

A COLLABORATIVE MODEL OF INTEGRATING TECHNOLOGY K – 16  
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When we look at the integration of technology into instruction, we find many points of agreement. Equipment must be usable, up to date and available to teachers. We must help teachers find appropriate links to the established curriculum, so that technology becomes a transparent mode of delivering instruction. We must go beyond drill and practice to higher order level thinking skills. Training must be hands-on, preferably concurrent with use, and at the appropriate level for the teacher. Why is it then, in spite of so many best efforts, that we still fail to see technology used as often or as appropriately, as it could be used in many classrooms? One answer can be found in the way we prepare teachers in their pre-service and student teaching years in the uses of technology.

Trinity College has taken on that issue. Trinity College was founded in 1897 in order to provide higher education opportunities for women, at a time when many institutions of higher learning were closed to women. The Sisters of Notre Dame established a college whose mission was to educate women of all faiths in a setting located just a mile from our nation's capitol. Over the years, Trinity's mission has evolved. But the commitment to preparing young women, and the commitment in particular to the graduates of the Washington DC public schools and to the schools themselves, has grown. The undergraduate enrollment at Trinity College is still all women; the graduate classes and weekend college includes males and females. When all programs in our college of science and arts, school of education and school of professional studies are combined, Trinity College educates more than 5000 students every year. Our main focus continues to be on preparing teachers and providing in-service training to current teachers, as well as the opportunity for advanced degrees.

Trinity College has adopted a strategy that provides for a consistent, three-pronged approach to preparing teachers to use technology. Our faculty is being trained in the infusion of technology into their instruction, and the revision of course syllabi to reflect that change. Classroom teachers who serve as cooperating teachers are being trained and provided with equipment, to plan and implement lessons that reflect current best practices in using technology in instruction. And, finally, student teachers are receiving instruction in skill level use of word processing, spreadsheet, database, email and Internet as well as pedagogical approaches to using these skills to provide technology-infused instruction.

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The first group of student teachers was trained this semester in skills related to MS Word, Excel spreadsheets, and PowerPoint. Each student completed a self-assessment of computer skills, and they were assigned to attend a workshop based on the assessment. Each workshop included not only skill level training but also applications to the classroom. For example, in the MS Word class the students learned mail merge and how to use this in writing a letter home to parents. In the Excel workshop they learned how to set up a grade book using the spreadsheet and formulas. PowerPoint assisted with their classroom presentation skills. Our training of pre-service teachers will be formalized starting in the Fall 2001 with the receipt of the Intel Teach to the Future Grant. The training that Trinity faculty will receive as a result of this grant will lead to the establishment of a required three credit hour course in technology skills and implementation, following the model of the Intel training.

The intensive workshops for classroom teachers and college faculty will be held this summer. The 'Preparing Tomorrow's Teachers to Use Technology' Grant (PT3) will include a 3 week, 45 hour session with classroom teachers and college faculty working side by side to learn, plan, and implement technology in instruction. The AOL Time Warner Foundation grant allows for training of 60 classroom teachers and administrators from Washington DC Public Schools in three two-week sessions. These programs will be discussed now in greater detail.

The AOL Time Warner Foundation Grant allows us to establish the Educational Leadership Technology Institute (ETLI) this summer. We will train 60 teachers and administrators from 12 schools in DC Public School system – 4 high schools, 3 middle schools, and 5 elementary schools. The schools were chosen in consultation with DC Public School and represent a range of location and enrollment. The participants will attend a two weeks session by grade level. During this time they will receive hands-on training in the ETLI classroom on our campus related to the integration of technology into their instruction. Topics include Introduction to Microcomputer Applications for Teachers; The Internet and Instructional Strategies; Educational technology Projects for Teachers; Enhancing Curriculum Instruction with Technology; and One Computer, Two Computers, Three Computers, Four..." Guest speakers will be current practitioners including Dr Acosta-Sing, principal of the Mott Hall School in the Bronx, NY who implemented the Microsoft Anywhere, Anytime Learning. Representatives from Boxer Learning, Riverdeep software and Classroom Connect will give short presentations. Classroom teachers from DC Public Schools who are currently using technology in instruction will be included as presenters, to give teachers quality time to interact with their peers, ask questions, and develop lessons.

Each participant will receive a laptop and a two-year account to AOL. In addition, every week the participants will spend one day at AOL Headquarters in Dulles, Virginia. They will be matched to AOL employees who will serve as partners or mentors to the teachers and their schools throughout the coming school year.

Many of these teachers will serve as cooperating classroom teachers to our student teachers in the years to come. Therefore, Trinity College benefits greatly from their expertise, as will the children they teach.

The Preparing Tomorrow's Teachers to Use Technology grant (PT3), received from the Department of Education, includes a three-pronged plan to prepare future teachers – train them, train the cooperating teachers, and train the college faculty. . Each of the 2 elementary schools received a 10-computer station lab with smartboard and projector. Trinity College received a 15-computer station lab with smart board. The third participating school, Northwestern HS, is filled with technology and we used that site for our meetings.

The first group of 15 teachers and 12 faculty members will be trained this summer. They will be grouped into K-16 teams with a unique focus for each: elementary education, secondary education, and special education. Time for each session will be divided into presentation, hands-on, and teamwork. The final product expected from each faculty member is a revised syllabus for at least one course that will be taught in the fall, with technology infused into the curriculum. The teachers are expected to develop several lesson plans or a unit plan that includes the use of technology. Of course, the added benefit is the interaction K – 16 on subject matter issues, pedagogy, and methods in addition to the discussion on technology. It promises to be a rich experience for everyone.

Initial response from all participants has been overwhelmingly positive. We will engage in specific assessment of each program to determine results as well as recommendations for future efforts. The PT3 grant is a 3-year grant that will repeat the summer training next summer. Sessions will also be held on campus for college faculty who were unable to attend. The AOL Time Warner Foundation grant calls for the development of ongoing professional development courses through the Office of Professional Development at Trinity College to address the needs and interests of participating schools.

Every step has been exciting – from the transformation of a 100 year old building into technology-rich classrooms, to the enthusiasm and interest of faculty, teachers, and students. This is just the beginning of our efforts to send our beginning teachers into the classroom with the skills and knowledge they need to become successful teachers in the 21<sup>st</sup> century.