Mohawk /North Country Technology Literacy Consortium Case Study

Contents:

1. Municipal Characteristics

The "lead" agency under which the grant was administered for the Mohawk/North Country Technology Consortium was the Madison-Oneida BOCES. Core partners included:

- St. Lawrence-Lewis BOCES;
- Jefferson-Lewis-Hamilton-Herkimer-Oneida BOCES;
- Oneida-Herkimer-Madison BOCES;
- Herkimer-Fulton-Hamilton-Ostego BOCES;
- Ogdensburg, Syracuse and Albany Roman Catholic Dioceses (23 elementary schools);
- St. Lawrence Valley, North Country, Midstate, Rome, Center State, Holand Patent Remsen, Whitesboro, New Hartford, Utica and Herkimer Teachers' Centers;
- Madison-Oneida, St. Lawrence-Lewis BOCES, Jefferson-Lewis-Hamilton-Herkimer-Oneida BOCES, and Herkimer-Fulton-Hamilton-Ostego BOCES SETRCs;
- Midstate and Northern New York SEALTAs;
- Mid-York and North Country Public Library Systems;
- School library systems of five partner BOCES;
- Oneida Regions of New York State Modal Schools Program.

The Mohawk/North Country Technology Literacy Consortium project covers a significant portion of northern New York State that includes many rural and small urban communities. The area includes a wide range of districts with an equally broad array of needs. While some areas serve a more affluent population, others have more than 50% of their students eligible for free or reduced-price lunch. The five-BOCES regions represented by the Consortium included nine upstate counties with a total population of 743,881 in 2003. It included 59 component school districts with an overall student enrollment in excess of 120,000.

2. Project Description & Impetus

In 1997 New York State was at a crossroads in classroom instruction; for the first time technology was available to revolutionize the way students learned. The Internet was opening a whole new world and computers held the promise of serving as a significant tool to educate in ways that are now commonplace. This potential was recognized by the New York State Education Department, which worked to develop the first specific learning standards defining the use of technology in our schools. In 1996 the New York State Board of Regents adopted learning standards for all subject areas taught in state schools as well as guidelines for incorporating technology into classroom instruction. These standards were not designed as local school/district curricula, but rather as a roadmap for local school districts to use in the design of their own curricula.

According to a study conducted by the Teachers College at Columbia University, the region boasted an up-to-date technology infrastructure but many school districts throughout northern New York lacked the capacity to adequately implement – or even understand – this new framework. Moreover, many teachers who came from a generation who learned their craft before there was anything like the Internet or a personal computer simply lacked knowledge about how to use these foreign tools. Others either feared the new technology or were convinced that it simply got in the way of proper instruction. Still others who taught subjects that did not lend themselves to technology had no idea how these new tools may be applied. It was in this context that Ed Shafer formed a planning team to apply for a Title III Technology Literacy Challenge Grant through the New York State Education Department (NYSED). The grant proposal was developed through a consensus process designed to involve teachers, professional staff and administrators from each partner institution over several meetings held over a period of months.

The planning team included a BOCES district superintendent, a BOCES deputy superintendent, school superintendents, teachers, technology coordinators, teacher-center directors, the Model Schools Program coordinator, a non-public school superintendent, non-public school teachers, library-media specialists, building

principals, and curriculum coordinators. In light of the strengths and needs of the region, the planning team defined its goals not in terms of strengthening infrastructures but in terms of strengthening the instructional staff's capacity to use that infrastructure to enhance teaching and learning.

3. Proposal(s) and Funding

The proposal was to form the Mohawk/North Country Technology Literacy Consortium - a four-year project designed to empower district-level teachers, administrators and school-library media specialists to generate, implement, share, and peer review hundreds of learning experiences and educational units into a standardized, electronic format that were available via an on-line clearinghouse. The Consortium was to be funded through a Title III Technology Literacy Challenge Grant through the NYSED. A detailed budget and budget narrative were prepared for the grant proposal, which specifically outlined how the funding would be allocated:

- Thirty percent of the budget was targeted for professional development
- Thirty-five percent of the budget was provided directly to the districts in the form of teacher participation stipends, substitute teacher reimbursement, administrative support and awards for exemplary learning experiences and learning units. Monies were also provided to school districts for computers, other technology-integration support equipment, and technical support.
- Slightly more than 10 percent of the budget was spent on administrative support. Costs in this category included full or partial salaries and benefits for the grant manager, peer review consultant, web master, computer technician, technical trainer, grant evaluator, secretary and account clerk.
- Slightly more than 20 percent was allocated for equipment and technical support, including dial-up Internet accounts, line costs and database software.
- Slightly more than 4 percent was allocated for travel and supplies

4. Legal Foundation and Legal Checklist

Legal authority came from the granting agency, the New York State Education Department (NYSED), as well as the formal relationships that exist between NYSED, BOCES, and its component districts.

