The Big 5: Teacher Knowledge and Skill Acquisition in Early Literacy

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THE BIG 5: TEACHER KNOWLEDGE AND SKILL ACQUISITION IN EARLY LITERACY

Joanne P. Vesay and Karen L. Gischlar

Abstract

In this study, the investigators surveyed 215 early childhood educators throughout New Jersey and eastern Pennsylvania to determine teacher knowledge and training in early literacy instruction, with a focus on The 5 Big Ideas in Reading as identified by the National Reading Panel: phonological awareness, accuracy and fluency, alphabetic principle, vocabulary, and comprehension (National Reading Panel, 2000; Walpole, McKenna, Uribe-Zarain, & Lamitina, 2010). The survey response totals indicated that of the five literacy domains, early childhood teachers were most likely to have had training in phonological awareness and least likely to have had training in the domain of vocabulary. Across all critical domains of early literacy, professional development was the most common training format and mentoring was the least common training format.
The Big 5: Teacher Knowledge and Skill Acquisition in Early Literacy

The National Reading Panel classified precursor skills into five critical domains of reading to include: phonemic awareness, alphabetic principle, fluency, vocabulary and comprehension (Pufpaff & Yssel, 2010; Rowe, 2005). Hsieh, Hemmeter, McCollum, and Ostrosky (2009) also include skills in listening, speaking, and writing in the foundations of emergent literacy. To ensure all children have the critical foundations in literacy prior to kindergarten, developers of preschool curricula are focusing their efforts on early learning standards, including emerging literacy outcomes (Hsieh et al., 2009). “Balanced” approaches to emergent and early literacy instruction take into account both the foundation skills for later decoding (including learning the alphabet, awareness of phonological/sound units, and sound/letter correspondence) as well as reading comprehension, vocabulary, and semantic-syntactic skills at the sentence level. The next logical step is to ensure that teachers have the necessary skill set within the critical domains of early literacy to effectively teach reading to preschool students. These skills are particularly warranted for teachers who work with struggling readers.

The research highlights specific precursor skills for educators to support effective literacy instruction. Early childhood educators need to have an understanding that speech is composed of phonemes or individual sound segments of speech and that the alphabet represents those phonemes (i.e. phonological awareness and alphabetic principle). Adequate skills for phonological processes instruction requires a teacher to make a conscious disassociation of sound from spelling if they are to think of words and their component sounds as children do before they read and spell. Teachers also need knowledge of linguistic structures beyond letter-sound correspondences. Teachers must demonstrate implicit knowledge of sound-symbol correspondences and their relation to English word structure (i.e., phonics). Fluency/decoding instruction would require teachers to possess explicit knowledge of the rules and conventions of the English language and how recognizing words easily and accurately is essential for rapid decoding. Instruction of vocabulary, facilitated by adequate skill in phonological awareness, requires an understanding of semantic structures, rules of grammar and word structure relationships. Comprehension instruction requires a thorough knowledge of linguistic concepts and complex sentence structures (Cunningham et al., 2004; Mather, Bos, & Babur, 2001; McCutchen, Abbott et al., 2002; Moats & Foorman, 2003).

A key area of content knowledge in reading for teachers involves understanding English word structure (Spear-Swerling & Brucker, 2003). This knowledge is vital for effective teaching of word identification, word decoding, and spelling (Mc-
Cutchen, Abbott et al., 2002; Moats, 2000; Moats & Foorman, 2003; Spear-Swerling & Brucker, 2004). Research addressing teacher preparation and teacher knowledge in early literacy skills has indicated that despite high general knowledge, many literate adults, including preservice and experienced special and general educators, do not possess adequate knowledge of English phonology and orthography (Bos et al., 2001; Cunningham et al., 2004; McCutchen, Abbott et al., 2002; McCutchen, Harry et al., 2002; Moats & Foorman, 2003; Spear-Swerling & Brucker, 2003; 2004). Teachers’ descriptions of their instructional strategies also indicate concerns with explicit instruction for vocabulary knowledge (O’Leary, Cockburn, Powell, & Diamond, 2010); however, through effective training and professional development, teachers can increase their understanding of vocabulary, phonology and spelling patterns to positively influence their instructional practices and effectiveness (McCutchen, Abbott, et al., 2002; Moats & Foorman, 2003; O’Leary et al., 2010).

