Collaborating for Change – Michigan’s Consortium for Outstanding Achievement in Teaching with Technology (COATT)

Full Paper

Larry Burton, Department of Teaching & Learning
Andrews University
United States
COATT Vice-President for Pre-service Teaching
burton@andrews.edu

Ellen Hoffman, Department of Teacher Education
Eastern Michigan University
United States
COATT PT3 Project Co-Director
ehoffman@online.emich.edu

Jon Margerum-Leys, Department of Teacher Education
Eastern Michigan University
United States
COATT PT3 Project Co-Director
jmargeru@online.emich.edu

Reuben Rubio, School of Education
Spring Arbor University
United States
COATT PT3 Project Director
rarubio@arbor.edu

Nancy Copeland, Merit Network, Inc.
United States
COATT PT3 Project Manager
ncope@merit.edu

Abstract: Michigan’s Consortium for Outstanding Achievement in Teaching with Technology (COATT) was formed in 1999. From an initial membership of 10 higher education institutions, the consortium has grown to include 16 private and public teacher education institutions and 9 K-12 organizations. COATT was awarded a PT3 catalyst grant in 2001. This paper presents details of the formation of the consortium, its ramp-up activities, and the COATT PT3 activities. COATT’s PT3 activities include providing leadership for the revision of the state’s existing technology standards for entry-level teachers, extending those standards to in-service teachers and administrators, and the delivery of intensive technology training workshops.

In 1999, United States Senator Carl Levin, recognizing an opportunity for Michigan to improve its preparation of new teachers to use technology, spearheaded the creation of a new organization of teacher education and K-12 institutions (McManus, Rubio, Lenze, Charles & Hoffman, 2001). This organization, the Consortium for Outstanding Achievement in Teaching with Technology (COATT), has taken a leadership role in encouraging student teachers to reflect upon and continuously improve their use of technology in education. By setting a high standard, establishing a means of consistently assessing and recognizing accomplishment of the standard, and rewarding outstanding achievement, COATT has both unified the efforts of educational institutions and motivated pre-service and in-service teachers across the state to move in new directions in their classroom practice.

Previous to COATT, other efforts to coordinate teacher education in technology in the state of Michigan had been made. In the mid-1990’s, the Council for Pre-service Technology (CPT) formed as a small group of faculty from institutions in southeastern Michigan. A goal of this group was to create a consensus-agreed-upon
conceptual framework for teacher education in the use of technology. This conceptual framework brought together mechanics of hardware and software, effective technology-enhanced pedagogy, modeling of appropriate technology use, and psychological foundations in learning theory. Some members of CPT went on to become COATT members and the work of CPT was influential in setting a theoretical base for COATT.

Formation of a State-wide Consortium (COATT)

Partly in response to a report (Coley, Cradler & Engel, 1997) which placed Michigan 44th among the 50 states in teacher preparation in technology, United States Senator Carl Levin began a campaign to bring together teacher education institutions and other interested organizations in Michigan. Senator Levin’s goal was the improvement of teacher education in technology use and his vision was of a broadly based consortium that had the potential to impact teacher education throughout the state and across boundaries of institution type and teacher preparation focus.

The resultant consortium consisted initially of ten member institutions of higher education. These included relatively small baccalaureate colleges, larger comprehensive universities, and doctorate-granting universities. Other education-focused organizations, including the Michigan Education Association and MERIT Network, Inc., sent representatives to consortium meetings. Within the consortium, each member had an equal seat at the table. The input of representatives from the various organizations was considered with equal weight, which is unusual in higher education in general and is certainly noteworthy within Michigan. Creating the consortium with a comprehensive membership base achieved two main goals. First, the diversity of voices added to the richness and authenticity of the discussion. Representation from such disparate sources helped to assure that the consortium’s message would depict the range of teacher education philosophies in the state and that the message would have credibility across contexts. Second, by including as many teacher education institutions as possible, the consortium hoped to influence the preparation of a majority of the teacher education students in the state.

