Project Title: Remote Tutoring—Bringing Learning Closer From a Distance

Project Summary: The modest goal of this on-line tutoring pilot is to assess the effectiveness of remote tutoring as yet another strategy for supporting student learning outside of class, as perceived by the students, assigned tutors, and the professors.

RIT owns a license for a "conferencing" application called Breeze. Breeze enables both one-to-one and group real-time communication through text, video, and white board. It also enables file-sharing and working from a common document. Some members of our group have had an opportunity to be trained on this software and experiment with it a bit; we feel it holds promise as a medium for remote tutoring.

We propose that we choose a different curricular focus each of the three quarters of the upcoming academic year to offer remote tutoring for deaf and hearing students enrolled in that course.

Applicants:
Marie Giardino      Jeffrey Porter
Student Affairs/TRiO      NTID Learning Consortium

Judith Bernhart      Christopher Cuculick
Student Affairs/TRiO      NTID

Sarah Donaldson      Sharon Rasmussen
Online Learning      NTID

Vicki Robinson      Joseph Stanislow
NTID      NTID

Mark Wambach      Julie Cammeron
NTID      Academic Support Center

William Stratton
Computing and Information Sciences

2. Targeted Learners or Population

We anticipate choosing classes in computer programming for the fall quarter, then moving on to Math and Science, Liberal Arts and Imaging Arts and Sciences for
the other two quarters. Target students are undergraduates, hearing, deaf and hard-of-hearing, and possibly members of TRiO Student Support Services and are enrolled in the classes selected.

3. The Number of Students Who Will Be Affected

Depending on the nature of the class, we anticipate serving 60-80 students per quarter (reaching two to three sections of a class). Approximately 200-250 students will have the opportunity to participate over the course of the year.

4. Anticipated Impact on Teaching and/or Learning

The opportunity to have remote tutoring as a support to classroom teaching is meant to enhance the learners’ opportunity to access information, have the opportunity for dialogue and questioning and have resources at “their fingertips” at peak times in their learning process. There are many benefits to tutoring whether live or remote because it allows the student to work with someone who has a better command of the material and can help to coach them to a level of mastery. The tutoring relationship itself helps to build on a relationship that can offer complementary perspectives. Remote tutoring also allows them to be in a comfortable place, at a convenient time when they are in the best position to focus on their studies and capitalize on the “teachable moment.” Remote tutoring does not take the place of other learning resources. It basically provides another dimension to the continuum of support services, and puts the choice of when to take advantage of their peak learning moments in the students’ hands. It allows for support to be available 24/7 by giving the students the ability to access prior tutoring sessions that have been archived. The Breeze technology has the capability to handle one-on-one individualized tutoring and it can also accommodate multiple users when it does not compromise the format of the class. When tutors are not scheduled live, students have the capability to go to the archived material for possible review.

5. How Will Your Project Impact Student Success (retention, etc.)?

There are several ways that this project can impact student success. First, by its very availability, it is making a statement that this type of continuous support should be seen as a resource for continuing to improve one’s ability in a particular area. It is not only for students who are having difficulties in a particular subject area. It is also for students who are interested in achieving higher levels of proficiency. As part of a continuum of services, students can elect to use this resource at whatever time of day is the most beneficial to their learning in an environment that is both safe and comfortable. It demonstrates a community support of continuous improvement and does not focus on deficiencies but on achievements.
By using prior years’ data for student success in these classes, we will track the progress of current students who take advantage of the remote tutoring option. First, we anticipate that through the use of this opportunity, there will be fewer D’s, W’s, F’s or I’s in the class for those students accessing remote tutoring (compared to historical baselines). Second, we anticipate that 70% of students who use the remote tutoring will earn a grade of C or higher in the class. We also anticipate that a substantial correlation between the number of times that students access remote tutoring through the quarter and the course grade.

We will also collect qualitative data from students and tutors regarding the effectiveness of remote tutoring on a session by session basis and overall at the end of the quarter. We will also seek feedback from the professors of the courses being tutored remotely at the end of each quarter.

6. **Measure Impact, Report Findings, and Share the Project**

The impact of this project will be measured in several ways:

a) the qualitative feedback from the students and from the professors will allow us to refine this service and make it more user friendly;

b) we will review the grades of all of the students in the class and compare the results of the grades of the students who used remote tutoring to students who did not use this service. We will assess a correlation between the use of remote tutoring and its impact on the student’s grade;

c) we will also compare the grades of the students in the class who accessed remote tutoring with previous classes to see if remote tutoring has a possible impact on lessening the number of D’s, W’s, F’s or I’s in the class.

**Reporting Findings:**

a) we will prepare a final project report with a full complement of data for the Provost;

b) we will do a presentation, if accepted, for the Faculty Institute on Teaching and Learning on the review of the project with both positive and negative perspectives. We will also offer a future view of the viability of remote tutoring as a regular part of the continuum of services offered at RIT;

c) we will do a “Perspectives” column for *News and Events* and introduce the concept of remote tutoring to the Institute community;

d) we will also prepare a journal article on the experience and explore which journal would be the most receptive to this type of article.

**What To Share In a Faculty Forum:**

a) how the project was conceived;

b) the steps that it took to bring it to completion;
c) the future of remote tutoring at RIT;
d) feedback from a panel of student-users and class professors.

7) A Rationale for the Project:

The technology to provide remote tutoring has not been available for very long, so this is a new effort for our institution. It is combining the technology of on-line learning with a traditional academic service. It is piloting the extension of this service on a 24/7 basis as has been described and it has the structure to promote a more wholistic view of support as something students can use to increase their mastery of a specific discipline versus something they use to compensate for a deficiency.

It is the wave of the future and relevant to the nurturing of success and competency in our students. We believe that it will have an overall positive effect on the progress students make in the classes where it is offered. As they continue to experience success in their classes, we believe that it can have a positive impact on the retention of students at RIT.

This project is relevant to other faculty because it has the potential to promote greater success among their students. It becomes a viable aid to the promotion of their goals and objectives for the class while not consuming much of the faculty’s time.

The team that is working on this project is coming from a multi-disciplinary perspective. Marie Giardino and Judy Bernhart have a combined 45 years of experience in offering academic and personal support services to students. Sarah Donaldson is offering her expertise in on-line learning and its technologies. Julie Cammeron brings a wealth of experience in offering tutoring, tutor training and perspectives on positive pedagogy. Chris Cuculick. Joseph Stanislow and Mark Wambach bring their familiarity on the use of the Breeze technology, their overall expertise in the field of Information Technology, and their expertise in supporting the learning of deaf students. Jeffrey Porter, Vicki Robinson and Sharon Rasmussen bring their understanding of the learning needs of students who are deaf and hard of hearing as well as their years of experience in providing successful support services to NTID students. The beauty of this project is that it unites RIT and NTID in a common effort that can impact the success of all students while giving these students (hearing, hard of hearing, deaf, TRiO, etc.) the opportunity to learn from each other.

The versatile communication modality of Breeze also should allow for effective communication between deaf students (eg. In the role of tutor) and hearing students (in the role of individuals seeking tutoring). Evaluating the effectiveness of such communication versatility will be an additional focus of this initiative.
8) Time-Table for Project:

March 2005-May 2005: small pilot using remote tutoring in programming classes that is being supported by NLC and by TRiO SSS.

July 2005-August 2005: contact the three colleges that have been selected for participation and find two to three professors in those colleges that are willing to have their students use remote tutoring for their class that quarter

September 2005-June 2006: implement the remote tutoring in the classes that have signed on for this project.