Cunningham et al. (2004) focused their study on three domains of knowledge of early literacy: children’s literature, phonological awareness, and phonics. These specific domains are considered critical to literacy development, especially for children with language and reading difficulties (National Reading Panel, 2000; Rayner, Foorman, Perfetti, Pesetsky, & Seidenberg, 2001; Snow, Burns, & Griffin, 1998). The results of the study indicated that the knowledge base of many K-3 teachers is not adequate and therefore the results do not align with the large body of research demonstrating the vital role that the component processes of phonemic awareness and alphabetic knowledge play in learning to read. These results were consistent with the findings of Bos et al., (2001).

The combination of teacher preparation, support and collaboration appear to be key elements for increasing reading performance (Bos, Mather, Silver-Paucilla, & Narr, 2000). Teachers trained in early literacy skill instruction are more likely to have students who show cognitive gains that are maintained well into Kindergarten (Whitehurst & Lonigan, 2002).

The challenge is to identify effective teaching strategies that optimize children’s literacy achievement (Justice & Pullen, 2003) and are grounded in evidence-based practice. Justice, et al. (2008) suggest high quality literacy instruction should include explicit direct instruction that incorporates phonological and print structures. Unfortunately, few teachers deliver high quality instruction even when using specific literacy curricula (Hsieh et al., 2009). Brown, Molfese, and Molfese (2008), found that when comparing a teacher’s level of education to their teaching experience, education had the stronger influence on a young child’s letter development skills. Furthermore, teachers’ descriptions of their instruction emphasized more
explicit planning strategies for phonological awareness skills than for development of vocabulary (O’Leary et al., 2010). Landry, Swank, Smith, Assel, & Gunnewig (2006) found that intervention differences were most significant with higher levels of teacher training combined with the use of early literacy curricula. Several national reports have suggested the benefits of phonics instruction for the development of early reading skills; however the familiarity with concepts of linguistic features of the English language remain inconsistent across early childhood educators (Joshi et al., 2009). Many early childhood teachers have poor or minimal skills in segmenting sounds, or differentiating phonemes from graphemes. In addition, many teachers function from an orthographic (letter-based) level rather than from sounds within words (Cunningham & Stanovich, 2004). Bos et al. (2000) suggest that struggling readers should participate in early literacy programs that balance instruction supporting language development and comprehension with instruction of basic skills that include phonological awareness, word recognition, spelling and fluency. Attainment of phonological awareness, print concepts, alphabet knowledge, and language are the precursors to success in reading. There is a need to determine what instructional strategies are most effective in supporting children’s acquisition of these concepts and expand teacher preparation programs to include focus on phonemic awareness, phonics, fluency, vocabulary knowledge and text comprehension (Catts, Fey, Tomblin, & Zhang, 2002; Jackson et al., 2006).

The need to improve early educator’s knowledge and skills related to literacy instruction is evident (Burchinal, Peisner-Feinberg, Bryant, & Clifford, 2000; Pufpaff & Yssel, 2010) and those essential skills to structure instruction will optimize the literacy achievements of young children (Justice & Pullen, 2003).

In this study, we were interested in learning whether early childhood teachers have acquired the necessary skills to support early literacy skill acquisition and how they acquired that knowledge. Four questions guided the present study:

1. Are early childhood educators trained in the five identified critical domains of early literacy: phonological awareness, alphabetic principle, fluency, comprehension, and vocabulary?

2. Do early childhood teachers differ in their knowledge base across the early literacy domains and do differences exist between early childhood teachers in general education, special education, and integrated class rooms?

