

## Multi-Sensory Coding as Intervention Therapy for ESL Spellers with Auditory Processing Delays: A South African Case-Study

**Authors :** A. Van Staden, N. Purcell

**Abstract :** Spelling development is complex and multifaceted and relies on several cognitive-linguistic processes. This paper explored the spelling difficulties of English second language learners with auditory processing delays. This empirical study aims to address these issues by means of an intervention design. Specifically, the objectives are: (a) to develop and implement a multi-sensory spelling program for second language learners with auditory processing difficulties (APD) for a period of 6 months; (b) to assess the efficacy of the multi-sensory spelling program and whether this intervention could significantly improve experimental learners' spelling, phonological awareness, and processing (PA), rapid automatized naming (RAN), working memory (WM), word reading and reading comprehension; and (c) to determine the relationship (or interplay) between these cognitive and linguistic skills (mentioned above), and how they influence spelling development. Forty-four English, second language learners with APD were sampled from one primary school in the Free State province. The learners were randomly assigned to either an experimental (n=22) or control group (n=22). During the implementation of the spelling program, several visual, tactile and kinesthetic exercises, including the utilization of fingerspelling were introduced to support the experimental learners' (N = 22) spelling development. Post-test results showed the efficacy of the multi-sensory spelling program, with the experimental group who were trained in utilising multi-sensory coding and fingerspelling outperforming learners from the control group on the cognitive-linguistic, spelling and reading measures. The results and efficacy of this multi-sensory spelling program and the utilisation of fingerspelling for hearing second language learners with APD open up innovative perspectives for the prevention and targeted remediation of spelling difficulties.

**Keywords :** English second language spellers, auditory processing delays, spelling difficulties, multi-sensory intervention program

**Conference Title :** ICALLM 2019 : International Conference on Applied Linguistics and Learning Methodologies

**Conference Location :** Paris, France

**Conference Dates :** June 25-26, 2019