .68), t(29) = 1.00, p = .33.

Courses and Experiences Contributing to Confidence

To what degree did various courses and experiences contribute to pre-service

teachers' levels of confidence in teaching reading? There were no statistically significant differences

between any of the factors with respect to contribution to confidence in teaching reading to struggling

readers versus readers in general:

Table 3. Contribution of Courses and Experiences to Pre-service Teachers' Confidence in Teaching

Reading Acquisition Skills

Courses and Experiences Contributing to Confidence in Teaching Reading	*for Struggling Readers*	*for Students in General*	*Significance*
Coursework			
Special education	M = 3.23, SD = .73	M = 3.37, SD = .62	$t(29)$ = 1.16, p = .26
Elementary education	M = 3.37, SD = .77	M = 3.53, SD = .63	$t(29)$ = 1.31, p = .20
College instructor's knowledge	M = 3.30, SD = .60	M = 3.40, SD = .62	$t(29)$ = .828, p = .42
Field experiences (practica) Special education	M = 3.32, SD = .67	M = 3.39, SD = .69	$t(27)$ = .812, p = .42
Elementary education	M = 3.53, SD = .57	M = 3.57, SD = .57	$t(29)$ = -.571, p = .57
Student teaching Special education	M = 3.34, SD = .67	M = 3.45, SD = .57	$t(28)$ = -1.14, p = .26
Elementary education	M = 3.47, SD = .57	M = 3.43, SD = .50	$t(29)$ = .441, p = .66
Mentor teacher's method of teaching reading	M = 3.40, SD = .62	M = 3.43, SD = .63	$t(29)$ = .297, p = .77
Professional development workshops	M = 3.00, SD = .79	M = 3.07, SD = .74	$t(29)$ = 1.44, p = .16

Responses to Open-Ended Research Questions

    Open-ended questions inquired about a specific experience or project that contributed towards the pre-service teachers' preparation to teach reading acquisition skills. Several respondents mentioned Literature Circles, many mentioned watching their mentor teachers and mentioned specific strategies used by the mentors, one respondent mentioned learning about miscue analysis, and several wrote about a project in their reading difficulties class where they had to research a specific method and present it to the class. Another mentioned Guided Reading, and yet another mentioned applying

ZooPhonics strategies in a Resource classroom. Almost every comment mentioned the benefit of the field experience and actually implementing specific methods and strategies that they had learned about in their college coursework. One participant stated, *"I had my students create their own books and they took ownership of the project. They wrote the drafts, drew the pictures, etc. What really helped the students to read is that it related to them because they created it."* Another wrote about a unit her mentor teacher did on the ocean where the students read stories, created their own books, and described how the mentor teacher integrated both phonics and whole language throughout the unit.

Pre-service teachers responded to the second open-ended question about a workshop that prepared them to teach reading acquisition skills." Again, several mentioned Literature Circles. One participant stated, the workshop "Ka Hui Heluhelu" from a large, prestigious, private school *"taught us how to apply specific reading strategies within the context of collaborative learning literature circles."* One participant mentioned a workshop about interdisciplinary units. Interestingly, one respondent stated, *"No workshop prepared me…I learned by working with the students."*

The third and final open-ended question asked for "suggestions or recommendations for improving pre-service teacher preparation programs." One participant recommended more classes on assessing students. Several stated that they needed more classes in reading strategies and more methods classes in general. One participant stated, "*A course on reading strategies should be required for all Elementary Education majors*." Another stated, "*Strategies for Reading Difficulties should be a mandatory course*." Yet another participant stated, *"Direct instruction geared towards training teachers to actively apply content such as phonemes, morphology, pragmatics, phonetics, syntax within the classroom with students."* Several participants stated that they do not feel comfortable teaching reading acquisition skills. For example, *"I learned so many wonderful activities; writing workshop, however, these are for those that already know how to read. I wouldn't know where to begin to teach a non-reader how to read."*

In general, the participants felt that hands-on field experiences were the most beneficial. They wanted specific instruction in reading strategies and more opportunity to practice what they learned under the direction of a knowledgeable mentor teacher. Pre-service teachers "need opportunities to apply the knowledge they learn in college classroom to public school classrooms under the direction of experienced mentor teachers and university supervisors who work closely together" (Jenkins, Pateman, & Black, 2002, p. 361).