3. How do early childhood teachers acquire and/or develop their own knowledge base in the critical domains of early literacy (e.g., preservice or in-service training) and do differences in training exist between early childhood teachers in general education, special education and integrated classrooms?
Method

Participants
The study involved (N = 215) early childhood educators from both public (n = 153) and private school settings (n = 62). The teachers were mostly women (98.1%) and Caucasian (93.0%). The majority (42.3%) was 50 years of age or more (see Table 1). Seventy-four (34.4%) of the teachers had 21 years or more of teaching experience and the majority were in their current positions at least ten years (see Table 2). Of the 215 participants, 211 had earned college degrees: 114 earned a Bachelor’s degree; 96 earned a Master’s degree; and one teacher earned an Associate’s degree. Many of the teachers reported working with multiple ages groups; however, 72.6% indicated the four to five age group as the most common (see Table 3). One hundred, twenty-eight (59.6%) of the teachers were in general education classrooms, 31.6% (n = 68) were in integrated classrooms and the remaining 8.8% (n = 19) were in special education classrooms.

Table 1
Demographics for the Teacher Respondents

<table>
<thead>
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<th>Demographic</th>
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<td>Gender</td>
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</tr>
<tr>
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</tr>
<tr>
<td>Men</td>
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<td>Age</td>
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<td>25-29</td>
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<td>30-34</td>
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<td>35-39</td>
<td>31</td>
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<tr>
<td>40-44</td>
<td>19</td>
</tr>
<tr>
<td>45-49</td>
<td>26</td>
</tr>
<tr>
<td>50+</td>
<td>91</td>
</tr>
<tr>
<td>No Response</td>
<td>2</td>
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</table>
### Demographics for the Teacher Respondents

<table>
<thead>
<tr>
<th>Ethnicity</th>
<th>Count</th>
<th>Percentage</th>
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</thead>
<tbody>
<tr>
<td>Caucasian</td>
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<td>93.0%</td>
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<tr>
<td>Black/AA</td>
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<td>1.4%</td>
</tr>
<tr>
<td>Hispanic/Latino</td>
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<td>2.3%</td>
</tr>
<tr>
<td>Native American</td>
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</tr>
<tr>
<td>Asian or Pacific Islands</td>
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<td>--</td>
</tr>
<tr>
<td>Mid-Eastern</td>
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<td>&lt;1.0%</td>
</tr>
<tr>
<td>No Response</td>
<td>4</td>
<td>1.9%</td>
</tr>
</tbody>
</table>

Table 1

### Training/Teaching Experience for the Teacher Respondents

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<th>Percentage</th>
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</thead>
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<tr>
<td>0-2</td>
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<tr>
<td>3-5</td>
<td>18</td>
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<td>6-9</td>
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</tr>
<tr>
<td>10-15</td>
<td>59</td>
<td>27.4%</td>
</tr>
<tr>
<td>16-20</td>
<td>33</td>
<td>15.3%</td>
</tr>
<tr>
<td>21 or more</td>
<td>74</td>
<td>34.4%</td>
</tr>
<tr>
<td>No response</td>
<td>2</td>
<td>&lt;1.0%</td>
</tr>
<tr>
<td>Years at current position</td>
<td></td>
<td></td>
</tr>
<tr>
<td>0-2</td>
<td>20</td>
<td>9.3%</td>
</tr>
<tr>
<td>3-5</td>
<td>48</td>
<td>22.3%</td>
</tr>
<tr>
<td>6-9</td>
<td>56</td>
<td>26.1%</td>
</tr>
<tr>
<td>10-15</td>
<td>59</td>
<td>27.4%</td>
</tr>
<tr>
<td>16-20</td>
<td>21</td>
<td>9.8%</td>
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<tr>
<td>21 or more</td>
<td>11</td>
<td>5.1%</td>
</tr>
<tr>
<td>No response</td>
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</tbody>
</table>

Table 2

### Education Level and Classroom Type for TeacherRespondents

<table>
<thead>
<tr>
<th>Demographic</th>
<th>Count</th>
<th>Percentage</th>
</tr>
</thead>
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<td>Highest Level of Education</td>
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<td>High School Diploma/GED</td>
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<td>--</td>
</tr>
<tr>
<td>CDA</td>
<td>0</td>
<td>--</td>
</tr>
<tr>
<td>Some college (Non-degree)</td>
<td>2</td>
<td>&lt;1.0%</td>
</tr>
<tr>
<td>Associates</td>
<td>1</td>
<td>&lt;1.0%</td>
</tr>
<tr>
<td>Bachelors</td>
<td>114</td>
<td>53.0%</td>
</tr>
<tr>
<td>Masters</td>
<td>96</td>
<td>44.7%</td>
</tr>
</tbody>
</table>