Formal agreements between partners were in the form of Letters of Intent defined within the grant guidelines. Each district that agreed to participate submitted a written statement of agreement in which they identified eight to 10 teachers who would form a "cohort" and an administrator who would serve as conduit for updates and oversight.

Each school's union representative was asked to sign a declaration that stated the person understood the obligations, payments, and outcomes of the project. They were involved in both the initial planning and throughout the implementation of the project.

5. Views on the Issue

Pros – Those in Favor

The arguments in favor of the project included the need to build local capacity and collaboration for technology-integration in practice, promote life-long learning, and utilize the Internet to enhance the teaching and learning environment. The Consortium had widespread support in northern New York demonstrated by the collaboration among 64 public partners and 27 non-public partners from three dioceses in the education community and local businesses, including: internet service providers, two public library systems, five BOCES staff and curriculum development divisions, 11 teacher centers, four school library systems, and the Model Schools Program.

Cons – Those Opposed

The public and the press raised a number of questions about the soundness of large investments in technology, exacerbated by the fact that the speed of change in technology leads to "built-in obsolescence."

There was a cohort of teachers and administrators who were reluctant to become involved with technology-based learning practices because they were unfamiliar or uncomfortable using tools they did not understand or because they felt these tools got in the way of instruction rather than enhancing the learning experience.

Local News Media Positions

According to Sue Martin, there was very little press coverage of the actual collaboration or the process used to create, develop, or administer the collaboration. These aspects of the collaborations were, in effect, a closed process. There was some subsequent coverage about the application/end products of the collaboration, particularly the development of lesson plans that were posted online. This coverage focused on individual districts and teachers and only referenced the collaboration in passing.

6. Results (adopted, amended, rejected etc)

The Title III Technology Literacy Challenge Grant in the amount of $1,025,000 annually for four years between 1997 and 2000 was awarded in 1997 and the Consortium was formed. Funding supported school-cohort teams. Teachers were paid for staff-development hours used for training sessions, peer-review sessions and for reviewing and revising web-posted ready lesson plans. Staff-development experts from each BOCES, Model Schools Program and Teacher Centers were paid to design and deliver training for technology use and K-12 curriculum content aligned to New York State Learning Standards. The project provided a total of 164 laptop computers and 164 Internet accounts for 82 cohort teams. A dedicated technical-assistance-resource person and a helpline number supported these teams. In addition to the training offered cohort members, technology-based staff development was provided by the Teachers Centers for all public and non-public school teachers and library professionals within the five BOCES service regions. In all, more than 1,000 teachers participated in training workshops offered as part of this project and several hundred exemplary lesson plans were submitted, reviewed, and posted on-line to be used in classrooms throughout New York State.

7. Implementation

A full-time grant manager was hired by the lead agency, the Madison-Oneida BOCES, to run the program. Very structured grant guidelines shaped both the nature and partners included in the Consortium. The grant application specifically dictated the partners that would be included in the Consortium, including non-public schools and high-needs districts as well as the collaborative process that was to be used to develop and implement the grant proposal. The [applicants] had to answer questions about how instructionally-based technology would help promote equity and how technology - and its fruits - would be shared among school districts and communities.

Each BOCES district superintendent worked within their region to inform, discuss, and invite their component schools to the planning meeting in Verona in the winter of 1997. This initial planning session was the first step for each school representative to learn about grant deadlines, opportunities, and project requirements. Each was asked to talk with their respective school leaders about the grant application, solicit feedback from internal stakeholders, and return for a second planning meeting. Ideas emerged for connecting technology with curriculum, creating lesson plans infused with technology that aligned with the states new Learning Standards, and projects that would both involve teachers as the learner and fit with school-improvement planning.

The planning project identified two main goals for the partners: 1)teachers would integrate technology using the Dimensions of Learning model to develop learning experiences and education units to support New York

State Learning Standards, and 2) apply the use of technology to help schools improve performance in English/Language Arts, Mathematics/Science/Technology, and Social Studies.

The Planning Team identified several guiding principles for implementing to collaboration:

- Participants would organize as district-level teams.
- Professional development would focus on helping teachers integrate Learning Standards, model learning experiences, internet resources and technology.
- Sharing mechanisms (peer review process) would enable teachers to develop and use exemplary learning experiences and units.
- Technology tools and resources, including laptop computers, would be available to participants.
- The project's website will house peer-reviewed learning units and experiences.
- Public and school-library systems will assist teachers and students to access on-line information.

