Provost's Learning Innovations Grant for Faculty  
Request for Full Proposal  
2000-2001  

Project Title: *Introduction to Psychology: Multimedia Workbook and Study Guide*

Applicant:  
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Summary of proposed project:

A Provost's Learning Innovations Grant is being requested for development and  
evaluation of an interactive multimedia workbook and study guide prototype that would be used  
initially to supplement the two NTID sections (60 and 61) of the Liberal Arts Introduction to  
Psychology course (0514-210) which are taught each quarter. There will be 10 modules  
organized to coincide with the weekly topics covered during the quarter and a supplemental  
module with guidelines on how to organize a research paper for either a case study or a survey  
research project using American Psychological Association (APA) style guidelines. (Students  
taking NTID sections of the Introduction to Psychology course are required to do an original  
research project and to report their results within the context of a research paper.) The  
workbook/study guide materials would be custom designed to support the abbreviated format  
that a 10 week quarter imposes on the course.  

The modules will be integrated into the Blackboard CourseInfo web site for these  
sections and will contain information, interactive exercises, homework assignments and practice  
tests that will assist the student in preparing for the weekly online quizzes and the final research  
paper. Eventually, the materials could be used as part of a distance learning section of the course  
that utilizes CourseInfo as the delivery system.  

Each module will contain a review of the most important concepts presented during the  
week, practice tests, and links to lecture notes and other materials contained within the  
CourseInfo web site as well as to external resources on the www. The review materials will be  
visually oriented, making liberal use of photos, clip art, flash animation, and video clips in  
addition to text captions. Most modules will also contain interactive tutorials and simulation  
exercises. At the end of each module, students will be presented with a 20 item multiple choice  
practice test. The practice tests will require that students select the correct answer before being  
allowed to continue on to the next question. The percent of initially correct responses will be  
displayed at the end of each practice test with suggestions for either additional study of the  
week's material for students who do not get a passing grade or a message indicating that the  
student is ready to take the graded online weekly quiz. A link to the appropriate weekly quiz in  
CourseInfo will be included in the latter message.
The format of the workbook/study guide will be a CD-ROM–web hybrid. This format should help to overcome the problem of data transmission speed of images and video while maintaining such benefits of the internet as interactivity, student-to-student and student-to-instructor discussion board and chat functions, and access to additional resources through the CourseInfo web site. Tutorials, simulations, and media files will be stored on a CD-ROM while practice questions and other course materials (i.e. the course syllabus, calendar, lecture notes, online quizzes, etc.) will be stored on the web server so that they can be updated as necessary.

Copies of the prototype CD-ROM will be loaned to students at no charge during the piloting phase of these materials and will be collected at the end of the quarter for redistribution to the next quarter’s classes. Re-Writable CD medium will be used to facilitate modification throughout the pilot phase of the project.

**Targeted learners:**

The approximately 120 deaf and hard-of-hearing students who enroll in the NTID sections of Introduction to Psychology each year are the targeted learners, although the materials would be useful for any student taking Introduction to Psychology, especially those for whom English is a second language. A long-range goal for this project beyond development and evaluation of the proposed prototype for use in NTID sections of the course is to incorporate it into a distance learning section of the course. This would potentially expand the population of targeted learners to include deaf and hard-of-hearing students (and perhaps normal hearing students) taking the course from an off-campus location.

**Anticipated impact on teaching:**

Students usually enter the course with a familiarity with Modern Language Association (MLA) style but they are not familiar with APA style guidelines. Although I explain the requirements of the paper in class and give students a handout of guidelines outlining what they are expected to do, a sizable number do not seem to understand. There is not enough time within the already abbreviated 10-week quarter time frame for me to teach students how to write a paper. The supplemental module which will provide an outline and guidelines for writing the research paper will save the instructor valuable class time now spent in explaining (and re-explaining) exactly what sections the paper must have, what type of information goes into each section, how a case study report differs from a survey research report, when and how to write an abstract, and how to cite various types of resources, including electronic citations, in appropriate APA style. This module will also deal with the issue of plagiarism, which has been an ongoing problem for my students, and for me in grading their work. The module will give examples of what constitutes plagiarism in order to prevent students from arguing, for example, that they didn’t realize that they can’t take words from an article (even if a sentence is not copied verbatim) without using quotation marks and citing the page number of their source.