Table 3
Data were collected via electronic survey which was deployed to early childhood educators throughout New Jersey and eastern Pennsylvania. Market Data Retrieval (MDR) research services were used to identify the target population and for survey deployment. The limiters for the school database search included teachers working with children two to five years of age in general education, special education, and integrated (combined general and special education) classrooms. The search resulted in over 1900 potential respondents (1400 from New Jersey and 525 from eastern Pennsylvania). A total of 222 teachers responded to the request for participation. Two hundred fifteen agreed to participate and completed the survey via electronic format.

A descriptive survey (see Appendix), designed by the researchers, was based on the literature of children’s acquisition of early literacy. The National Reading Panel classified precursor skills into five critical domains of reading to include: phonological awareness, alphabetic principle, fluency, vocabulary and comprehension (Pufpaff & Yssel, 2010; Rowe, 2005). The researchers developed questions for the survey with the goal of differentiating among the five aforementioned critical areas of early literacy. For this study, teachers were asked to describe the training they received in each of these literacy domains. The teachers were able to select from the types of training commonly used by teachers to acquire knowledge and instructional strategies in literacy instruction: preservice coursework, on-the-job training, professional development, mentoring/coaching, and self-taught. Teachers indicated for each of the five critical areas the types of training they received. The teachers were permitted to indicate any choices that applied. If they had no training in a particular area they were asked to indicate that as well. If a respondent didn’t want to answer a question, they were permitted to leave it blank.
This survey was distributed to a pilot group of teachers using a national school database service. The researchers provided the following limiters: early childhood teachers of students two to five years of age, public and private school settings, and all classroom settings and private schools inclusive of general education, special education, and integrated classrooms. The survey was initially distributed in late fall with a secondary deployment to the same pool of teachers in early winter of the same school year.

The geographical region for this pilot study was in close proximity to the researchers. All the counties of New Jersey and the eastern counties of Pennsylvania were used in preparation for subsequent national distributions.

Data Collection and Analysis

The data were analyzed to address the similarities and contrasts across the respondent groups in regard to the following questions. First, do all the respondents have training regarding the five critical domains of early literacy: phonological awareness, fluency, alphabetic principle, comprehension, and vocabulary? Second, how do educators vary based on training/no training across the critical domains and do differences exist across general education, special education, and integrated classrooms? Third, how do early childhood teachers acquire and/or develop their own knowledge base in the critical domains of early literacy (e.g., preservice or in-service training) and do differences exist across training for early educators in general, special, and integrated classrooms?

To address all the questions, the responses and percentages for each group were computed and visually examined. For the first question, respondents were separated by training in the domain areas. By comparing responses across type of preschool classroom, general education (n = 128), special education (n = 19), and integrated classroom (n = 68), we were able to address the second question. For the third question, we compared the same respondents across type of training. These data are displayed accordingly in Tables 4 and 5.

For the fourth and final question, the individual literacy domains were grouped and compared across preschool classroom settings by type of teacher training: pre-service coursework, on-the-job training, professional development/in-services, self-taught skills, and mentor teaching (see Table 5).

Results

The results reported address training in specific reading skill instruction. The results from the companion to this paper (i.e., Gischlar & Vesay, in preparation)
address preschool teachers’ use of general or literacy specific curriculum and the training the teachers received to implement the curriculum. Questions pertaining specifically to training in the teaching of early literacy skills areas are addressed in this study.

**General Knowledge and Comparisons of Early Childhood Educators Across Early Literacy Domains**

The first question focused on educators’ general training of the critical domains in early literacy. On the critical domains of early literacy, 95.6% of respondents indicated they received training in phonological awareness, 91.3% indicated training in listening comprehension, 89.8% indicated training in phonics instruction, 90.8% reported training in reading comprehension, and 85.9% indicated training in vocabulary.

**Comparisons of Early Childhood Educators Across Type of Preschool Classroom**

**General Educators.** On the critical domains of early literacy, 94.3% of general educators indicated they received training in phonological awareness, 87.7% indicated training in listening comprehension, 86.9% indicated training in phonics instruction, 90.2% reported training in reading comprehension, and 82.8% indicated training in vocabulary.