Once the coalition had formed, the focus turned to deciding on a means by which to judge outstanding achievement in teaching with technology. As a conceptual base, COATT used Michigan’s Seventh Standard for entry-level teachers. This standard calls on beginning teachers to demonstrate proficiency in the following seven areas:

- 7a: Design, develop and implement student learning activities that integrate information technology for a variety of student grouping strategies and diverse student populations.
- 7b: Identify and apply resources for staying current in applications of information technology in education.
- 7c: Demonstrate knowledge of uses of multimedia, hypermedia, telecommunications, and distance learning to support teaching/learning.
- 7d: Demonstrate knowledge about instructional management resources that assist in such activities as writing and updating curriculum; creating lesson plans and tests; and promoting, reinforcing, and organizing data regarding student performance.
- 7e: Use information technologies to support student problem solving, data collection, information management communications, presentations, and decision making including word processing, database management, spreadsheets and graphic utilities.
- 7f: Demonstrate appreciation of equity, ethical, legal, social, physical, and psychological issues concerning use of information technology.
- 7g: Use information technology to enhance continuing professional development as an educator.

Basic proficiency in these areas is required by the State of Michigan. Teacher education institutions assure that beginning teachers demonstrate this proficiency by a variety of means. Some institutions have dedicated educational technology courses centered on fulfillment of the seventh standard; others infuse educational technology throughout students’ educational preparation.

COATT began with a mission to encourage student teachers to view the required standard as a minimum and to reach beyond it. Additionally, the group was concerned that students demonstrate their advanced proficiency by enacting technology-infused activities in real classrooms with real students. To demonstrate their accomplishment, student teachers would create electronic assessment portfolios. These portfolios, the group decided, would contain evidence in the form of student artifacts, curriculum pieces, video clips of teaching, and a reflective narrative. The narrative was organized around the sections of the standard. This encouraged students to
base their reflections on the accepted standard and facilitated assessment of the portfolios (for sample portfolios visit [http://www.coatt.org](http://www.coatt.org)).

With the portfolio described, the next step was to build a process for adjudicating submissions. This process had two steps: First, a representative from the student’s institution gave approval for the completed portfolio to move to the judging stage. After initial approval by the student’s institution, portfolios were sent to three-member teams for judging. To reduce possible bias no members of the review team were from the student’s institution. Students approved for recognition were issued Michigan’s Certificate for Outstanding Achievement in Teaching with Technology (MCOATT).

Member organizations agreed to a level of support for the consortium as well as for their respective student teachers. Deans at each institution signed letters of support agreeing to contribute faculty time and other resources to the consortium. Each institution also agreed to mentor students through the process of digital portfolio creation and to provide needed technological infrastructure for hosting student work.

Initially, COATT meetings included representatives from all member organizations. These meetings were held approximately once a month during the academic year. For a new organization, community building was a primary goal. It was important that all members feel that they contributed equally to the formation of the organization and to the nature of and criteria for judging student excellence in teaching with technology. In fall 2001, COATT’s operational structure was reorganized and an executive board appointed which can devote more time to the organization. The executive board consists of a president (Reuben Rubio, Spring Arbor University), two vice presidents (Larry Burton of Andrews University and Karen Selby of Kalamazoo College), a secretary (Ellen Hoffman of Eastern Michigan University) and a treasurer (Jon Margerum-Leys of Eastern Michigan University). To ensure ongoing community and buy-in, meetings that include representatives from all member institutions are held several times each semester.

**COATT’s Ramp-up Activities**

As COATT began functioning as a true, cross-state organization, one of the first efforts was the recruitment of new institutions of higher education (IHEs) for the membership. COATT representatives spoke to various groups and individuals involved in teacher education across the state. As a result of this intensive networking IHE membership in the consortium has risen from the original 10 institutions to 17 as of this writing. This represents more than half of the institutions approved for teacher preparation in Michigan. Efforts to build membership continue as a high priority of the consortium.