**Anticipated impact on learning:**

Deaf learners are visually oriented as a result of their disability, and they also seem to prefer an active, hands-on involvement in the learning process. In addition, idiomatic language structures often used in materials oriented to college students are confusing to many deaf students. The highly visual and interactive nature of the modules is consistent with the average
deaf student’s learning style. Combined with appropriate captions and language structures that will be readable by deaf learners (as well as those who may have English as a second language), the modules should appeal to students and encourage them to engage in the supplemental learning experiences that this project will provide. The practice tests will give students feedback on areas covered during the week that they may need to review and will comment upon their readiness to take the graded weekly online quiz. Although not intended to be a substitute for attending class, students who may have missed a class can use the workbook/study guide to get some idea of what aspects of the weekly topic are being emphasized by the instructor.

**Impact measures:**

Students will be asked to evaluate the usefulness and effectiveness of the materials. Specific aspects of each module (tutorials, simulations, and practice tests) as well as an overall measure of satisfaction with the workbook/study guide in general (clarity/readability, interest level, etc.) will be collected. In addition, CourseInfo allows for tracking students’ use of various course materials, and this feature can provide information about the actual use of those workbook/study guide materials that are linked to the course.

A summary report of the student evaluations of the prototype materials will be compiled after the workbook/study guide has been piloted for at least 2 quarters. If it seems to be positively received and used by the students, a proposal to request NTID level 1 prioritization and funding for on-going development of the workbook and study guide will be submitted for consideration.

Once the materials are evaluated and revised, they could be shared with other faculty teaching Introduction to Psychology and with faculty using CourseInfo who may wish to integrate more multimedia into their courses.

**Rationale:**

There are three reasons for developing a supplemental multimedia workbook and study guide for the Introduction to Psychology course. The first and foremost reason relates to the target population – deaf students – and their need for visually-oriented, interactive materials that are motivating, compatible with their learning style and that are written in concise, non-idiomatic English. The use of video clips will also allow for deaf role models to be used where appropriate and for simulations to include subject matter that might be of interest to deaf college students.

The second reason relates to the fact that RIT’s quarter system is not compatible with a traditional introductory Psychology course or text format. Most Psychology texts and supplemental workbook or study guide materials are designed to be used within the context of a 15-week semester which covers between 16 to 18 topics in so many chapters (plus a chapter on Statistics in the Appendix). Even the so called “brief” or "abbreviated" versions designed for use at two-year Community or Junior Colleges have a minimum of 14 chapters/topics plus an Appendix that covers Statistical Analysis. In order to teach an introductory Psychology course within the confines of a 10-week quarter, several chapters and topics need to be eliminated. Thus, a custom designed workbook and study guide would assist students in focusing in on the most important concepts within the topics that are taught. Such an undertaking requires resources that my department is unable to provide.

A third perhaps less immediate but equally important reason is that the materials will be
integrated into the Blackboard CourseInfo course management system that the Institute has recently piloted and purchased. The prototype multimedia workbook/study guide could be used as an example of how to incorporate animation and video clips into the CourseInfo format. Once the proposed materials are piloted and revised, a more "commercial" version could be developed and distributed on CD-ROM to on-campus and possibly distance learning students taking this 10-week course.

Credentials:

Dr. Gail Rothman-Marshall is an Associate Professor with the NTID Liberal Arts Support Department. She has a BA in English from the SUNY State University at Albany, and an MS in Education/Counseling from SUNY College at Brockport. She received her Ph.D. in Counseling and Educational Psychology from SUNY Buffalo in 1989. Her dissertation and on-going research has been on learning styles of deaf college students and the relationship between learning style, choice of major and retention. She currently teaches two NTID sections of Introduction to Psychology each quarter, serves as NTID Liaison to the Psychology Department, and provides information and advisement services to deaf students interested in and preparing for entry into the Psychology major. She has attended several faculty instructional technology workshops including two RIT FIT and two NTID ITC intensive weeklong workshops. She has created web sites for several courses she has taught and is currently in her third quarter using the Blackboard CourseInfo course management system. She has 30 years of experience working with deaf students as a counselor, advisor and teacher -- 26 years of which have been at RIT/NTID.

Timetable:

The overall design and the selection of content to be included in each module will be identified in the Fall Quarter (20001), including a listing of images, animations, video clips and text that will be needed. During the Winter Quarter (20002), the content materials will be gathered, the media created, and development of the individual modules will begin. Rough prototypes of 6 modules (including the Research Paper supplement) should be completed by the end of winter and can be piloted during the spring. The additional 5 modules would be completed by the end of Spring Quarter (20003). The entire workbook/study guide would be piloted during the Summer Quarter (20004) and fine-tuned over the summer. The final version of the prototype multimedia workbook and study guide will be distributed to all students enrolled in NTID sections of Introduction to Psychology Fall Quarter of 2001. If students evaluate the project positively, additional funding will be sought from NTID for on-going refinement of the workbook and study guide.