Discussion

The most encouraging finding from our study is that the pre-service teachers did not feel less confident in teaching reading to struggling readers than to students in general. Nineteen felt confident and six felt very confident with respect to struggling readers (25/31, 81%). Five felt very confident and 21 felt confident with respect to students in general (26/31, 84%). This similarity in confidence levels was surprising in light of the NCES (1998) findings that 99% of in-service teachers studied stated they were well prepared or moderately prepared to teach reading; but only 65% felt they were well or moderately prepared to teach students with disabilities (only 11% of the 65% felt well prepared). However, our findings may not be directly compared to the NCES study because our questions were worded differently. The NCES asked about how well prepared the teachers were to teach students with disabilities; not how well prepared they were to teach *reading* to students with disabilities. Another difference was that our study asked about confidence in teaching *struggling readers*, not children with disabilities. Teachers' interpretations of *struggling readers* are probably quite different from what they envision when thinking of teaching students with disabilities.

Reading Acquisition Skills

Participant's confidence levels were the same for struggling readers and readers in general in (a) literacy development, (b) phonological awareness skills, (c) strengths to become a skilled reader, (d) content of instruction, and (e) formal and informal assessment procedures with no statistically

significant differences. While the means were not identical for understanding of various reading methods and programs for struggling readers and readers in general and understanding of current research for struggling readers and readers in general, there were no statistically significant differences between participant's levels of confidence.

The open-ended items clearly reflected students' perceptions of the importance of the Reading Difficulties course stating it should be required of every education major, not just those seeking dual teacher licensure in elementary and special education.

Although two literacy courses were offered through the elementary education program and one reading course through the special education program, a delineation between the elementary general education instructor(s) and the special education instructor(s) associated with college instructor's knowledge was not made on the survey of the item *college instructor's* knowledge.

The conceptual foundation for the reading course through the special education program was based on the five critical skill areas in reading instruction are phonemic awareness, phonics, fluency, vocabulary, and reading comprehension (Moats, 1994; 1999; Moats & Brady, 1997; Moats & Lyon, 1996; Snow, Burns, & Griffin, 1998). Pre-service teachers need to understand literacy development, the linguistic units of both print (orthography) and speech (phonology). Pre-service teachers need to acquire knowledge regarding sound-letter association (phonics) and spelling generalization and rules (Moats, 1994, 1999). Lastly, pre-service teachers need to understand syntax, semantics, and text structure and be able to foster comprehension skills and writing skills. From results of our survey, it appears that the pre-service educators recognized this fact by recommending that all prospective educators take a class that focuses on "*direct instruction geared towards training teachers to actively apply content such as phonemes, morphology, pragmatics, phonetics, syntax within the classroom with students.*"

Field Experiences

There were no statistically significant differences between special and general education field experiences as it related to confidence levels in teaching reading acquisition skills to struggling readers and readers in general. There were also no statistically significant differences between elementary general education and special education student teaching as it related to struggling readers and readers in general. Perhaps because the field experiences and student teaching experiences in both elementary and special education take place concurrently, there is a "spill over" effect. It seems that the program truly is integrated. Participants' confidence levels were the same whether asking about teaching students in general or teaching struggling readers.

Part of field experience is working with a mentor teacher and for these particular pre-service teachers their mentor teachers' knowledge was important as they developed confidence in teaching reading acquisition skills. There were no statistically significant differences between how the pre-service teachers perceived the influence of their mentor teachers' practices in teaching reading to struggling readers and to readers in general. It is important to note, however, that the teachers were not comparing their general education and special education mentor teachers. They were just evaluating the influence of their mentor teachers' knowledge on their own confidence level.

