

INCREASING MULTIDISCIPLINARY TEAM SKILLS FOR PROFESSIONALS IN DEAF EDUCATION: IMPLEMENTING A CROSS-DISCIPLINARY CURRICULUM

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ABSTRACT

This paper shares results of an effort to increase collaboration between students enrolled in professional preparation programs focused on different services to students who are deaf or hard of hearing (DHH). The method used involved creation of activities and opportunities for students from both programs to increase awareness of the roles and responsibilities of each profession and to learn strategies for collaboration across disciplines in service of the DHH student. Feedback on the unit was collected annually from students via an anonymous survey.

BACKGROUND

The landscape of education of deaf and hard of hearing students in the United States is changing. Whereas in the past most were educated in separate schools, 87% are now mainstreamed. Today these students and their parents face a continuum of options, including residential schools, day schools, center schools, and mainstream settings. No matter the placement of the DHH student, he or she will likely need additional services from diverse professionals, including teachers of the deaf (ToDs) (Foster & Cue, 2009) and Speech-Language Pathologists (SLPs). Often the meeting to develop an Individualized Education Plan (IEP) is the only time these specialists meet and they may have very different perspectives on the DHH student's needs. Ideally TODs and SLPs would gather regularly to discuss the needs of individual DHH students, but in reality collaboration often falls short of the ideal.

In response to the growing need for collaboration across disciplines in support of DHH students, the authors (also course instructors) developed and piloted a curriculum that bridged classes in two graduate programs - a training program for ToDs at the National Technical Institute for the Deaf (NTID) at Rochester Institute of Technology, and a training program for SLPs at Nazareth College. The goal of this curriculum was to (1) create awareness of and respect for the skills of professionals in other disciplines who work with DHH students, and (2) prepare students to work in collaboration with professionals in related disciplines in a range of educational placements.

CURRICULUM

Each year the curriculum included two or more of the following four components: discussions, events, readings, and a collaborative activity. Discussions were held in several venues - face to face in structured settings, online, and through informal gatherings. Events included invited guest speakers, panelists, and presentations on related topics given by NTID faculty. Readings were focused on Deaf culture, disability, and guidelines for professionals working with DHH students. Collaborative activity involved giving students a task, i.e. sharing backgrounds with each other, developing collaboration strategies, and designing a multi-disciplinary instructional plan for a fictitious deaf student.

EVALUATION OF CURRICULUM

Formative evaluation of the curriculum was conducted annually using several approaches. A survey was administered to all students in both programs. The survey included Likert, multiple choice, and open-ended questions regarding a) unit activities, (b) suggestions for improving the unit, (c) the impact of the unit on students' professional development, and (d) demographic

information. Open-ended questions were used to gather more extended answers from students in follow-up to their response to a Likert or multiple-choice question.

Administration of the survey occurred at the end of the unit via an e-mail that included a link to the survey. The instructors reviewed the goals of the survey with students in class and explained that the feedback would be used to determine whether to continue this unit in future courses and, if continued, how to improve it. They were also informed that completing the survey was voluntary, and that no identifying information (i.e. no names or ID numbers) would be collected. Response rates over the three years were high (87% of NTID students and 100% of Nazareth students).

Data from this survey was analyzed and documented in an annual report. Additionally, instructors met throughout semester to reflect on and document students' progress and challenges with unit activities and again at end of the semester to review survey results, share impressions from observations of unit activities, and determine what changes might be made for the following year to improve the unit.

RESPONDENT CHARACTERISTICS

A total of 74 students from the two programs participated in this unit between 2012-2014 - 53 from NTID and 21 from Nazareth. The difference in numbers is a reflection of admissions limits in each program; Nazareth limits the cohort to eight students while NTID's limit is about 25. Twenty of the Nazareth respondents reported as hearing and one as hard of hearing. Of the NTID respondents 17 reported as deaf, 7 as hard of hearing, and 15 as hearing.