In addition to expanding the IHE membership, COATT worked to increase involvement of relevant K-12 educational organizations in the state. While representatives from K-12 educational organizations have been involved from the beginning of the conversations that led to the formation of COATT, the consortium members worked to create formal, supportive working relationships with organizations representing teachers, school administrators, educational technologists, and others involved in providing quality education in the K-12 system. A complete listing of current COATT IHE and K-12 members is available on the consortium web site, [http://www.coatt.org](http://www.coatt.org).

COATT’s purpose is to encourage excellence in teaching with technology. At the outset our mission focused on pre-service teachers. We recognized our first cohort of pre-service teachers at the end of the 1999-2000 school year. Each year since then we have recognized additional cohorts. As COATT’s work has matured, we have added recognition of practicing teachers. COATT issued the first certificates of achievement to in-service teachers in 2001. Our second cohort of practicing teachers will be reviewed during 2002. Discussions in the consortium have also identifies two areas of possible expansion in the future: processes for recognizing school administrators and non-classroom education personnel, such as media specialists.

Another of the ramp-up activities pursued by COATT was the development of a proposal for an endorsement in educational technology that could be added to an existing Michigan Teaching Certificate. Currently no such endorsement exists in Michigan. This proposal, developed by COATT members in close collaboration with officials from the Michigan Department of Education has received favorable initial reviews. Approval of this proposal by the State Board of Education remains one of our organizational goals.

In July 2001, COATT was awarded a grant from the United States Department of Education’s PT3 (Preparing Tomorrow’s Teachers to Use Technology) initiative. The grant, Developing an Ecology for Preparing Tomorrow’s Teachers to Use Technology, is administered by Spring Arbor University with substantive subcontracts at Merit Network, Michigan State University, and Eastern Michigan University. Funds from this grant will allow the organization to reach out to more pre-service teachers, increasing the scale of our activities. The added resources
will also allow us to better support portfolio creation through summer workshops, enhanced infrastructure, and increased on-line resources. Based on activities completed during our first three years of operation we are actively seeking additional funding to support the work needed to accomplish our mission. 

One striking example of the spirit of collaboration that has developed as a result of this consortium is that Eastern Michigan University pursued and has received grant monies from the Ameritech Foundation for projects that will contribute to the success of COATT’s initiatives. A second example is a recent effort between Western Michigan University, COATT, and several Intermediate (county-wide) School Districts, community colleges and universities to provide a statewide, interactive television broadcast of a talk on electronic portfolios by Dr. Helen Barrett of the University of Alaska-Anchorage.

COATT’s PT3 Activities
Setting Standards

Pre-service technology integration standards

As part of the PT3 grant, COATT is leading an effort to update the state’s technology standard for pre-service teachers to bring an earlier version into alignment with the ISTE National Technology Standards for Teachers (International Society for Technology in Education, 2000).

Michigan adopted its first technology standard in 1998 as an additional requirement to the six existing initial certification learning and teaching standards in the state’s “Entry-Level Standards for Michigan Teachers.” Because it was an additional requirement, the technology requirements became known as the “Seventh Standard.” While the 1997 ISTE standard was used as a guideline, this first version of Michigan’s Seventh Standard took a different approach, with a goal of developing a state standard that would not need revision each time that national standards changed. At the same time, the committee indicated that the standard should be reviewed every two to three years to ensure that it reflected expected shifts in technology and curriculum.

As part of its early work, COATT played a major role in the state in bringing together faculty from teacher preparation institutions to discuss implementation of the 1998 Seventh Standard. This cooperative effort to review the operational aspects of the standard played a major role in the state in furthering a common understanding of the standards’ requirements. The success of these efforts is evidenced in anecdotal information from hiring districts that suggests Michigan’s schools are doing well in terms of producing recent graduates with the expected basic technology integration skills.

