

## **1. Title of the submission**

Effective Teaching for Children with Cochlear Implants

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## **6. Abstract of paper**

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### Effective Teaching for Children with Cochlear Implants

Current research in speech perception abilities of children with cochlear implants has focused on three main areas: 1) the comparisons of the effects of the devices with other technology (e.g. hearing aids, tactile aids); 2) the comparison of the child's age at the onset of the hearing loss with the child's age at the time of implantation; and 3) the comparison of the effect of communication mode (oral communication and total communication). The verbotonal method of aural rehabilitation is an example of an oral communication method.

In order to address the efficacy of various aural rehabilitation methods, researchers have utilized large group statistical analyses to evaluate changes in speech perception ability of children who use cochlear implants. However, due to the heterogeneity of the population of children with hearing impairment, this type of research methodology has resulted in flawed conclusions which are acknowledged by the investigators. To address the efficacy of the verbotonal method of aural rehabilitation, various researchers have utilized descriptive case studies. These studies have measured

speech perception as well as speech production abilities of children with hearing impairment who have been enrolled in the verbotonal program. A few studies compared individual case study results with group means, on the same batteries of tests, of individuals enrolled in other aural rehabilitation programs (e.g. Central Institute for the Deaf or Gallaudet). No studies have gone beyond the case study to evaluate the efficacy of the verbotonal program for children who use cochlear implants.

Although recommended by the FDA nearly a decade ago, researchers have not examined aural rehabilitation programs within the context of a single-subject research design. Specifically, no studies exist that evaluate the efficacy of the verbotonal method for children using cochlear implants within the context of a single-subject design. This study will evaluate, using a single-subject multiple baseline design, the efficacy of the verbotonal method for children who use cochlear implants by examining the changes in speech perception ability across time of individual children who wear cochlear implants and are enrolled in the verbotonal program.