**Special Educators.** On the critical domains of early literacy, 94.7% of special educators indicated they received training in phonological awareness, 100% indicated training in listening comprehension, 89.5% indicated training in phonics instruction, 78.9% reported training in reading comprehension, and 77.8% indicated training in vocabulary.

**Integrated Classroom Educators.** On the critical domains of early literacy, 98.5% of teachers in integrated classrooms indicated they received training in phonological awareness, 93.9% indicated training in listening comprehension, phonics instruction, and reading comprehension, and 92.4% indicated training in vocabulary.

Comparative results (see Table 4) for preschool classroom type were noteworthy. Educators in integrated classrooms expressed the most consistent responses for training across four of the five domains. All of the special educators indicated they received training in listening comprehension, as compared to 87.7% of general education teachers and 93.9% of those in integrated settings.
Teacher Training in Literacy Domains for Early Childhood Educators

Across all critical domains of early literacy, professional development (79.7%) was the most common format for training of early childhood teachers. Pre-service coursework, self-taught skills, and on-the-job training were of secondary importance and percentage scores and rankings were similar across the five domains. The least common training mode for all five domains was mentoring and the results were consistent across classroom type (see Table 5).

Table 4
Training in Critical Domains – Across Type of Preschool Classroom

<table>
<thead>
<tr>
<th>Demographic</th>
<th>General Education N = 128</th>
<th>Special Education N = 19</th>
<th>Integrated Classroom N = 68</th>
<th>Response Totals N = 215</th>
</tr>
</thead>
<tbody>
<tr>
<td>Literacy Domains</td>
<td>%</td>
<td>%</td>
<td>%</td>
<td>%</td>
</tr>
<tr>
<td>Phonological awareness</td>
<td>94.3</td>
<td>94.7</td>
<td>98.5</td>
<td>95.6</td>
</tr>
<tr>
<td>Listening comprehension</td>
<td>87.7</td>
<td>100.0</td>
<td>93.9</td>
<td>91.3</td>
</tr>
<tr>
<td>Phonics</td>
<td>86.9</td>
<td>89.5</td>
<td>93.9</td>
<td>89.8</td>
</tr>
<tr>
<td>Reading comprehension</td>
<td>90.2</td>
<td>78.9</td>
<td>93.9</td>
<td>90.8</td>
</tr>
<tr>
<td>Vocabulary</td>
<td>82.8</td>
<td>77.8</td>
<td>92.4</td>
<td>85.9</td>
</tr>
</tbody>
</table>

*9 survey participants did not respond to questions

Teacher Training in Literacy Domains and Comparisons of Early Childhood Educators Across Type of Preschool Classroom

General Education Teachers. Across all critical domains of early literacy, professional development was the most common format for training of general educators, with responses ranging from 61.5% (vocabulary) to 80.3% (phonological awareness). Pre-service coursework, on-the-job training, and self-taught skills were of secondary importance and percentage scores and rankings were similar across the five domains. General educators reported the least common training mode for all five domains was mentoring, ranging in scores of 12.3% for listening comprehension and vocabulary to 17.2% for phonological awareness (see Table 5).

Special Education Teachers. Professional development was the most common training modality for special educators across four of the five literacy domains, with responses ranging from 63.2% (reading comprehension) to 89.5 % (listening comprehension). The domain of vocabulary had the most variation compared to the other domains. Fifty percent of the special educators indicated they relied on pre-service coursework and self-taught skills to acquire training in vocabulary instruction and 44.4% indicated they use on-the job and/or professional development training (see Table 5).
The special education teachers also indicated that 50% utilized pre-service training in the domains of listening comprehension, phonics, and reading comprehension. Mentoring was used minimally across four domains with no instance of use with acquiring reading comprehension (see Table 5).

**Integrated Classrooms.** Similarly to the general education teachers, professional development was the most common training modality for school teachers in integrated classrooms across all five literacy domains, with responses ranging from 68.2% (phonics) to 78.8% (phonological awareness). Almost 50% of the integrated classroom teachers also indicated that they received preservice coursework in all five literacy domains. Though mentoring was also reported as the least common training type across all five domains (range of use was reported from 13.6% for phonics and up to 24.2% for listening comprehension), teachers in integrated classrooms clearly used mentoring more frequently than general educators and special educators and these results are consistent across all five literacy domains (see Table 5).