COATT, in cooperation with the Michigan Department of Education, established a committee to draft a revision of the Seventh Standard. This committee began work in October 2001. The draft of the revised standard has been developed. The Michigan Department of Education hopes to present these revisions to the State Board of Education for formal review in spring 2002. The committee working on the revised standard includes COATT member representatives, educators and administrators from K-12 including representatives from the two major teacher unions, and a facilitator from the Michigan Department of Education.

In reviewing the earlier Seventh Standard, the committee found that the first committee had been ahead of its time, as the original Seventh Standard was more like the 2000 ISTE NETS-T than the 1997 ISTE version. While Michigan’s standard could be continued with some minor modifications, the new committee determined that a rewrite to bring wording in closer alignment with the national standard had advantages for both educators and students. The draft standard is shown in Table 1. For teacher candidates, similar wording makes it very clear how the state standard is similar to the national standard. The new standard also makes it easier to relate statewide initiatives to national ones, including the ability to readily adopt and modify curricular materials and assessments developed elsewhere.

Proposed changes in the standard are more organizational than content-related, as the existing Michigan Seventh Standard was progressive and the state’s higher education institutions had already made significant program changes to meet the earlier requirements. Additional implementation efforts through dissemination of best practices and incentives such as the MCOATT awards will continue in conjunction to encourage excellence in programs and outcomes.

The sub-committee charged with revising the Seventh Standard is following the approved sequence in the state for pre-service standards revision that involves multiple reviews and time for public comment, and its recommendations and timeline are expected to have a high degree of success in achieving changes at the higher education institutions that must be the implementers of the proposed changes as a result of an active process of collaboration. This includes not only the drafting of the standards but the follow-up that is required to produce real
change in the state’s teacher preparation programs, a process that will in part be underwritten by a federal grant awarded to COATT.

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<th>7a. TECHNOLOGY OPERATIONS AND CONCEPTS.</th>
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<td>Teachers demonstrate understanding of and continued growth in technology operations and concepts.</td>
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<tr>
<td>A. demonstrate knowledge, skills, and understanding of concepts and learning related to technology as described in state and national standards for students.</td>
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<td>B. demonstrate continual growth in technology knowledge and skills to stay abreast of current and emerging technologies.</td>
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<th>PLANNING AND DESIGNING LEARNING ENVIRONMENTS AND EXPERIENCES.</th>
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<td>Teachers plan and design effective technology-enhanced learning environments and experiences aligned with Michigan content standards and benchmarks for all students.</td>
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<td>A. design developmentally appropriate learning opportunities that apply technology-enhanced instructional strategies and provide access to curriculum to support the diverse needs of learners.</td>
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<td>B. apply current research on teaching and learning with technology and Michigan technology standards and benchmarks when planning learning environments and experiences.</td>
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<td>C. identify and locate technology resources and evaluate them for accuracy and suitability.</td>
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<td>D. plan for the management of technology resources within the context of learning activities.</td>
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<td>E. plan strategies to manage student learning in a technology-enhanced environment.</td>
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<th>TEACHING, LEARNING, AND THE CURRICULUM.</th>
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<td>Teachers implement curriculum plans that include technology-enhanced methods and strategies to maximize student learning.</td>
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<td>A. facilitate technology-enhanced experiences that improve educational outcomes and are aligned to the Michigan Curriculum Framework.</td>
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<td>B. use technology to support learner-centered strategies that address the diverse and individual needs of students.</td>
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<tr>
<td>C. apply technology to develop students' higher order skills (problem-solving, data collection, information analysis and management, communications) and creativity.</td>
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<td>D. plan for the management of technology resources within the context of learning activities.</td>
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<th>ASSESSMENT AND EVALUATION.</th>
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<td>Teachers apply technology to facilitate a variety of effective assessment and evaluation strategies.</td>
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<td>A. apply technology in assessing and evaluating student learning of subject matter as aligned with the Michigan Curriculum Framework using a variety of assessment techniques.</td>
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<tr>
<td>B. use technology resources to collect and analyze data, interpret results, and communicate findings to improve instructional practice and maximize student learning.</td>
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<tr>
<td>C. apply multiple methods of assessment and evaluation to determine students' appropriate use of technology resources for learning, communication, and productivity.</td>
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<tr>
<td>D. understand the uses of information technology to assess the proficiencies, strengths, and challenges of each student recognizing individual and diverse needs.</td>
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<th>PRODUCTIVITY AND PROFESSIONAL PRACTICE.</th>
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<td>Teachers use technology to enhance their professional development, practice, and productivity.</td>
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<td>A. use technology resources to engage in ongoing professional development and lifelong learning.</td>
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<td>B. continually evaluate and reflect on professional practice to make informed decisions regarding the use of technology in support of student learning.</td>
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<tr>
<td>C. apply technology to increase productivity in planning, teaching, and management.</td>
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<td>D. use technology to communicate and collaborate with peers, parents, and the larger community in order to nurture student learning.</td>
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<th>SOCIAL, ETHICAL, LEGAL, AND HUMAN ISSUES.</th>
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<tr>
<td>Teachers understand the equity, ethical, legal, social, physical, and psychological issues surrounding the use of technology in P-12 schools and apply those principles in practice.</td>
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<tr>
<td>A. model and teach legal and ethical practice related to technology use.</td>
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<tr>
<td>B. apply technology resources to enable and empower learners with diverse backgrounds, characteristics, and abilities.</td>
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<td>C. identify and use technology resources that affirm diversity</td>
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<td>D. promote safe and healthy use of technology resources.</td>
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<td>E. facilitate equitable access to technology resources for all students.</td>
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Table 1: Proposed Revision of Michigan’s Seventh Standard

