

An Assessment of Speech-Language Pathologists', Special Educators', and Elementary Teachers' Language Knowledge Related to Reading Instruction

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Introduction

- Reading is a language based activity that requires the skills of both decoding printed symbols and attaching meaning to them and comprehending what has been decoded.
- Teachers must make sure that students understand the language so that they may speak, read, and write effectively to facilitate communication.
- Current research has shown that current teacher preparation programs may not require teachers to have explicit language knowledge to help struggling readers.
- The National Reading Panel determined that effective reading instruction contains the components of phonemic awareness, phonics, guided oral reading, vocabulary instruction, and strategies to facilitate and improve reading comprehension (Hall, 2000).

Research

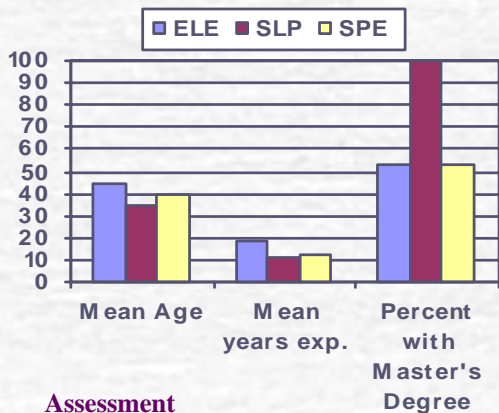
- To ensure reading success of all students, a comprehensive reading program should be used (National Education Association Task Force on Reading, 2000)
- Research has shown that current teacher preparation does not consistently require future teachers to have a command of language and how to teach it in order to facilitate the development of reading (Maots & Lyon, 1996).
- After surveying general teacher preparation programs, Nolen, McCutchen, and Berninger (1990) concluded that reading and writing instructional preparation, program requirements, and state certification standards must be upgraded nationwide.
- Few surveys have been completed that directly measure teachers' knowledge of the structure of language. Moats and Lyon (1997), however, found that teachers who are literate and experienced have little knowledge of the relationship of spoken and written language in order to adequately teach it.
- Toner and Edwards (2002) recently surveyed speech-language pathologists, special educators, and classroom teachers in Arkansas in regard to their opinions about their ability to teach reading and language knowledge. Results indicated that a majority of respondents from each profession were not sufficiently prepared in their academic program for their current job responsibilities in regards to reading.
- McCutchen et. al. (2002) assessed the knowledge of 59 teachers in general and linguistic knowledge. Results indicated that teachers scored significantly higher on the general knowledge test as compared to the linguistic knowledge test.

Purpose of the Current Study

- To ensure reading success of all students, a comprehensive reading program should be used (National Education Association Task Force on Reading, 2000). The purpose of this study was to assess linguistic knowledge of professionals in the Midwest within speech-language pathology, special education, and elementary education in regards to several different areas of reading instruction.

Subjects

- A total of 57 subjects were surveyed, nineteen subjects in each of the three disciplines including speech-language pathologists, special education teachers, and elementary education (first through third grade) teachers.
- Subjects were all employed at schools within a 100-mile radius of Charleston, IL.
- Sets of subjects were obtained from each school that participated. An equal number of subjects were used from each site based on the discipline that had the fewest number of employees at the school. For example, if a school had 2 speech-language pathologists, 4 special education teachers, and 18 regular education teachers, 2 subjects in each discipline completed the assessment.



Assessment

- A 26-question assessment of knowledge was used to assess subjects' knowledge in several areas of reading including phonemic awareness, phonics, and vocabulary/morphology. Seventeen of the questions were taken from Louisa Cook Moats' (1996) Informal Survey of Linguistic Knowledge. The remaining questions were developed by the author and supervisors to gain more information about the subjects' knowledge.
- The total number of points was 114. Each section of the survey had a point total ranging from 36-39.
- The first part of the survey addressed demographic information followed by 10 questions pertaining to phonemic awareness, 11 questions related to the topic of phonics, and seven questions about vocabulary/morphology.
- The survey consisted of multiple choice, true/false, and two open-ended questions.
- The author arranged a time to administer the survey at each of the participating schools and was present while the subjects completed the assessment.
- There was no time limit.

Data Analysis

- All multiple choice questions were marked as correct or incorrect.
- A scoring matrix was developed to consistently score the short answer questions.
- Inter-judge reliability was performed on 15% of the surveys. A point-by-point agreement index revealed reliability to be 98%.

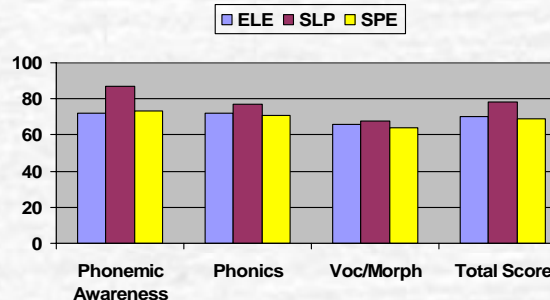
Results

Table 1. Mean Raw Scores on Sections of Reading Survey.

Group	Phonemic Awareness (total=39)	Phonics (total=39)	Vocab/Morphology (total=36)	Total Test (total=114)
ELE	28 ¹	28	24	80 ¹
SLP	34 ^{1,2}	30	24	89 ^{1,2}
SPE	28 ²	28	23	79 ²

*1,2 Indicates significant differences between groups

Comparison of Mean Percent Correct Scores on Sections of the Reading Knowledge Survey



Results

- Indicated a significant difference in the phonemic awareness knowledge of subjects $F(2, 53) = 11.50, p = .00$. A post-hoc Tukey analysis revealed a significant difference in the knowledge of phonemic awareness. The speech-language pathology students scored significantly higher than the special education and elementary education students.
- The post-hoc Tukey analysis also indicated that the speech-language pathologists scored significantly higher on the total test as compared to the elementary education teachers and special education teachers.
- No other significant differences were found between the groups regarding their knowledge of phonemic awareness, phonics, or vocabulary/morphology.

Discussion

- Relationship to past literature: Present findings support Nolen, McCutchen, and Berninger (1990) who concluded that reading and writing instruction preparation, program requirements, and state certification standards must be upgraded nationwide.
- Possible explanation for findings:
 - Speech-language pathologists are required to complete a course in phonetics which probably increased their phonemic awareness skills.
 - Phonics and vocabulary/morphology are considered to be more general knowledge topics and all groups evidenced higher percent accuracy's in these areas.
- Implications: Mean percent correct in each area and on the total test suggests that more emphasis may need to be placed on the implicit knowledge related to reading instruction to aid struggling readers.
- Future Research: Research is needed to replicate and expand upon the findings of this study, including a greater number of subjects in various areas of the country.

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