Project Title: Methods of Adapting Case Teaching for Deaf and Mixed (Deaf and Hearing) Student Groups

Applicant(s):

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<thead>
<tr>
<th>Name</th>
<th>Telephone</th>
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<tr>
<td>Bonalyn J. Nelsen</td>
<td>475-4293</td>
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<tr>
<td>Name</td>
<td>Telephone</td>
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<tr>
<td>David Crumb</td>
<td>475-2355</td>
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<td>Mark Pfuntner</td>
<td>475-5994 v/tty</td>
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<td>School of Hospitality Management, CAST</td>
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1. **Summary of proposed project**

Case-based instruction is widely recognized as an effective pedagogical tool for education in multiple disciplines. Simply put, “…a case is the story of a company or an institution or a situation. Like any story, a case has a beginning and an end. It has sufficient detail to enable the reader to picture what is being described, whether events or people or relationships. A case, like a good story, also has a theme or a message, something for the reader to take away and continue to think about” (Naumes and Naumes 2006). Learning outcomes of case-based teaching include, but are not limited to, (a) an appreciation of the complex problems, dilemmas, and ethical issues that exist in “real world” situations, (b) helping students understand and connect theories and concepts with practice, (c) promoting situated ways of thinking among learners, and (d) inculcating valuable skills such as critical thinking, problem framing and analysis, prioritization, action planning, and stakeholder analysis (Levin 1999; Naumes and Naumes 2006). These learning outcomes are achieved in two basic ways: through writing about cases and case discussion.

Although writing about cases and case discussion share common elements (for instance, posing and answering questions about the case), both methodologies produce different learning outcomes for students. Because it occurs in small and/or large groups case discussion provides opportunities for social interaction among students. The divergent opinions, views, experiences, and solutions traded during case discussion act as a trigger, prompting students to reflect on prior knowledge and opinions, consider ideas and perspectives that clash with their original thinking, acknowledge the impact of experience, culture, and other personal factors on interpretation of the case, and possibly change their opinions. Thus, case discussion, particularly in face-to-face encounters, prompts assimilation of new ideas into established ways of thinking (Levin 1999), resulting in a richer, multi-faceted learning experience for students. The importance of discussion in case-based teaching has led researchers to closely examine what and how different student groups learn in case discussions, and to identify ways of making case discussions more productive for various learner groups.

Yet, no research currently exists on the use and outcomes of case discussion among deaf students. Implicit in the concept of “discussion” are the assumptions that (1) that students and teachers speak the same language and (2) can engage one another in dialogue. Presumably, because deaf students cannot hear and (possibly) speak and typically communicate in sign language—a distinctive form of language whose verbiage, structure and grammar differs from spoken language—researchers have considered them to be unable to actively participate in case discussions employing interpersonal interaction and dialogue. However, our experiences in R.I.T.’s classrooms suggest otherwise. Deaf students can be active, productive participants in case discussion if pedagogical techniques are adapted to the specific needs of this learner group. The proposed research is an exploratory, descriptive study that examines (a) how case discussion techniques can be modified to allow deaf students to actively participate in and learn from case discussions in non-virtual learning contexts in multiple disciplines. The study’s objective is to identify, describe and disseminate effective pedagogical techniques and best practices for including deaf students in case discussions with hearing students in non-virtual environments. Pedagogical techniques will be identified by interviewing instructors about novel, creative methods used when case teaching is employed with deaf and mixed (deaf and hearing) student groups, and by videotaping actual use in the classroom, if possible. Interviewees will be identified using a snowball sampling technique, and interviews will continue until theoretical saturation is achieved. This descriptive study is a necessary first step in the design and implementation of quasi-experimental models of case teaching among deaf students (which would assess learning outcomes using pre- and post-tests). All interviews will be transcribed, coded, and analyzed using an iterative process of content analysis and coding until theoretical saturation is reached. This exploratory, descriptive study will also be used as a springboard for seeking additional grant funding from external resources.

2. **Targeted learners or population (include cluster, departments, year level, number of learners impacted)**

The primary target audience will be instructors who are interested in using cases and case discussion with deaf and mixed (deaf and hearing) students. Case discussion is a pedagogical method used across multiple disciplines, including chemistry, mathematics, engineering, information technology, project management, business studies, hospitality management, service science, education studies, legal studies, health care administration, human resource development, political science, sociology, and psychology. The target population potentially includes all full time and adjunct faculty teaching in the Colleges of Engineering, Business, and the National Technological Institute for...
the Deaf, as well as faculty housed in departments within the Colleges of Applied Science, Liberal Arts, Science, Computing and Information Sciences. The secondary target audience will be instructors outside the Rochester Institute of Technology who are interested in using cases and case discussion with deaf and mixed (deaf and hearing) students.

3. Is this for a current or new course?

While the findings of this study can be applied to new courses, the ultimate goal is to develop pedagogies and best practices that can be applied to pre-existing courses in Colleges at R.I.T. and, more broadly, throughout academia. Although some members of the PLIG grant committee suggested that the proposed study may be suitable for the “Proof of Concept” track, the authors respectfully disagree. Specifically, the A&I program “…invites proposals that adapt and implement a learning innovation on a broad scale…(including) educational practices and pedagogies that have been developed or tested either at RIT or at other institutions” (PLIG: Adaptation and Implementation Description, 2010). Because this study seeks to discover, describe, and disseminate innovative case discussion practices developed at RIT for use with deaf and mixed student groups across multiple disciplines, the authors believe that the study is better suited to the “Adaptation and Implementation” (A&I) track. However, due to budgetary restraints matching funding is not available from the College of Applied Science and Technology or the National Technological Institute for the Deaf.