**Expanding standards to practicing teachers**

At the same time that the COATT-led committee was doing its work, a State Board of Education Task Force on Educational Technology produced its report recommending a new Seventh Standard aligned with the 2000
ISTE NETS-T and applicable to all teachers and administrators in K-12. At present, the state has no standards for practicing teachers or administrators. Only a handful of states have adopted such standards, and fewer have any process for enforcing achievement of the standards. Several states have mandated specific technology professional development programs for all teachers, but these have been in conjunction with state funding dedicated to technology for both budget support and as a compliance factor. The Board has decided to wait for completion of the COATT-led committees work to further discuss whether the Seventh Standard will be the basis of a broader standard.

As a result, much of the activity in the area of professional competencies in technology for teaching and learning for practicing teachers in the state is based on the dissemination of best practices and the active promotion of voluntary compliance with standards. COATT has played a key role in this by promoting the Seventh Standard as the basis for recognition for outstanding teachers, and through its work with K-12 educators to increase awareness of standards based practice.

Technology Training Workshops

Student teaching is a critical period in the training of teacher candidates, yet it is often the time when they find themselves looking to reduce risk in order to “survive”, and are thus in the greatest need of an environment of technological entrepreneurship. The workshops will provide a technology-rich training experience that will sustain the design community over time.

The goal of the COATT Technology Training Workshops will be to help teacher preparation institutions partner with school districts to improve the potential for successful use of technology during the student teaching experience. Teams comprised of a student teacher, cooperating teacher, university supervisor or field instructor, and K-12 building technologist will form a “design community” to assist the student teacher in creating effective technology-infused lessons to be implemented during student teaching. The design team and community becomes a support system for the student throughout the design process and student teaching. The workshops will have both face-to-face and online components, extending over a yearlong training cycle.

A pervasive project objective is to build capacity in schools in low-income districts to provide technology-rich student teaching experiences. Low-income districts are defined as those with higher than 60% participation in the Federal School Lunch program. Over the three years of program activities, 30%, 40%, and 50% of the participating school districts will be low-income. An important foundation for this effort is the Michigan Teacher Technology Initiative of 2001, which provides every practicing teacher in the state with a laptop computer.

