

University of Arizona's Einstein's Protégés Program

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In late fall 2002, two librarians from the University of Arizona Library and members of other campus units, including the Teaching Teams Program, University Learning Center, University Writing Program, University Teaching Center, and Office of Instructional Assessment met to brainstorm ideas to build a learning community focused on bridging the disconnect between faculty instruction and student learning. Based on a prototype model tested by one of the members, the group developed an idea for a university-wide critical competencies program called Einstein's Protégé's (EP). The EP Program focuses on academic improvement and success using learner-centered education to develop critical competencies and relying heavily on peer-assisted learning techniques.¹ As a group, we defined critical competencies as a set of skills, knowledge, and abilities that are essential for student academic success and retention. They include study skills (e.g., note-taking, test-taking, time management techniques), information competencies and communication skills. This paper will provide a brief overview of

the Einstein's Protégé's Program, including assessment results, informal feedback, descriptions of the faculty workshop series and content for the credit-bearing EP preceptor course, and provide the names of the two institutions working with the University of Arizona to model the program.

Located in Tucson, the University of Arizona (U of A) is the second largest university in Arizona, with a student population of over 36,000. There is a general education curriculum, which includes foundational courses in math and composition. The U of A also has a program called the Teaching Teams Program (TTP). TTP has been in existence since the fall of 1998 and has been supported by several grants from different agencies since its inception. It is the only formal program on campus that trains students, in a credit-bearing course, to work as preceptors in their courses (regardless of discipline). TTP also provides support for instructors who wish to have preceptors in their courses, and works with a

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variety of service units on campus to deliver the needed training and support for both the faculty and students.

In late fall 2002, members of the Teaching Teams Program, University Learning Center, University Writing Program, University Teaching Center, Office of Instructional Assessment, and University Library met to discuss further expanding a pilot project that had been conducted by Dr. Hal Larson, Director of the Teaching Teams Program, during the fall 2002 semester. In his pilot project, Dr. Larson investigated whether or not students who received instruction in time management, note-taking, test-taking strategies and other related skills would raise their grades in his class. Self-selected students in Dr. Larson's class were given instruction by preceptors who enrolled in a credit-bearing class taught by staff from the Learning Center as part of the TTP. The preceptors held group study sessions, provided advice to students, held office hours, and reviewed students' completed assignments before they were due. Preliminary results showed improvements in student grades for those students who participated in the pilot program when compared to those who did not.

Working with the TTP Leadership and the other potential campus partners (University Learning Center, University Teaching Center, University Writing Center and Office of Instructional Assessment) throughout the spring semester, it was demonstrated and explained to the group how information competency was an essential set of skills that students often lacked when entering the university. Given that the term "information competency" was a new term to several of the group members, an overview of information literacy skills and examples of classroom activities relating to them was presented to help the group members better grasp the concept and application of information literacy to the program that was being proposed. These types of in depth discussions also helped the TTP group understand how information literacy greatly impacts the potential for student learning and exploration. Through continued discussions, goals for the new program were brainstormed, ideas for student curriculum were expanded, training for faculty was planned, and the proposed program was expanded to include instruction on both study skills as well as information literacy.

During spring 2003, the project group worked collaboratively to write and submit a grant proposal

to the Department of Education's Fund for the Improvement of Post-Secondary Education (FIPSE) to develop the Einstein's Protégé's Program. EP aimed to build a learning community that focused on developing under-prepared students for academic success in their coursework through the introduction of "critical competencies". Critical competencies would be developed in students through 1) providing preceptor training in the tools and resources needed to actively work with peers; 2) embedding these preceptors in courses to help create successful learning environments for under-prepared students; and 3) preparing faculty to develop learner-centered curricula.

In September 2003, it was announced that the project group was awarded the FIPSE grant for the development and implementation of the Einstein's Protégé's Program (\$483,389) and the project team began to develop a program of concurrent student and faculty development based on current learning theory, incremental skill building through peer assisted learning techniques (preceptors), student-initiated program direction (bottom-up management), motivational strategies that encourage student engagement, and low cost.²

In order for the program to be successful it was recognized that faculty buy-in would be essential. The initial focus of the EP Program has been to set up a structure to train preceptors and faculty to understand and appreciate "critical competency" development in students and its applications to their respective courses. In doing so, opportunities are created for preceptors to share study skills, communication and basic information literacy skills via individual consultations, office hours, group study sessions or whatever other course structures faculty have in place. The preceptors take this knowledge to their classrooms and work with their peers to teach skills and share knowledge that is discipline-independent and immediately applicable to other classes. These specially trained preceptors embedded within participating instructors' classrooms help other students improve their critical competencies, while also providing input and feedback to faculty on student needs so that adjustments can be made to curricula.

Participating faculty are encouraged through a workshop series and a grant program to reflect critically on how their assumptions about student critical competencies influence the design of assignments and research projects. The Curriculum Development Grants

are \$3,000 awards to faculty (and other instructors of record) to revise and explore changes in any particular course which would focus on developing critical competencies through integrating information literacy, study skills, and/or Einstein's Protégés Preceptors to help maximize student development and potential for success in university courses. Recipients are required to participate in the faculty workshop series and write a final report reflecting on how the changes they implemented in their course affected student learning.