The coordination and management of the entire project was both central and distributed. The central model was adopted to define the process and procedure necessary to implement such a large project of professional involvement and resource management. The central focus was layered into sub-central groups, cohorts, and members from each region; who served as collaborative oversight and advisor to the grant manager. The distributed model was adopted to allow each school to take the ownership necessary to make the project a success. The lesson plans were written by teams or individuals within a cohort (individual schools) and the submitted lesson plans were peer reviewed by teachers from several different school districts throughout the region. A planning board was made up of each BOCES staff and curriculum division, non-public representatives, and teacher-center directors, meeting together and as individual groups to review project benchmarks.

8. Expectations vs. Results

The professional development strategy for the Consortium would build upon existing professional development efforts throughout the region.

Policy: One of the stated goals of the Consortium was that teachers would integrate technology using the NYSED's Dimensions of Learning model into learning experiences and teaching units to support the New York State Learning Standards. The grant required Consortium partners to link their efforts to New York State performance standards, as well as national and state goals and priorities.

Fiscal: This grant was designed to link disadvantaged communities to more economically viable ones through collaborative staff development and technology networks. There was recognition from the outset that different school districts had different resources and the focus was to provide equitable – rather than equal – assistance.

The teachers became involved in the project in order to further build their skills in developing effective instruction and integrating this with technology. The project also enhanced and supported the work of faculty in promoting high achievement for each child and opened the door to further technology use and collaboration among school districts and other partners.

The Madison-Oneida BOCES Program Information and Improvement Specialist conducted the evaluation process. The evaluation focused on measuring the attainment of objectives outlined in the grant proposal. A variety of formative and summative evaluation techniques were utilized. Appropriate data was collected and analyzed to assess the achievement of each project objective.

The emerging impacts of this program:

- Students and parents took greater advantage of library resources. With the project's focus on libraries

as a critical link in the home/school connection, students have been exposed to the resources available through public libraries. Librarians and teachers reported that students and their parents have "discovered" these local resources and were taking advantage of them.

- There was greater professional interaction among teachers. Project leaders reported a sustained and sophisticated conversation among teachers across the region about teaching practices. The website and listserv supported that conversation and sharing.
- The divide between public and parochial schools was diminished. While this divide certainly included narrowing the digital divide between the two systems, the project fostered unprecedented collaboration in the region. Non-public and public school faculty are working together and sharing with each other, and the non-public schools are volunteering their sites for professional development and other meetings.
- For some teachers the inclusion of technology, staff development, and access that accompanied it changed the way they taught and viewed teaching and learning. For others computers, digital cameras, and the Internet were simply additional tools they could use in their already dynamic and creative teaching method.
- There is a growing presence of technology in the classrooms. In many schools, technology was limited at that time to library/media centers or computer labs. This project has refocused teachers on using technology as a tool in all content areas and a fostered a rethinking of the distribution of computers. Project leaders report an increasing shift of technology from centralized sites to the classrooms where students and teachers use them.
- The focus of this project was squarely on developing products to improve teaching and learning. The professional development efforts helped teachers examine their practice and identify where they could integrate technology into standards-focused teaching. The teachers are then expected to develop their own technology-mediated lesson plans and post them on the web for review and comments by their peers. This has clearly led to improved practice and provided a wealth of exemplary lesson plans that can be used by educators within and beyond the region.

The Consortium was not universally embraced by all teachers and school districts. This project represented a new way of looking at teaching in a profession that can be resistant to change. The fact that all the lesson plans developed through this process were adjudicated by their colleagues was another stress point for teachers.

Not all districts within the five BOCES service areas participated in the project. Some stated that they could not afford to get involved in the program for both financial and philosophical reasons. Other school districts simply had different priorities at the time.

By all accounts, the Consortium exceeded expectations. While the original grant proposal called for 300 exemplary learning units to be posted online for use in New York State classrooms, more than 830 units were eventually posted online. The legacy of the program and the outcome of the grant may be viewed at: http://www.modelschools.org/lexp_search.cfm

9. Factors contributing to success/failure

Collective bargaining units were part of the process from the outset. This was not just a courtesy but an attempt to have unions buy into and support the project.

The five BOCES superintendents shared responsibilities as members of BOCES existing regional structure, referred to as the 793 Governing Body. Thus, each had the benefit of already working together on other projects and had developed a collaborative working relationship over an extended period of time. Their prior history of collaborating was a key element in securing the project. It was recognized from the outset that no single BOCES among the group had the capacity needed to successfully compete for the substantial funding offered through

the grant, even though the school districts involved probably had a greater need for the funding. The only chance for success was to partner and take a regional approach to the problem. Their joint application represented the seeds of a collaborative process that would become much more formal and structured after the funding was secured.