Summer Intensive Workshop

Face-to-Face Design Community. The training begins with a five-day summer intensive workshop that will include both training and design activities. Design teams work together to help the teacher candidate develop lesson and unit plans that make exemplary use of technology to achieve learning goals. Each COATT member institution is invited to select at least one design team to become part of the first face-to-face cohort of participants to pilot the initial training cycle. These groups will grow in size during the second and third years to four sets of 20 groups each year. As Consortium members assemble teams, their first priority will be to target technologically underserved schools, such that a significant number of student teaching classrooms will come from these schools.

The workshops will be held at a COATT member institution or a retreat center, and will include room, board, technical support staff, and access to computer facilities that are suitable for a technology-rich environment. Ancillary technology such as digital camcorders or cameras, CD-RW or DVD-RW drives, specialty software such as used for creation of digital audio or video, and assorted storage media will be available to support the design community activity. The first workshop will begin in the summer of 2002.

A team of faculty members, professional development experts, and instructional technology consultants from member institutions are developing the curriculum and structure for the face-to-face component of the workshop. During the pilot phase, teams will focus on the singular curriculum arena of reading, with different strands targeted at elementary and secondary students as well as advanced and novice degrees of technological expertise. Teams will develop learning activities that focus on strengthening standards-based practice by engaging members in authentic, problem-based activities aligned to Michigan curriculum and technology standards. Video case scenarios of effective teaching with technology will be incorporated as a basis for study and discussion. The workshop will conclude with presentations by the teacher candidates of a proposal and a thoughtful and workable
draft set of lesson plans. This is a unique opportunity for pre-service teachers to enhance their teaching skill, and cooperating teachers to more effectively mentor student teachers by developing a collegial, collaborative relationship prior to their teaching placement.

Subsequent to the live component of the workshop, there will be online follow-up sessions, where the design community will gather to mark progress and continue the creative process. Some of the follow-up sessions will be asynchronous, where the teacher candidate updates a web site to show their latest progress, and other members of the community provide feedback and guidance. At least two sessions will be synchronous, where the entire community gathers for a common discussion. The online follow-up will last for a total of 30 hours per individual in a design group, and will conclude with the viewing of web pages that describe a final set of lesson plans.

**Online Design Community.** Beginning in the fall of 2002, monthly online sessions for 250 teacher candidate/cooperating teacher teams (at least 500 people in all), with additional participation from the K-12 technologists or the faculty supervisors. This training will move the group members from more basic to more advanced understanding. Faculty members who work with a team will receive a small one-time allotment of funds to purchase software that will be used in a course, directed study, or research project that is directly related to undergraduate teacher training. The time of both teachers and teacher candidates will be an in-kind contribution. The teams will participate in 10 monthly sessions consisting of two hours apiece.

The curriculum for the online training will be created and implemented by six faculty, whose time for creating and implementing is a budgeted expense of the grant. Three of them have already been selected (two from Michigan State University and one from Merit Network, Inc.) and three more who will be chosen by the COATT Board from the pool of institutional representatives. The curriculum will parallel that of the face-to-face workshop, but will also address any need for development of basic technology skills that is needed to be more inclusive of cooperating teachers districts that are technologically underserved. The training materials will remain the intellectual property of the faculty, and may be freely used or modified on their home campuses after the online training has been completed. Faculty will have either already created some of these materials, will create them with an eye to applying the materials to their own courses once they are finished. The charge to the faculty will be to assess the understanding of what it means to teach with technology as well as the current level of skills required to do so, while syncing up with the technology-based teaching that was planned in the summer and will sometime during this year be in the process of implementation. They will then determine the presentation format (e.g. a live chat or a web broadcast), and create a curriculum that would position each teacher and teacher candidate to apply both their understanding and skills to the creation and implementation of units and lessons.