Table 5

<table>
<thead>
<tr>
<th>Training in Critical Domains of Early Literacy – Across Classroom Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>Demographic</td>
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<tr>
<td>-------------</td>
</tr>
<tr>
<td>Phonological Awareness</td>
</tr>
<tr>
<td>Pre-service coursework</td>
</tr>
<tr>
<td>On-the-job training</td>
</tr>
<tr>
<td>Professional development</td>
</tr>
<tr>
<td>Self-taught</td>
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<tr>
<td>Mentoring</td>
</tr>
<tr>
<td>Phonics</td>
</tr>
<tr>
<td>Pre-service coursework</td>
</tr>
<tr>
<td>On-the-job training</td>
</tr>
<tr>
<td>Professional development</td>
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Table 5
Training in Critical Domains of Early Literacy – Across Classroom Type

<table>
<thead>
<tr>
<th>Demographic</th>
<th>General</th>
<th>Special</th>
<th>Integrated</th>
<th>Response</th>
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<tbody>
<tr>
<td>Mentoring</td>
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<td>13.6</td>
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**Listening Comprehension**

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<th>Response</th>
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</thead>
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<td>46.4</td>
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<tr>
<td>On-the-job training</td>
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<td>42.1</td>
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<tr>
<td>Professional development</td>
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*9 survey participants did not respond to questions.

**Training in Critical Domains of Early Literacy – Across Classroom Type**

<table>
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<tr>
<th>Demographic</th>
<th>General</th>
<th>Special</th>
<th>Integrated</th>
<th>Response</th>
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</thead>
<tbody>
<tr>
<td>Reading Comprehension</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pre-service coursework</td>
<td>47.5</td>
<td>42.1</td>
<td>50.0</td>
<td>47.8</td>
</tr>
<tr>
<td>On-the-job training</td>
<td>38.5</td>
<td>36.8</td>
<td>37.9</td>
<td>38.2</td>
</tr>
<tr>
<td>Professional development</td>
<td>71.3</td>
<td>63.2</td>
<td>71.2</td>
<td>70.5</td>
</tr>
<tr>
<td>Self-taught</td>
<td>39.3</td>
<td>36.8</td>
<td>43.9</td>
<td>40.6</td>
</tr>
<tr>
<td>Mentoring</td>
<td>16.4</td>
<td>0.0</td>
<td>19.7</td>
<td>15.9</td>
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**Vocabulary**

<table>
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<th>Special</th>
<th>Integrated</th>
<th>Response</th>
</tr>
</thead>
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<td>Pre-service coursework</td>
<td>36.1</td>
<td>50.0</td>
<td>51.5</td>
<td>42.2</td>
</tr>
<tr>
<td>On-the-job training</td>
<td>35.2</td>
<td>44.4</td>
<td>33.3</td>
<td>35.4</td>
</tr>
<tr>
<td>Professional development</td>
<td>61.5</td>
<td>44.4</td>
<td>74.2</td>
<td>64.1</td>
</tr>
<tr>
<td>Self-taught</td>
<td>35.2</td>
<td>50.0</td>
<td>47.0</td>
<td>40.3</td>
</tr>
<tr>
<td>Mentoring</td>
<td>12.3</td>
<td>11.1</td>
<td>21.2</td>
<td>15.0</td>
</tr>
</tbody>
</table>

*9 survey participants did not respond to questions.
Discussion and Limitations

This study builds on previous research in early childhood teacher training and the critical skills related to literacy instruction (Burchinal et al., 2000; Pufpaff & Yssel, 2010; Walpole et al., 2010). Research has demonstrated that phonological awareness is a precursor to literacy and includes the understanding that speech is composed of phonemes or individual sound segments of speech and that the alphabet represents those phonemes. Teachers need to make a conscious disassociation of sound from spelling if they are to think of words and their component sounds as children do before they read and spell. Teachers also need knowledge of linguistic structures beyond letter-sound correspondences. A teacher’s pedagogical knowledge for phonics instruction must include implicit knowledge of sound-symbol correspondences and their relation to English word structure. Teachers must also possess explicit knowledge of the rules and conventions of the English language (Cunningham et al., 2004).