Technology was a key component for planning, implementation and collaboration. Each cohort teacher team was assigned two laptop computers with modem and network access. Accounts for e-mail and Internet access were critical infusions of technology used in the lesson-planning process. E-mail was used for relaying important information to each cohort and for the collection of lesson-plan submissions.

Project leaders distributed different resources to teams to ensure each received an equitable portion of the resources, such as providing non-public schools with printers because they didn't have them in their schools at that time. This raised the issue of "equal vs. equitable" in allocating resources.

The project benefited from the presence of a leader/advocate that had the vision of what the project might accomplish and the wherewithal to marshal the forces to bring it together.

The consortium was very large, both in the geographic sense and in the number and diversity of partners. The fact that resources were available to hire a full-time grant manager and technological support staff and to actually pay individual partners for their time and effort was a key component to the success of the project. Without those outside – and substantial – resources, such a vast collaboration would never have been possible.

The project was designed to be flexible to include new cohort members at different levels of technological expertise by providing different levels of technological access. The "bottom up" approach to curriculum development also provided the local control needed for school districts of different sizes and with different needs and resources to fully embrace and benefit from the project.

10. The 10 STEP PROGRAM

1. Define problem and affected parties

By developing learning guidelines for local districts to follow, The New York State Education Department (SED), as the grantor, had defined the challenges associated with applying emerging technologies in ways that had never been previously explored. The SED also recognized that these challenges would be best tackled at the district level. The issues involved were specifically outlined in the grant RFP, but also defined locally by a planning team composed of a wide array of constituents.

2. Identify solutions and potential partners

The Consortium was careful not to try and "reinvent the wheel," using existing state-approved regional technology plans to help guide the process. The professional development components of the grant were also built on efforts and partnerships that were already in place on a regional basis. The Consortium's focus was also determined with the help of outside experts. A study conducted by Teachers College at Columbia University indicated that the region boasted an up-to-date technology infrastructure. In light of this report, the Consortium's planning team defined its goals not in terms of strengthening infrastructures but in terms of strengthening the instructional staff's capacity to use that infrastructure to enhance teaching and learning.
The grant had very specific "top-down" objectives and deliverables, yet provided enough flexibility for local school districts to determine what worked best for them. The Consortium was also very effective in connecting district-level cohort teams with regional resources that provided training and support to the initiative.

3. List and allocate financial impacts

See # 3 Proposals and Funding

4. Confirm Legal Authority
Not Applicable

5. Plan the Project, 6. Collaborate with Affected Parties, 7. Negotiate the Agreement, 8. Prepare Agreement, and 9. Implement the Agreement
Determination of need, costs, deliverables and plans for implementation and assessment were thoroughly delineated through the grant writing process. The grant also outlined the process through which collaboration would take place, particularly the mechanisms created to ensure equity between individual school districts, opportunities for professional development and the peer review process for evaluating and sharing exemplary learning units. Writing the grant was in itself a collaborative process involving several representatives from each participating school district as well as other core partners. As noted previously, each district that agreed to participate submitted a written statement of agreement that outlined its roles and responsibilities. District union representatives were also asked to sign a declaration of understanding concerning the obligations, payments and outcomes of the project.

10. Evaluate the Project
Assessment of the program was conducted on many levels, including written self assessments conducted by teachers about their ability to effectively integrate technology into meaningful experiences for students. Formal evaluation focused on measuring the attainment of the objectives outlined in the grant proposal. A variety of formative and summative evaluation techniques were utilized.

11. Technical Assistance
Technical support for the applied use of technology was provided by the Mohawk Regional Information Center (MORIC), which also maintained the project's website and listserv. MORIC ensured high quality technical support to cohort members throughout the four-year grant period. The 11 Teachers Centers worked collaboratively to provide an array of planning, implementation, and technology support. The grant coordinator met with them quarterly to determine training needs and schedules. The divisions of staff and curriculum development at each of the five partner BOCES offered staff development training opportunities, while the Mid-York and North Country Public Library Systems cooperated to offer training in accessing on-line resources. They also cooperated with local districts in on-line homework projects.

Implementation of the project was developed through district-level cohort teams. Each district cohort team (82 in total) included five teachers, one library-media specialist, and one administrator.

Once cohorts were determined, a range of resources was made available to them. These included:

- Professional development and training opportunities.
- Laptop computers with Microsoft Office Pro software.
- Two dial-up Internet connections with e-mail that could be used at home or school.
- Help desk support.

12. List of Documents (can we link to each document or selected documents?)

1. The Mohawk/North Country Technology Literacy Consortium Grant Proposal Abstract
2. The Mohawk/North Country Technology Literacy Consortium Technology Literacy Consortium Evaluation
3. http://www.modelschools.org/lexp_search.cfm

13. Additional comments/suggestions/helpful hints

14. Contacts

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