Coursework

There were no statistically significant differences between the pre-service teachers' perceptions of the degree to which elementary and special education courses contributed to their confidence in teaching reading acquisition skills. The special education program has one class devoted to reading acquisition skills, S*trategies for Reading Difficulties;* other classes are devoted to classroom management, methods and assessment, working with families, and assistive technology. The elementary education program has two required classes in literacy; other courses are devoted to math, health, science, social studies, art, drama, and physical education. If the participants had been asked, "How much did the one reading class you took in special education influence your level of confidence?"

or "How much did the literacy classes you took in elementary education influence your level of confidence?" the results may have been very different. Therefore, our results are not surprising since we asked about the participants' coursework in general, not about specific courses.

Limitations

Limitations of our study included a small sample size. The survey was given to 52 undergraduate pre-service teachers and 31 pre-service teachers returned their surveys and participated in the study (59.62%). Results of our study cannot be directly compared to national studies because we used the terms *struggling reader* and *student in general* instead of the term *student in special education* or *student with a reading disability* and student in general. Although, the program was a dual preparation program in elementary and special education, we did not specify which college instructor (elementary or special education) when inquiring about college instructor's knowledge. Additionally, we did not specifically inquire which college courses contributed to their level of confidence. Last, students in the dual preparation programs could have experienced as many as eight mentor teachers during their program, and we did not ask the participants to specify which mentor teachers influenced them the most.

Implications

Much of the literature discusses teachers feeling unprepared to teach students with disabilities. Our sample, however, felt confident in teaching struggling readers. Is this difference in confidence level because we used the term struggling readers instead of students with disabilities? Or is this increased level of perceived confidence due to the nature of the pre-service teachers' preparation – namely dual licensure. Using the same survey to compare elementary education only and dual preparation would be the next step in answering this question. Nevertheless, all elementary teachers will have struggling readers in their classrooms. Perhaps dual preparation is a better way to prepare all teachers for meeting the needs of all students.

The following overall implications exist for current pre-service teacher preparation programs at our university. Eighty-one percent of the participants felt confident or very confident in teaching reading acquisition skills to struggling readers, and 84% felt confident or very confident teaching readers in general. Since there were no statistically significant differences between the participant's confidence level to teach struggling readers and readers in general, could the dual preparation cohort program in elementary general education and special education be more effective than other elementary general education cohort programs for undergraduate pre-service teachers?

The integration of courses in the dual preparation cohort program appears to enhance the level of confidence of pre-service teachers in teaching reading acquisition skills to struggling readers and students in general in Kindergarten through third grade. In response, first author integrated *Strategies for Reading Difficulties* with the elementary general education's reading class, *Literacy and Literature*, Part I. This collaborative instructional effort provided for a clear delivery of pedagogy, less duplication, and a better understanding and acceptance of the generalist and specialist's perceptions in reading for struggling readers and students in general. Perhaps, we as instructors create the dichotomy between special education and general education by teaching courses separately and not offering a more integrated approach to teaching reading in higher education. Although this integrated program in higher education appears to be highly effective, one could also argue in support for more programs, which address specific pedagogy (i.e., language structure) for struggling readers. In any event, it appears that this particular group of pre-service educators was more confident in their ability to teach reading to all students, those who struggle and those who do not, than similar surveyed participants in the research literature.

Future Research

Future research should compare confidence levels of pre-service teachers' in different types of preparation programs. Are pre-service educators who are prepared in dual preparation programs

(elementary and special education) more confident in teaching reading acquisition skills than those who are prepared only for teaching elementary education? What kinds of strategies do these pre-service teachers use to teach reading several years after they have had classrooms of their own? How do they (or do they) use strategies, methods, and interventions from their college classes? Do the methods used several years later by elementary-only prepared teachers differ from those who received dual preparation? If these methods are different, are some superior to others?

And last, but certainly not least, this study examined pre-service teachers' perceived levels of confidence. We do not know whether their actual competence in teaching reading matched their confidence levels. Were they effective in teaching reading with students in general as well as with struggling readers? It is our hope that the additional coursework required by the dual preparation program at our university did, in fact, increase these pre-service educators' confidence and skill levels. And that this increased confidence and skill resulted in gains in student learning in our State.

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