Results from this study show that early childhood teachers do receive training in the critical areas of phonological awareness, phonics/decoding, reading comprehension, listening comprehension, and vocabulary; however the amount or consistency of training varies across those critical areas. For example, our results indicate that early childhood teachers overall are more likely to have training in phonological awareness and less likely in vocabulary development. Differences across type of classroom were noted when comparing literacy training for teachers in general education, special education, and integrated classrooms. Training in vocabulary development was the least likely skill for the teachers in all three classroom settings. General education and integrated classroom teachers were most likely to have training in phonological awareness. Special educators were most likely to have training in phonological awareness and listening comprehension.

The results from this study indicate that teachers’ acquisition of knowledge and skill in all five literacy domains is obtained primarily through professional development. Though mentoring/coaching is gaining in popularity as an effective mode for teacher training, it was still the least utilized according to the survey results. These results were consistent when making comparisons across classroom type (e.g., general, special, integrated). It was also noteworthy that early childhood special educators indicated preservice coursework was the second most common modality for training in all five early literacy domains.
Implications for Practice

A well-developed early literacy curriculum can offer evidence-based ideas and strategies to teach young children concepts for beginning reading. However, the greatest impact on children learning to read is the quality and skill of the teacher who is implementing the curriculum (Darling-Hammond & Bransford, 2005). The present study emphasizes the need for early childhood educators to have comprehensive training across all emergent literacy and early literacy skill domains. These skills are particularly critical for teachers who work with children who are at-risk for language and literacy deficits. Although the literature doesn’t indicate a specific order or ranking of importance for The 5 Big Ideas, the research indicates that teachers are most likely to have training in phonological awareness when compared to the other key literacy skills. Further, the phonological awareness knowledge and skill of educators is commonly linked to student outcomes (Spencer, Schule, Guillot, & Lee, 2008). Unfortunately for many teachers, previous training in phonological awareness may not have provided them the explicit and necessary phonemic awareness skills that are required for high quality literacy instruction (Justice et al., 2008). Future research should attempt to define a specific skill set and level of phonological skill required of teachers to ensure they achieve a sufficient knowledge of language structure which in turn will contribute to instructional effectiveness (Spencer et al., 2008).

Although the research clearly indicates the importance of vocabulary training, the literature explaining how to transfer this knowledge to classroom practice is very limited. How teachers initially introduce new words and use them purposefully throughout a lesson or entire theme will impact how the children hear, comprehend, and ultimately add those words to their own repertoire. Teachers need to be skilled in integrating new vocabulary into meaningful and functional language experiences and require explicit guidance regarding language development (Nagy & Scott, 2000; Wasik, 2010).

Limitations

Several limitations of the present study warrant comment. Because the survey distribution included teachers in New Jersey and eastern Pennsylvania, the sample size was limited geographically. The respondents were also primarily experienced teachers (98% had three or more years of experience) and almost half were in the 50+ age bracket. This may reflect that teachers with more experience and education were more likely to participate and, thus, not necessarily representative of New Jersey or Pennsylvania teachers. Additionally, similarities and differences in teachers’ knowledge and skills may be reflective of the state policies that drive preprofessional
training. Though the response rate of 11% was below the targeted 30% average for an online survey (Hamilton, 2003; Sheehan, 2001), the focus of this investigation was not to make generalizations but to gain insight. Further study to include a national distribution of the survey may provide more generalizability of results.

The demographic data obtained from the survey indicated that 98% of the teachers had earned college degrees of which 53.0% earned Bachelors, 44.7% earned Masters and <1.0% earned Associates. However, the participants were not required to specify their majors or program of study which may have obscured the data, especially when considering the recent changes to early childhood certification requirements, preservice training, and the differences in job/teacher qualifications across classroom settings. Further investigation of professional training specific to the undergraduate and graduate degrees of early childhood educators may highlight the differences in pedagogical and background knowledge across the current early childhood workforce.

