

Talking EBP: Information Updates for Virginia School SLPs

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"'We've always done it this way' is so ... yesterday"

Lee, S., Brandt, L., & Blanchard, T.H., 2011. Promoting research and evidence-based practice: Strategies for creating and sustaining a professional practice environment. Massachusetts General Hospital. http://www.mghpcs.org/knightcenter/ce/Documents/4_PromotingResearch_andEBP.pdf (accessed 8/31/15)

Need to Know:

Farquharson, K., Tambyraja, S. R., Logan, J., Justice, L. M., & Schmitt, M. B. (2015). Using hierarchical linear modeling to examine how individual SLPs differentially contribute to children's language and literacy gains in public schools. *American Journal of Speech-Language Pathology*, 24(3), 504-516. doi: 10.1044/2015_AJSLP-14-0055

This implementation research provides quotable evidence that language intervention provided by school SLPs results in identifiable contributions to students' grammar, vocabulary, and word decoding skills. Students' abilities in the fall of the year appear to influence growth; however, variations in SLPs' years of experience, caseload size, or time constraints did not predict SLP contributions to student achievement.

Test Your Knowledge:

- 1) True or False: A recent meta-analysis (2014) examined nonverbal intelligence tests results for children who have language impairments. These findings provide evidence against the use of nonverbal IQ tests when determining the need for speech-language impairment services (cognitive referencing).
- 2) True or False: Dynamic assessment in English cannot accurately identify language impairment in English language learners.
- 3) Which of the following evidence-based assessment measures achieved at least 90% diagnostic accuracy with verbal children who have childhood apraxia of speech?
 - a) Percentage of phonemes correct in polysyllabic words
 - b) Articulatory accuracy during diadochokenesis
 - c) Syllable segmentation
 - d) Lexical stress matching
 - e) All of the above

Practically Speaking:

Hall-Mills, S., & Apel, K. (2015). Linguistic feature development across grades and genre in elementary writing. *Language, Speech, Hearing Services in Schools*, 46(6), 242-255.

This research article provides **grade level** expectation **means and standard deviations** for productivity, grammatical complexity, grammatical accuracy, lexical density, organization, text structure, and cohesion values in **written narratives** and **expository**

texts for second through fourth grade students. –This research provides a valuable assessment resource for SLPs in schools.

Working With Data:

Analysis of language assessment data from a culturally and linguistically diverse group of 6 to 12 years old students revealed differing patterns of agreement between norm-referenced tests and narrative language samples. Importantly, the cut-point for decision-making (-1.0 or -1.5 SD) impacted the level of agreement between these two sources of clinical data. The **overlap and non-overlap** of students' **assessment results** underscores the importance of using both types of assessment data when making diagnostic decisions. (Side note: In addition, considering confidence intervals rather relying on discrete standard scores is a very important factor in eligibility decisions. See More to Explore.)

Ebert, K. D., & Scott, C. M. (2014). Relationships between narrative language samples and norm-referenced test scores in language assessments of school-age children. *Language, Speech, and Hearing Services in Schools, 45*(4), 337-350. doi: 10.1044/2014_LSHSS-14-0034

More to Explore:

1) True

YouTube: "Understanding Confidence Intervals: Statistics Help" by the Statistics Learning Centre. This 4 minute video explains the concept of confidence intervals (CIs) in clear language, including how to accurately interpret them. https://www.youtube.com/watch?v=tFWsuO9f740

StatTrek: "What is a Confidence Interval?" This website provides a straightforward explanation of CIs that includes an opportunity to test your knowledge. Instructions for constructing confidence intervals are available for the statistically inspired. http://stattrek.com/estimation/confidence-interval.aspx

"Evidence-Based Practice Tutorial #5: Confidence Interval" by Patricia Hargrove provides information to aid the understanding of confidence intervals in treatment research articles. This brief overview was written specifically for SLPs in *SIG 1 Perspectives on Language Learning and Education*, July 2003, Vol. 10, page 33. doi:10.1044/lle1.2.33

Answers for Test Your Knowledge:

2) False

Full references and additional information about these questions can be found in the Spring 2015 issue of *Talking EBP*, available at

http://www.doe.virginia.gov/special_ed/disabilities/speech_language_impairment/ or http://curry.virginia.edu/TalkingEBP

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