

A Qualitative Study of Teacher Perceptions of the Benefits of a Grade-three Hearing Module

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Abstract: This preliminary study examined teacher perceptions of the module was delivered to three Grade-three classes. Teachers' impressions of *Everybody Hears* were elicited by way of a questionnaire. A review of the data revealed student engagement, curricular enrichment, and clinical expertise as benefits of the module. Topics for further research should include measurement of effects on student achievement of curricular outcomes and generalizability of results across Grade-three classrooms in Alberta.

Background

- Currently, few resources are available to Grade-three teachers that supplement achievement of curricular outcomes of the *Hearing and Sound* science unit related to hearing loss prevention and the effects of hearing loss on communication.¹
- Consequently, in 2016-2017, speech-language pathology (SLP) students created the module Everybody Hears to address this need.¹
- Teachers' appraisals of the value of the module and of its delivery by SLP students were not gauged.
- A review of relevant literature revealed only one study that examined teachers' perceptions of the value of content experts educating students towards achievement of curricular outcomes.²



Research Question: Do teachers perceive the SLP student-delivered hearing module as a valuable tool that enriches the teaching towards achievement of curricular outcomes of the Alberta Grade-three Hearing and Sound science unit?

Methods

Participants

• Three Grade-three teachers from an Edmonton-area school district

Procedures

 SLP students delivered Everybody Hears, an interactive presentation/module for Grade-three students in three classrooms.

Measures

 Teachers completed a brief, open-ended, qualitative questionnaire via Google Forms, designed to investigate their perceptions of the benefit of Everybody Hears.

Teacher Insights

Presentation had a variety of visual, auditory

"Excellent engagement for the students.

and hands on activities for learning.

Everyone was able to participate."

 Researchers reviewed the responses and identified common themes.



Figure 1: Materials

A sound level meter (left) ossicle models, (middle), hearing aids (right), and an audiometer (bottom) aimed to make Everybody Hears hands-on and interactive.

Results

Student **Engagement:**

Teachers perceived the module to add a further level of engagement that made learning more meaningful

Curricular **Enrichment:**

Educators indicated that the module met curricular outcomes and extended beyond what was normally provided

Teachers perceived a benefit in having the module delivered by individuals who are specifically trained in the area

Clinical Expertise:

"Totally enriched curricular outcomes!! Reiterated things I had covered, and supplemented with effective and interesting added bonuses!"

 "The SLP students have much more knowledge about hearing and sound than I do. They were able to add more information to further the understanding of the students."

Conclusions

- Teachers perceived the module as a valuable tool as it provides information beyond the typical background knowledge of elementary teachers on this topic.
- Materials accessible to SLP students enriched learning and student engagement.
- Teachers unanimously reported that they would recommend this module to other Grade-three teachers and that they would like to see the module available for future years.

Future Directions

- As this was a preliminary study, topics for further research should include measurement of effects on student achievement of curricular outcomes and generalizability of results across Grade-three classrooms in Alberta.
- This will expand opportunities for SLP students to collaborate with teachers.

Figure 2: Major Themes

Teachers indicated that the materials used contributed to each of the major themes. Teachers acknowledged that SLP students have access to materials that they do not, such as ossicle models, sound level meters, audiometers, and hearing aids. Multiple and alternative delivery styles, including videos, manipulating materials, and hands-on activities contributed to a captivating experience.

References:

- ¹ Jenkinson, M., LaGrange, R., Meyn, L., & Smith, S. (2017). Creating a hearing conservation presentation for Alberta's grade three students. Unpublished Manuscript, University of Alberta, Edmonton, Alberta, Canada.
- ² Kisiel, J. F. (2010). Exploring a school-aquarium collaboration: An intersection of communities of practice. Science Education, 94(1), 95-121

Acknowledgements: We would like to thank:

- Tammy Fulton and Christine Miller, Grade-three teachers, and Marlene McDonald, Science Consultant, for their contributions to the development of Everybody Hears.
- Dr. Jason Daniels, for his contribution to the development of the questionnaire.