The survey data were dependent on teacher self-report and teachers were given the option to skip any question without responding which occurred most frequently with regard to the questions on teacher training. Further study on teacher training specific to determining preferences for professional development and the related efficacy of the various training models in early literacy might address these considerations.

Summary

It is clear that the research in language development and early literacy has had a positive effect on ensuring children have the precursors to reading and writing. Further, current trends clearly indicate that literacy “instruction” provided prior to kindergarten is critical to ensure optimal opportunities for young children to develop early literacy skills (Whitehurst & Lonigan, 2002). This study of early childhood educators had two primary foci. First, this study explored early childhood educators and the early literacy skills they possessed. The findings suggested that although the majority of early childhood educators received training in all the critical areas of early literacy, 95.6% of the teachers indicated training in phonological development (most common domain), and 85.9% of the teachers received training in vocabulary instruction (least common domain). Although a number of the teachers reported “no training” in the five key early literacy elements, the teachers in the integrated classrooms had the most consistent training across all critical early literacy areas. Future research should be conducted to explore early literacy
curricula and the models of high-quality instruction. Additionally, early literacy teachers across all classroom settings must receive systematic instruction on how to implement the strategies within those models and be provided appropriate fidelity instruments to ensure effective implementation. Finally, the study sought to survey early childhood teachers to determine how they acquired their knowledge and skills in early literacy. The findings suggest that although professional development was the primary mode of training across all domains, preservice coursework, on-the-job training, and self-taught skills were heavily favored modes of instruction for teachers. Future studies should be conducted to explore the efficacy of the various models of preservice and in-service training to maintain and sustain high-quality instruction in emergent and early literacy instruction.

References


Appendix

Participant Survey

1. Gender
   o Female
   o Male

2. Age
   o 20-24
   o 25-29
   o 30-34
   o 35-39
   o 40-44
   o 45-49
   o 50+

3. Race/Ethnicity
   o Caucasian
   o Black/African American
   o Hispanic/Latino
   o Native American
   o Asian
   o Pacific Islands
   o Mid-Eastern

4. Highest level of education completed
   o High school diploma/GED
   o CDA (Child Development Associate)
   o Some college (non-degree
   o Associates
   o Bachelors
   o Masters
   o Doctorate

5. Total years teaching experience
   o 0-2
   o 3-5
   o 6-9
6. Years at current position
   - 0-2
   - 3-5
   - 6-9
   - 10-15
   - 16-20
   - 21 or more

7. Age group of student you teach
   - 2-3 years of age
   - 3-4 years of age
   - 4-5 years of age

8. Describe your preschool site
   - Public
   - Head Start
   - Private

9. Describe your preschool classroom
   - General education
   - Special education
   - Integrated classroom (combined general and special education)

10. What general early childhood curriculum are you currently using?

11. What training did you receive in order to use this general early childhood curriculum?
    - None
    - Preservice coursework
    - On-the-job training
    - Professional development
    - Self-taught
    - Mentor/Observed others
12. What early literacy assessments do you currently use?
   o Standardized assessment
   o Teacher-made tests or screening instruments
13. What training did you receive in order to use this/these early literacy assessments?
   o None
   o Pre-service coursework
   o On-the-job training
   o Professional development
   o Self-taught
   o Mentor/Observed others

14. Do you use specific literacy curriculum?
   o Yes
   o No

15. If you answered “Yes”, please list the literacy curriculum below:

16. What training have you had regarding Phonological Awareness (e.g., rhyming, blending)?
   o None
   o Pre-service coursework
   o On-the-job training
   o Professional development
   o Self-taught
   o Mentor teaching

17. What training have you had regarding Listening Comprehension?
   o None
   o Pre-service coursework
   o On-the-job training
   o Professional development
   o Self-taught
   o Mentor teaching

18. What training have you had regarding Phonics/Decoding Fluency?
   o None
19. What training have you had regarding Reading Comprehension?
   - None
   - Pre-service coursework
   - On-the-job training
   - Professional development
   - Self-taught
   - Mentor teaching

20. What training have you had regarding Vocabulary Comprehension?
   - None
   - Pre-service coursework
   - On-the-job training
   - Professional development
   - Self-taught
   - Mentor teaching
About the Authors

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