
Keywords: vocabulary, phoneme awareness, elementary education, complex communication needs

Summary: Two students, Scott age 7 and Anna age 10, participated in phoneme awareness intervention to determine the benefits of phoneme awareness on students with complex communication needs (CCN). Both students had poor “phoneme awareness knowledge and severely delayed written language skills” (p. 7). After 7 hours of intervention for Scott and 11 hours of intervention for Anna, both students responded favorably to the phoneme awareness intervention. Specifically, Scott improved his phoneme identity skills and letter sounds, and Anna improved her phoneme segmentation and manipulation skills. However, neither student was able to generalize to different versions of the same task.

Assumptions:
- Phoneme awareness can assist students who are considered at risk for reading failure.
- Phoneme awareness can support reading skills of students diagnosed with reading disorders,
- Phoneme awareness intervention improves reading and spelling skills of students with spoken language difficulties.
- Students with CCN often have literacy issues that continue through adulthood. Therefore, addressing the issue at an early age can be beneficial for the student.
- Students with poor phoneme awareness may have limited word recognition and spelling abilities.

Results:

**Scott**
- Improvements were made in Scott’s content specific learning (i.e., ability to match sounds to letters and letters to sounds)
- Gains were achieved in knowledge of trained letter names, but not trained letter sounds.
- Phoneme identity improved after Scott’s intervention program.
- Intervention effects did not transfer to untrained letter names and sounds.

**Anna**
- Intervention advanced Anna’s segmentation and manipulation skills.
- Anna was able to apply phoneme segmentation skills to novel words.
- Anna, like Scott, could not generalize skills gained during the intervention to different versions of the same task.
Conclusion:

- The intervention program did promote phoneme awareness skills for Scott and Anna.
- The study advances the idea that phoneme intervention programs may promote literacy skills among students with CCN.
- For generalization to occur, “generalization from the visual stimuli used in the intervention to the novel stimuli used in assessment task” (p. 21) must take place.
- Students with CCN may need longer intervention periods due to their inability to complete tasks at the same rate as those without CCN.

Suggestions for Teachers:

- Phoneme awareness intervention is a useful method for assisting students with CCN.
- Teachers should look at transfer to ensure that instruction is beneficial.
- Teachers should develop strategies to keep the students motivated and attentive during the longer intervention programs.
- Variety of instruction and/or multiple short blocks of intervention may be useful in keeping the students motivated and attentive.

Suggestions for Literacy Leaders:

- Extended intervention periods need to be allocated to teachers with CCN students.
- Training for teachers should be conducted in using methods to keep students with complex communication needs motivated and attentive during the longer intervention programs.