Province’s Learning Innovations Grant for Faculty
Request for Full Proposal
2010-2011

Project Title:
Integrated technology-based learning in foreign languages: Integration of interpreting, note taking, and online interaction to enhance hearing and deaf students communication skills in the target language

Applicant(s):

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1. **Title and summary of proposed project**
Technology-supported learning in the foreign language classroom: Increasing success of deaf/hard of hearing, and hearing students with the enhancement of technology-supported learning.

**Summary**
This project will investigate the effectiveness of technology-supported foreign language learning for deaf students using interpreting support with the adapted interpreting methodology integrated with notetaking captioning. Moreover, the deaf and hearing students will be working constantly together using online synchronous and asynchronous communication to improve the ability of both parties. The first expected outcome intends to prove the effectiveness of the newly developed integrated pedagogical approach to improve the ability of the deaf students to appropriately communicate in the target language. The second expected outcome aims to also prove the effectiveness of the described pedagogical approach to improve the target language learning in both hearing and deaf students.

2. **Targeted learners or population** (include cluster, departments, year level, number of learners impacted)
The targeted population is about 25-30 undergraduate students, including both deaf, hard of hearing, and hearing students in the Beginning Italian I, II, III offered by the Department of Foreign Languages in College of Liberal Arts. Usually they include sophomores, juniors, and seniors, many of whom elected a minor in Italian and preparing for studying and working in Italy.

From this focused group project, we anticipate that the number of students benefiting from the teaching methodology based on the research findings will be around 800 enrolled students on an average every academic year in Foreign Languages.

In fact, these research findings, while focusing on Italian, will apply to any Western language taught at RIT (Italian, French, Spanish, Portuguese, and German).

3. **Is this for a current course or new course?**
These courses are current sequence of courses.

4. **Anticipated impact on teaching and/or learning.**
Deaf and hearing students will improve greatly their language learning and better prepare for the growing global relationship in the working world.

5. **How will your project impact student success (i.e., retention)?**
With this project we believe that we will retain more deaf and hard of hearing students in the foreign languages courses providing them with a more suitable support for learning a language.

Meanwhile, we believe, the strong use of technology with the note taking via pc tablet integrated with appropriate interpreting services will provide a successful integration of deaf and hearing students.

However, not only this project will make more successful our deaf students and better integrate our deaf and hearing population, but will provide a great opportunity through the use of technology of improving the language learning and therefore the overall success of students.

In fact, in these courses the students are using technology to communicate among each other via synchronous and asynchronous on line conversation, skit creations, and skype conference with Italian natives on a daily basis. According to Vygotski, the use of more capable peers, deaf or hearing, to support the learning provides appropriate scaffolding to enhance learning in the Zone of Proximal Development.

6. **How you will measure the impact, how you will report your findings, and what you will share about your project in a faculty forum.**
The project will be evaluated by the end of the 2009-2010 with:
   a. Video documentation of each quarter of instruction,
   b. Note taking and teaching log documentation to accompany the video,
   c. Quantitative surveys of deaf and hearing students participating in the research project to document the findings,
   d. Tests results of students in the projects will be compared with students of the previous academic year,
e. Deaf and hearing students pass rate will be compared to historical pass rate with a particular attention to deaf ones,
f. The methodology developed should prove to be transferable to all-Western languages courses in the nation, and
   presented at national conferences (specifically American Council for Teacher of Foreign Languages national
   conference)

We expect to present the project findings at various conferences for Foreign Language teaching but also across campus
at RIT.

7. Present a rationale for your project, as it ties to the intent of the grant, including:
The foreign languages at RIT use the target language as the main means of communication and RIT student body
composition sees both deaf and hearing students grouped in the same classroom.

Due to this communicative approach, the opportunities for deaf students to interact with hearing students could be
limited causing an isolation of the deaf student/s in the classroom. In the past the interpreting, even when the interpreter
was fluent, it was limited due to an excessive and taxing use of finger-spelling, which would then in turn cause a main
use of ASL sign to render the target language phrases (example: Italian word grazie, ASL sign for thank you.)

Obviously this modality would limit the learning of the deaf students and while the hearing student would progress in the
‘immersion target-only language modality’, the deaf student would be segregated in a lower level language acquisition.

Consequently, as the number of deaf students present in the courses increased, from 2005 the Italian section of Foreign
Languages at RIT has been collaborating with NTID and Support Services (Interpreting and Note taking Services) to
seek a better way to support foreign languages in mainstream deaf education.

Through the years we have tried different approaches. Starting in 2006, Elisabetta D’Amanda began working with Dr.
Peter Lalley in NTID to prepare the first deaf student participation in the Genova, Italy Study Abroad Program.

Considering that FL (Foreign Language) is taught mainly in an immersion modality, we have first tried to eliminate
interpreting in favor of note taking to insure an appropriate immersion environment for the students; such immersion
style teaching provides that only the target language is used in both instruction or conversation by the instructors and the
students at all times. Using a captionist would allow to eliminate ASL in the deaf supported environment so permitting
an earnest immersion for the deaf just like with the hearing student. This experience has continued since then on campus
from 2007 to 2009.

