

Academic Technology Grant - FY 2009
Removing Barriers of Economy
Final Report

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Original objectives and strategies & revisions to same

Our main goal for this project was to “level the playing field” in terms of access to college courses and ease of access through the use of computer lending, technology support and academic skill building." Our proposal planned to accomplish this by lending laptop computers and by providing additional technology and academic skill building to achieve three desired outcomes:

1. *Allowing students with limited financial resources to "participate in classes they would otherwise not have access to" as most of the Early Childhood Courses include an online component and some are almost entirely online.*
2. *"Improved access to technology" would then "facilitate immediate and interactive opportunities for feedback on writing assignments."*
3. *This, in turn would lead "to improved student performance."*

In fact, our grant accomplished the first and third outcomes, as only one of our students would definitely have been able to participate in classes without this help and three others would definitely NOT have been able to take courses without this program. Access to technology also lead to an improvement in performance, even if only because students would either not have been able to take courses at all, or would have had extremely limited access to computers. The main complications (other than not having a computer at all) were outdated hardware, sharing computers with multiple family members (often where mothers felt pressed to give priority to their school-age children),

and not having internet access. While this grant had not included providing internet access, even those borrowing laptops who did not have access in their homes, were able to take advantage of free "hotspots" in the community. In one case a student who did not meet our criteria of being matriculated, enrolled in a course anyway and attempted to use her work computer on a limited basis. Unfortunately, this student is now working with Brenda D'Alotto to finish her Incomplete from the course and meets me on campus to use computers there.

Although we did provide improved access to technology" the computer access alone did not lead to the "immediate and interactive opportunities for feedback on writing assignments" that both PI's hoped and planned to have. Although the grant itself improved communication between PI Paugh as a course instructor and PI D'Alotto in terms of developing quality writing support, students from the programs as a whole did not seek or follow up on out of class writing support as we expected. Reasons given were, obstacles caused by family illnesses, trouble teen children, and other family responsibilities. These are issues already documented in the literature as barriers to graduation for non-traditional students. In addition, three of the students who participated in the program faced complex challenges as English Language Learners and several were unfamiliar with computer use so that the "hybrid" nature of the courses (fully and partly online) presented obstacles rather than opportunities for these students.

Activities Carried Out

1. **Lending Criteria/Process** - Our criteria for lending were that the students needed to be matriculated and working as paraprofessionals. However, since an additional intent of this grant was to serve and assist early childhood educators

who lacked resources to purchase a computer, we also accepted "teachers" from programs such as Head Start, since their incomes are on par with those of public school paraprofessionals and, sometimes, even lower. Locating students was more complex since we quickly realized that students who could not afford computers often could not afford college. When the Building Careers Grant received additional funding, grant PI, Lisa VanThiel, was able to provide funding for our target population to attend classes and Brenda tag-teamed with Lisa on the Building Careers Grant to recruit participants. Six of the nine computers lent to students went to Building Careers students, one to a Boston Ready student, and one to an Including All Children student. The connection between course funding and laptops has been made very clear in this.

- 2. Computer Training** - As a part of my position as Academic Specialist, I already organize and hold training on BlackBoard use. However, of the students who borrowed laptop computers, five required additional technology assistance and were unfamiliar even with things such as email and email attachments. Two two-hour training classes were held in January to assist students with their computers. Unfortunately, three students who needed help did not make these trainings and two are currently in danger of failing their courses.

Academic Support - Brenda D'Alotto was aware from the beginning that many of the students in this program would need academic support. Some students were more willing or able to take time for this than others; however, at obtaining that help. Six of the students who borrowed laptops have completed their coursework for Spring 2009; three

have taken Incomplete grades, one of whom has met with me on a weekly basis since the end of the term. It is suggested through this experience that the academic support needed by these students requires qualitatively different approaches than simply providing a computer or providing skills tutoring.

Deliverables

The deliverable schedule for this grant included: establishing procedures and forms for lending, placing information online, taking baseline statistics, including gathering and analysis of pilot qualitative data on student writing (Spring 2008). Procedures have been developed for lending, but are somewhat different than expected for recruitment. As mentioned earlier, it has become very apparent that having only a small pool of computers for lending seriously limits our ability to recruit. Placing the stipulation of matriculation on selection proved to be a sound idea, as some new students who were not matriculated have already dropped out.

During the summer of 2008, our second deliverable was to acquire computers, screen and select initial applicants and begin workshops. Due to complications with ordering procedures, computers were not available for Fall lending as hoped. However, nine computers were lent out for Spring 2009. Two students also returned the computers early--one received a computer as a gift and the other received one from the school where she teaches.

The third deliverable was to continue the lending program during the Spring of 2008 using lessons learned from the Fall term. Since we were delayed a term due to

purchasing issues, we are now lending out computers over the Summer for students still completing coursework, or taking Summer courses. We continue to collect writing samples from students and plan to do further analysis after the Summer sessions.