All respondents had taken one or more courses in American Sign Language (ASL) and/or were currently enrolled in courses at NTID. Both groups reported a range of self-ratings in terms of sign language skill from "0" (none) to "6" (native). Overall NTID respondents reported higher sign language skills than Nazareth respondents in each of the three years. This diversity in ASL self-ratings is not surprising. NTID's program requires all students to achieve a prescribed level of fluency during their two years in the program, and as teachers of DHH students they must be able to communicate well in ASL. Moreover approximately half the NTID students are deaf or hard of hearing and some of the others are children of deaf or hard of hearing parents. Nazareth students have a general focus on communication disorders and differences with a chosen specialty of working with DHH students. It should be noted that almost all of the Nazareth respondents had taken three or more sign language courses prior to entering the program, and two had completed an interpreter-training program. Three students had deaf or hard of hearing parents or grandparents. Knowledge and experience with deaf and hard of hearing individuals, including knowledge of sign language, is a critical consideration in admission decisions into the specialty program.

Two general questions were included each year and provide a broad measure of respondents' impressions of the value of the unit. The first question is "I think this unit included important information and experiences for my future work." Respondents could select one of five options: 1=strongly disagree; 2=disagree; 3=undecided; 4=agree and 5=strongly agree. The response for each of the three years was between 4.0-4.2, indicating strong agreement regarding the importance of the unit for future work. The second broad question focused on the degree to which the unit should be maintained in future courses or expanded to other courses. While most respondents supported continuing and expanding this unit in the two programs, a small percentage felt it should not be continued or expanded at all.

OPEN ENDED RESPONSES

Respondents were asked to provide additional information to support their selection of a Likert scale response and encouraged to give examples or offer other details that supported their opinions and experiences. Additionally they were asked to provide suggestions for improving the unit. Examples of their responses to selected questions are included below.

- Important for future work
 - It provided good examples of collaboration and how important it is. It also allowed us to make connections
 - I am sure that I will work with SLPs in my future. This gave me a prediction of what to expect working with SLPs. I will be somewhat prepared and know what to expect working/collaborating with SLPs.
 - Learning more about IEPs is a must for us in the MSSE program as future ToDs. This experience was useful and I will apply this in the future, just would have liked to learn more about IEPs because I was clueless with how to design one, etc. and had to rely on the SLPs for the most part.
- Interacting with students in another discipline
 - I enjoyed interacting with the students when we were in smaller groups or at informal events... The individuals were a lot more open and willing to talk freely and equally listen to other opinions in this scenario. Having us split at the tables (MSSE on one side/SLPs on the other) seemed to distance us too much. I would make small tables or a circle and have everyone share their experience as to why they're in their field first before jumping to what a ToD or SLP is.
 - It was a joy to work with them although I feel lots of people do not agree with me. It was a necessary experience especially in the aspect that we will be doing this in the future
 - Perhaps as a class assignment, we can prepare some time for meet, even in weekends. I am not sure whether it is reasonable, but for this time, too flexible in time arrangement results into no time for meet by persons.
- Suggestions for improving the unit
 - I think switching up the groups would have been nice to be able to work and meet with different people. Also I think the last activity would be more useful if we had different clients to discuss and present so everyone isn't saying the same things.
 - More social time between the groups, and from the first moment the collaboration begins, both groups need to be told that they must respect and listen to the other group. Need more explanation about the final project. Maybe the first class can also entail telling what each profession does?

DISCUSSION

Student feedback suggests that this pilot unit is potentially a useful addition to both programs. It exposes graduate students who are enrolled in professional preparation programs focused on the educational success of DHH students to the work of other specialists in this area and encourages development of strategies for collaboration across disciplines. Students were generally positive about this unit, with over two thirds expressing support for continuing the unit in the future and/or expanding the unit to other courses. Their feedback also highlighted areas in which the unit needs to be re-worked to make it more successful; for example, having more time to interact and get to know each other. As noted earlier, annual evaluations of the unit resulted in modifications for the following year. In this section of the paper we review some of the adjustments we made to the unit and offer broad recommendations for future efforts in this area. Some examples:

- In Year One the discussion occurred largely online. This proved challenging due to the need to process Nazareth students into the NTID course and their understandable learning curve in using this forum. In subsequent years, discussions