In the 2009-2010 academic year we have reintroduced interpreting with a fluent speaker of Italian, Kathy Darroch, who
is also a Senior Interpreter at RIT who worked in addition for a while as a CLA Access Services Interpreting Manager.

With Access Services we have realized that even tough captioning was providing the ‘immersion style’ it was not
accounting for the visual culture of the deaf community, consequently shortchanging the deaf students of a full
understanding of the subject. While the hearing students can rely both on audible and text-based modalities, the deaf
students with captioning would rely mainly on a text-base modality, which can be improved with a visual-based
modality bridging the gap in the instruction.

In fact, educators teaching to deaf students are urged (Reeves) to think visually in order to help maximize opportunities
for deaf students to use their visual learning skills in developing literacy skills, and in their general academic, social, and
personal development. The sign languages use space, sign movement, indexing, body shifts, eye gaze and facial
expression, together with sign selection based on meaning, to provide clear visual communication for the following
concepts and language structures: (1) appropriate pronoun usage/identification; (2) verb usage, with focus on active
versus passive voice; (3) semantics/meaning of individual terms or phrases; and (4) dependent clause structures.
Consequently, in an effort to better support with note-taking and interpreting services we established the integration of
the 2 support systems in the same classroom and emphasized their constant interaction in the support rather then have
them function in a vacuum and isolation from one another.

Meanwhile, the interpreter who was aware of the ‘immersion modality’ has started to study a way to use not just
fingerspelling, but cued signing adapting the ASL syntax and grammar to the target language, therefore creating a new
modality. The interpreter also started making use of linguistic knowledge of sign language to parse the spoken Italian
language in a visual format to enable Deaf and hard-of-hearing students to better discover the way in which a spoken foreign language sentence is structured. This method causes the creation of an *interlanguage* that reproduces also the *interlanguage*, as defined by Selinker (1972), used by hearing students in the acquisition of a Foreign Language.

She has, moreover, only implemented the voicing of Italian on her lips while signing to insure the deaf students would be able to also understand lip-reading in the target language of Italian.

In addition, as she has learned Italian Sign Language (LIS – Lingua Italiana dei Segni) while interpreting from the Genova, Italy Study Abroad Program, and subsequently has also started implementing the use of LIS in combination with ASL cued signing to make the learning of Italian more relevant to the deaf population.

Finally, the opportunity in the academic year 2009-2010 to work in The Wallace Center TLT Studio has greatly helped to further explore the possibilities to improve support in a visual modality as the studio offers multi-screen projection, flexible furniture, document camera, tablet PCs, among other useful tools.

The opportunity to use the TLT studio has insured also that hearing and deaf students alike could use online interaction among themselves to improve their abilities in written communication. The students have been ‘scaffolding’ (Vygotski) one another in the online communication, correcting each other and supporting each other learning in the “Zone of Proximal Development” as they get paired appropriately to this end.

Finally, being part of College of Liberal Arts with limited resources for technology-based instruction, the option to use the FL lab has been reduced only to once a week in the last 2 years while the other CLA labs are not at all suitable for the learning of FL for hearing or deaf students.

And as research shows, it is very important to provide particularly to deaf students a ‘predictable learning environment’ as “the best practices will be those that produce a visually predictable environment in which deaf students can learn to predict and therefore ignore task-irrelevant stimuli that may distract them from attending to their instructor or other learning resources.” (Visual Attention, 260) Therefore relying on a very structured and well thought out enviroment – possibly always in the same classroom – has proven to provide great results.

**Grant Applicant Credentials**

Elisabetta D’Amanda is the Italian Lecturer for the Foreign Languages Department from 2006 and has worked at RIT from 2001. She has a Master in General Education, a certification for Italian teaching 7-12 in NYS and is ABD at Middlebury College in Italian studies. Her main field of research is Italian cinema and her secondary focus is teaching Italian through films. Ms. D’Amanda is also an MFA candidate at the RIT School of Film and Animation with a focus on documentary filmmaking in regard to language and ethnicity (her recent work includes 2 documentaries on the Italian American community of Rochester, and the Cochlear Implant debate at RIT.)

8. **Provide a timetable of the development of the project.**

   In the 2010-2011 academic year we would like to:
   
   I. Continue the integration of LIS and ASL to the teaching of Italian providing dedicated time for Kathy Darroch (Access Services) in the learning of LIS and devising of better integration in the Italian classroom. This will also entail the preparation of other interpreters to both Italian and LIS during the next academic year with dedicated time for such opportunity and meeting with professor D’Amanda to monitor and assess the research project methodology;

   II. Continue the integration of note taking in Italian with the paid training of note takers (Access Services), who are typically RIT previous students of Italian, who are fluent in the language to insure an appropriate turnover and availability but most important a personal investment in the project and participation in the data collection for the research project;

   III. Continue to develop a technology-based instruction in the Italian classroom for both deaf and hearing students with dedicated time for Elisabetta D’Amanda, represented in release time from lectureship duties with the support of an adjunct faculty;