Our final deliverable is this report on our lending process, which was to include the selection of high-need students, agreements between IT and academic programs regarding support and training, training materials and formats that have proven successful for naïve technology users. The cliché "You don't know what you don't know" fits this situation perfectly.

While most university employees find it difficult to believe that there are people in today's world who don't have email, they do exist. Technology is not universally accessible. Some of the students we have encountered have some sort of computer in their homes, but it serves primarily as a word processor for their children's homework. In her work with these students, Brenda D'Alotto had multiple discussions with students who could not understand that just because you have a computer with internet capabilities does not automatically mean you have access to the internet! Also, many of the students who applied for computers never completed the process, or were not reachable at the contact numbers provided when we tried to reach them for additional information. Yet, none of this should be a criticism of this group of students, but more of an articulation of the issues that exist.

As teachers of young children, often for a decade or more, our students have frequently not had exposure to computer use. Many of them have only a limited number in their workplace, let alone at home. In some cases, paraprofessionals have worked their way up from hourly jobs into positions as teachers in programs such as Head Start where

a couple of college courses qualify them to claim this title. Yet, they cannot claim the paycheck we might assume goes with it and generally earn about the same as public school paraprofessionals. In this light, what most of our students have learned in a semester is highly commendable and, as we learn more about them and how to support their learning, it bodes well for their success.

Issues and Further Questions

We will continue working with the same group of students and lending them computers. Between the Massachusetts "Paraprofessional Teacher Preparation Program," grant funding from Building Careers (and possibly Including All Children and Boston Ready-if a continuation is obtained), along with the laptop lending program , we will be able to assist the strongest students in completing their degrees. Unfortunately, those students who are not able to complete courses this term will not be eligible for future grant funding due to financial limitations of funding.

At this point the research with these candidates has taken two turns: a focus on the candidates in the Building Careers grant (non-licensure seeking) and a focus on candidates in the Including All Children (licensure seeking) cohort. For the former (courses that are more fully online) headsets have been requested to assist students with online access. For the latter, research on writing has begun and has resulted in several conference presentations and a journal article. The issues arising from this research points to the links between technology access, writing support and course participation. This suggests several questions:

1. What is the nature of support for non-traditional candidates seeking degrees as Early Childhood teachers?
2. What is type of technology best links what these candidates already know to academic success?

Research presentations on this data include:

We presented pilot data on our target students using IAC data at three conferences:

- i. Paugh, P., Abbate-Vaughn, J. & D'Alotto, B. (2008). *Writing assessment: Diversity, assessment, and achievement*. Presented at: RE-envisioning writing assessment: Relevance, diversity, and achievement. A Conference of Teachers Pre-K through College. Hosted by the University of Massachusetts Amherst. November 1, 2008, Southbridge, MA
- ii. Abbate-Vaughn, J. & Paugh, P. (2008). *Using Developmental Education Approaches to Transition School Paraprofessionals Into 4-Year College Degrees: Challenges & Opportunities*. Presented at: 4th International Conference on Research in Access and Developmental Education. September 24 – 27, 2008
- iii. Paugh, P. & Abbate-Vaughn, J. (2009). *Writing critical praxis: The challenge of teacher education in an urban public university*. Paper presentation at the National Council of Teachers of English Assembly for Research. Los Angeles. February 2009

There is one article in preparation:

- i. Abbate-Vaughn, J. & Paugh, P. The Paraprofessional-to-Teacher Pipeline: Support Throughout Graduation, In preparation for Journal of Development Education

Future funding would include a proposal to provide digital and video “flip” cameras to students and to include technology workshops in class and out of class to investigate a broader notion of academic support. Linking digital modes of knowledge generation to writing may help students to bridge the technology and academic literacy gaps we found in this work (see Lea & Street, 1998; Lea, 2004).

Disposition of Funds

Currently, we have received confirmation from Stephanie M.R. Michel-Moore regarding the disposition of remaining funds and arranged for an extension so that headsets and other supplies, possibly including the flip cameras and/or power supply units . Any monies remaining at the end of the calendar year 2009 will be returned to the university. During this past semester several students did not use headsets and relied on borrowing (or skipped the audio portions entirely, which resulted in their losing at least 40 percent of the course content.

Grant Program Comments

We truly appreciate the opportunity to have funds to extend our service to students in Building Careers programs who so desperately need financial, academic and moral support. The students who have participated in this program have taught us more than we imagined about the nature of support. At least four of the students who have participated in this grant overcame nearly impossible circumstances in order to take and complete courses this term. Being able to contribute and facilitate this has been immensely rewarding.

On the other side, this program could have been more easily facilitated had there been funding for more support for us, the grant administrators. Not only did we have all of the usual complications of administering a grant, but we also ran into so many communications and administrative complications (generally due to lack of funding for support staff and resources) that we probably expended twice the amount of effort that should have been required for such an effort. This is clearly overpowered the gains imagined at the writing of this grant, of helping students achieve success, it realistically

indicates the barriers imposed by the large bureaucracy for students least prepared to navigate a university setting as well as faculty who attempt to directly meet their needs.