- were primarily embedded in events where students could share and discuss ideas in a guided face-to-face format while readings and other course documents were posted online or sent directly to students.
- In Years One and Two events included presentations at NTID, guests from a local school for the deaf and a panel of practicing SLPs and ToDs. Feedback suggested that the panel was most effective and in Year Three this was the only event with invited speakers.
 - In Years One and Two students were required to complete a paper outside of class time in which they collaboratively prepared a plan using a case study approach. This proved to be overly burdensome for students already taking intensive courses in their respective programs so in Year Three this assignment was dropped; instead students worked together in class workgroups using a case study approach; they developed a collaborative plan that they then shared with the other workgroups and the instructors.
 - In Year One communication was relatively fluid since most of the MSSE and Nazareth students had some level of skill in American Sign Language and others were very fluent. In the second year we anticipated more communication issues and engaged a prior Nazareth program student who was also a certified interpreter to provide limited interpreting support; yet communication still proved to be a barrier to fluent and comfortable communication. In retrospect we believe that strained communications were largely due to initial discussions on the topics of disability and medicine which polarized the two groups and established tense interactions that continued throughout the semester. During Year Three two interpreters were available for all events. However they were needed only at strategic times, due to (a) the level of sign language skill among students and (b) the instructor-guided use of whiteboards for group interaction (Marchetti, Foster, and Long & Stinson, 2012).

Recommendations

The work of professionals with DHH students is a relatively small and narrow specialty due in part to the low incidence of hearing loss. There has been a lot of focus on collaboration in schools in the SLP curriculum with other professionals, but more opportunities are needed for ToDs to learn effective strategies for collaboration with other specialists. This project both highlights the challenges in cross-disciplinary collaboration and offers insight into how the lack of training might be improved. Several recommendations emerged from this three-year experiment.

First, there needs to be more instruction and exposure to the practice of collaborative and cross disciplinary work in programs preparing specialists who will work on teams within educational settings. For most of the students, this unit was their first or most intensive direct exposure to students preparing in the other discipline. The result was understandably stressful and often based on uncertainty. Collaboration might be enhanced if students learned about multidisciplinary teams and cross-disciplinary collaboration *prior* to coming together for a combined educational unit. It is recommended that steps be taken at the start of the professional preparation program to familiarize students with the roles and responsibilities of both ToDs and SLPs. The instructors provided a document addressing this (ASHA/CED 2004) but the students-especially those from NTID-might have benefitted from additional readings and applied experiences, in this course and perhaps others in their program of study.

Second, there were several unique barriers to collaboration among the ToDs and SLPs who participated in this unit, including differences with regard to communication, understandings of deafness (i.e. as a disability or linguistic and cultural minority), and in the case of some DHH

students, negative prior experiences in speech language therapy. These barriers may inhibit interaction and increase stress and should therefore be anticipated and directly addressed should they arise.

Third, each class is different and the makeup of students in a class can make or break the experience. When there are more students who know sign language in both groups stress related to communication is eased. When students come into the unit with different levels of knowledge of cross-disciplinary collaboration, Individualized Education Plans, and professional standards for working in teams with DHH students, cooperative work is far more difficult. These situations impacted each of the three cohorts and often made the project more challenging for everyone. Despite our efforts to foresee and plan for unexpected challenges, we were not always successful. We recommend that others who wish to replicate our model be prepared for the unexpected and develop pre-emptive strategies and activities that can be implemented quickly should barriers to collaboration arise.

Fourth, it is important to document successful strategies even when they are unplanned and/or spontaneous. In Year One the mix of students was such that they genuinely enjoyed getting to know each other. This was the biggest group of the three and there were twice as many NTID students as Nazareth students. But communication was relatively smooth and students seemed to find ways to make things work. By the third week of classes the students had set up their own Facebook page for the unit and established weekly gatherings at local restaurants - without professors. At the end of the semester everyone went to dinner to celebrate their work and they continued to interact through the remainder of their respective programs. What was the key to this success? We are unsure. Maybe our initial enthusiasm spread to students. Maybe it was simply a uniquely positive mix of students. Maybe they were ready for this kind of activity. Regardless we learned never to underestimate the power of positive attitude in making things work. The following year we held a gathering at one of the professors' houses in an effort to kick start this same kind of synergy but it was poorly attended and did not have the hoped for results.

Finally, flexibility is essential to the success of any new curriculum. What works one year might not work with the next group of students and modifications may need to be tried for several years before implementing a change. For example, Year One students recommended that the unit be expanded from 10% of the course to 20%. As a result we tried this suggestion only to receive feedback From Year Two respondents that this was too much. In year three we went back to 10% only to receive feedback that this was insufficient and to expand the unit to 20%! The authors incorporated change each year - in some cases this resulted in a more productive and less stressful semester but in others the change made proved challenging in new ways. In sum, we concluded that a mix of consistency and flexibility is essential for successful implementation of a complex unit such as this one.

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