To train the preceptors, learning specialists and librarians worked together to develop and teach a 3-unit course (UNVR 297a) for preceptors in the EP Program that focuses on developing critical competencies. The course has been co-taught since the fall 2003 semester with members of the University Learning Center and the library. The instructional design of the course has changed each semester based on prior assessment. Our work with the preceptors will guide them to being able to both contact appropriate subject librarians and to prepare them to talk knowledgeably about their information needs and problems. The curriculum for the course is available on line.³

To provide faculty with support, there is a website with a variety of materials, including a Faculty Toolkit with ideas for planning and managing the course, as well as a Faculty Resource Manual. Additionally, there is a workshop series offered every semester entitled "Turning Information into Knowledge." Attendance at the workshops is not mandatory and so varies from session to session. The schedule of workshops can be found on the TTP site: <http://teachingteams.arizona.edu/ep/workshops.htm>. A look at the most recent eight workshops provides an outline of the types of workshops regularly offered: 1) Exploring the Disconnect between Instructor Expectations and Student Skills; 2) Who Are Your Students? 3) Critical Competencies; 4) How People Learn; 4) Learning Centered Education I: Philosophy and Practice; 5) Learning Centered Education II: Practice and Assessment; 6) Managing Large Classes; 7) Universal Design; and 8) Einstein's Protégés. The workshops are planned and taught by members of the TTP, the Library, and the University Teaching Center.

Although we are only in the second of a three year project, the EP Program has already provided the opportunity to educate students and faculty about information literacy and its importance in developing infor-

mation smart graduates. As of the spring 2004 semester, a total of 33 preceptors have taken the UNVR297a Preceptor Training course and 7 different instructors have participated with the EP Program, reaching a total student population of 1,340 students in the fall 2003 and spring 2004 semesters. The EP Program through the Faculty Development Workshops and the Curriculum Development Grants affords the Library the opportunity to work closely with faculty teaching and/or participating in both the EP Program, as well as the broader Teaching Teams Programs. This participation may result in an increase of faculty members wanting to work with librarians on assessing course assignments and integration of information literacy skills.

Working with faculty who use preceptors provides wonderful opportunities to develop scalable instruction models. This is successful program that allows us to partner with faculty participating in the program to find creative ways to utilize peer-assisted learning to integrate information literacy into the curriculum. The program provides a model for other libraries to partner and collaborate with many campus units in order to develop a student-centered, inquiry-based model of learning. Through our participation in the EP Program, we are developing strong partnerships with the University Learning Center, University Teaching Center, University Writing Center and the Teaching Teams Program. These partnerships have already resulted in being asked to participate in an "Advancing Literacy in the Majors" Writing Workshop hosted by UA Writing Program in April 2004. Other results include the local dissemination of the commitment and importance of information literacy, as well as the national dissemination of the results of the program and the potential to aid in the development of similar programs at UT-Austin and UW-Milwaukee.

Additionally, the grant funding is contingent on formal assessment of the program. There are two assessment specialists working with us on the project to ensure that the program itself is working as it was intended and that we are using measurement tools that can yield feedback about whether or not students are gaining skills and knowledge from UNVR 297 that help them succeed in their courses.

There are several problems with the program that are being considered. First, several students enrolled in UNVR 297 (EP training class) were disappointed, primarily in two areas. The first was that they did not always

feel like they learned the information in a timely manner; i.e., soon enough to apply it in the classroom. Second, some students felt limited by the professors in whose classes they were preceptors. They felt they could do more than they were asked to do and some of the students did not feel comfortable taking more initiative because they were students, as well as preceptors, in the class.

Another issue we faced as instructors of UNVR 297 was the difficulty in obtaining syllabi from faculty. It was a challenge to teach skills to students but not know how they would be able to take them into their classes to help their peers develop some of the skills or complete assignments more successfully. In some cases, research was not required of the students and, thus, the preceptors felt they were wasting their time. They would have preferred to develop knowledge or learn skills that could be immediately applied to their preceptor duties. In the future, it would be ideal to talk with each instructor and ensure that what we are teaching will be used in their classes.

Another issue we faced was that several students felt they already knew how to search for information, even though formal assessments did not demonstrate their perceived knowledge and skills. It may be that the pace of the course needs to be quickened, such that we are provided a more in-depth study of resources. This is an area that is somewhat vexing. It could be an issue of the way the content is delivered or the amount of complexity in the content. We may be guilty of simplifying concepts, which in turn made the students feel that it was so easy that they didn't need the formal training that we were offering in the course.

One way that we, as librarians, would like to see the program develop is to have more liaison librarians involved in the program. The majority of UA liaison librarians are heavily involved with instruction in their departments. Occasionally, we would find out that a librarian was working with a class in which there was a preceptor enrolled in the UNVR 297 class. Ideally, the preceptor would have had contact with the liaison librarian and assisted the librarian in developing handouts, classroom activities and instruction for the class. Although we have given the librarians several presentations on the project and every semester we provide a list of the faculty involved in the program, there is no formal structure for their involvement. We think that in time, this will happen more organically as the librarians become more aware of the preceptors' roles in the courses and how they, too, can benefit from their roles as peer-assistants in a classroom.

Notes

1. "Introduction to Peer-Assisted Learning." Teaching Teams Program website <http://teachingteams.arizona.edu/ep/about.htm>. Accessed on January 10, 2005.
2. University of Arizona: Einstein's Protégés: A Heuristic Approach to Bridging the Gap between Faculty Expectations and Student Preparedness. FIPSE Programs: Grant P116B030990. <http://www.fipse.aed.org/grantshow.cfm?grantNumber=P116B030990>. Accessed on January 10, 2005.
3. "UNVR 297a Course Homepage." Teaching Teams Program website http://teachingteams.arizona.edu/ep/unvr_297a.htm. Accessed on January 10, 2005.