4. Anticipated impact on teaching and/or learning

How will your project impact student success? This project will describe and disseminate pedagogical practices that facilitate case discussion among deaf and mixed students. Instructors are more likely to adopt case teaching as a class component if armed with effective pedagogical methods for working with deaf and mixed student groups, and students are therefore more likely to reap the benefits of case learning. As students from these divergent groups engage in discourse about case research, they have the opportunity to interact directly and meaningfully with one another, leading to richer understandings of case material and a better appreciation of diversity in the classroom.

How will you measure the impact, report your findings, and what will you share about your project in a faculty forum? The study’s objective is to identify and describe effective pedagogical techniques and best practices for including deaf students in case discussions with hearing students in non-virtual environments. The typology of pedagogical techniques and best practices produced by the study will be examined and critiqued by interviewees to establish the validity of findings. These techniques will be categorized and described in workshops, college research colloquia, and (if desired) faculty learning communities at the RIT campus, and national/international conferences for peer evaluation and feedback (such as the Society for Case Research’s and the North American Case Research Association’s annual conferences). Peer feedback will be used to develop papers submitted to peer-reviewed journals on case research and teaching. Preliminary data from the study will also be used to develop a grant application for a 2010-2011 $10,000 Case Research Grant from the North American Case Research Association (NACRA), an international organization dedicated to promoting excellence in case research, writing, and teaching.

5. Present a rationale for your project, as it ties to the intent of the grant:

Why is the project not part of regular college business? This project is not a part of regular college business because pedagogical scholarship is supported and encouraged, but not conducted by, the university. The skills and motivation of faculty are required to identify, codify, and disseminate innovative applications of case research, writing, and teaching to diverse audiences within and without RIT.

How is the project relevant to required cluster, college, and department competencies? This project is relevant to all colleges and departments that currently or potentially enroll and mainstream deaf students in courses. Because the typology and best practices produced encourage classroom engagement and collaboration between deaf and hearing students, the project is also consistent with and supportive of RIT’s diversity goals.

How is the project relevant to other faculty and how will findings be transferred? The project’s findings are relevant to any instructor who (1) teaches deaf and/or mixed student groups and (2) is interested in adopting case
teaching in their courses. As previously mentioned, findings will be categorized and described in workshops, college research colloquia, and (if desired) faculty learning communities at the RIT campus, and national/international conferences for peer evaluation and feedback (such as the Society for Case Research’s and the North American Case Research Association’s annual conferences). Peer feedback will be used to develop papers submitted to peer-reviewed journals on case research and teaching. Preliminary data from the study will also be used to develop a grant application for a 2010-2011 $10,000 Case Research Grant from the North American Case Research Association, an international organization dedicated to promoting excellence in case research, writing, and teaching.

Relevant credentials and experience of involved faculty: The principal investigator, Dr. Bonalyn J. Nelsen, has successfully completed several ethnographic studies of technical education and training programs funded by the U.S. Department of Education. She has employed qualitative methods including ethnographic interviewing, participant observation, non-participant observation, and focus groups to conduct studies in industry, has conducted doctoral-level courses on qualitative research methods, and lent her expertise in qualitative research methods on twelve master’s- and doctoral-level theses. Dr. Nelsen is the Associate Editor of the Business Case Journal and an active case researcher; she has led faculty workshops and a faculty learning community on case research and writing. Mark Pfuntner works closely with students at NTID and, as a deaf instructor, contributes personal and practical insight on pedagogical techniques used with deaf students. David Crumb has taught many courses with mixed (deaf and hearing) student groups and is an active user of case discussion and other experiential learning techniques in the classroom.

6. Provide a timetable for the development of the project

Spring/Summer 2010 (20093-4):
• Purchase several digital tape recorders.
• A semi-structured list of interview questions will be developed for use in ethnographic interviews. A preliminary list of interviewees will be compiled, and interviewees will be contacted to secure their cooperation.
• Dr. Nelsen will instruct professors Crumb and Pfuntner in ethnographic interviewing and data recording techniques.

Fall 20101:
• Conduct interviews to elicit data on using/adapting case discussion techniques for use with deaf and mixed student groups. Solicit recommendations for potential interviewees from study participants.
• Conduct preliminary coding and analysis to identify conceptual themes and gaps in collected data; subsequent interviews will seek to fill these gaps and flesh out concepts.

Winter 20102:
• Continue to conduct ethnographic interviews and data coding and analysis until theoretical saturation is achieved.
• Develop a typology of case discussion techniques successfully used with deaf and mixed student groups, highlighting best practices.

Spring 20103:
• Disseminate project findings on the RIT campus in workshops, college research colloquia, and faculty learning communities.
• Prepare conference papers, journal articles, and NACRA Case Research Grant for submission.

Summer 20104:
• Present project findings at relevant conferences and case research workshops, including the Society for Case Research’s Summer Case Writer’s Workshop to be held on the RIT campus June 23-25, 2011.
• Submit journal articles and NACRA Case Research Grant.

References