**Implementation and Beyond.** The design team cohort groups will continue to meet on a monthly basis during the academic year, when the various teacher candidates undertake their student teaching. An important feature of their online gatherings will be to support the teacher candidates as they implement their teaching, and allow those who teach later to learn from those who go first. The teacher candidates will then be encouraged to submit an MCOATT portfolio for either the spring or summer round of awards, whichever is appropriate. In addition to meeting the requirements of the application, they will be asked to thoughtfully reflect upon and assess their experience as part of the design community.

One of our key concerns is sustainability of our efforts, and to that end we are linking up with different State stakeholders to diffuse those efforts as broadly as possible. In one instance, COATT is working with the Preservice Teaching special interest group of the Michigan Association of Computer Users in Learning (MACUL) to offer a workshop on creating digital portfolios at their 2002 conference. MACUL sponsors the largest K-12 technology conference in the State. If all goes well, an annual offering of this sort will be continued. In another instance, COATT is collaborating with Merit Network, Inc. to make some portion of our online curriculum available to practicing teachers across the State through the Michigan Virtual University.

**Workshop Outcomes**

There will be upstanding short-term and long-term gain from these activities. In the short term, the goal will be for each pre-service teacher to craft and implement teaching that is pedagogically sound and utilizes technology to accomplish both new and improved learning. In the long-term, each member of the design community acquires a similar body of knowledge that can be put into practice with different teacher candidates in subsequent years. The pedagogical content knowledge of the cooperating teacher for using technology will also be enhanced for the times when they teach without a student teacher. The proactive involvement of the technology support specialists will better enable them to support the later classroom use of technology (as opposed to only becoming involved
when a problem occurs). The faculty supervisor will be better able to nurture the teacher candidate during this sensitive period of professional development, and will be able to better understand the challenges of using technology during student teaching while creating new ideas to meet these challenges.

Perhaps the most important long-term outcome is the focused effort that will result in an increase in the number of classrooms and schools in low-income districts where the gain detailed above will be realized.

Implications

**True collaboration among institutions takes extended time and effort.** Our work together has taken place over several years. Institutional buy-in and the creation of a robust, carefully thought out infrastructure have required a relatively long time line. The payoff will be a system that continues to meet the needs of our member institutions and their constituents as we scale up in numbers and reach out across geographic and socio-economic borders. Organizations that follow similar paths should progress carefully, assuring community, continuity, and capacity at each step.

**Standards-based portfolios can be used to assess teacher excellence.** COATT has taken a relatively theoretical framework and constructed a set of procedures by which participants can enact technology-enhanced teaching in their classrooms, document this enactment, be assessed in a consistent manner, and be rewarded for their efforts. Abstract standards become practical guidelines for practice; outstanding practice is, in turn, measured and recognized along standards-based lines.

Conclusion

The Consortium for Outstanding Achievement in Teaching with Technology (COATT) is, in its present form, the result of several years of intense work and close collaboration between entities which in the past have not had the opportunity to work closely together. Through organizational support from member institutions and United States Senator Carl Levin, COATT has created a means by which to encourage student teachers and practicing teachers in Michigan to integrate educational technology into their teaching practice in ways that reflect current thinking on best practices. To allow teachers to demonstrate their accomplishment, we have put into place a procedure for creating and subsequently judging electronic portfolios. Exemplary portfolios are recognized with the M-COATT certificate.

With the increased capacity made possible by this Federal PT3 grant, COATT will support a larger number of pre-service teachers and the in-service teachers with whom they work. Reaching beyond the mentoring provided by individual institutions in the past, COATT will provide summer institutes to enhance teachers’ abilities to infuse technology into their teaching lives. We will also work to close the digital divide, reaching out to teachers working in schools that have been traditionally underserved in terms of technology and support for technology-infused teaching and learning.

As COATT moves into the future, we feel strongly that we have set a productive direction based on a solid standards-based foundation, working collaboratively to create a vision that will sustain us through growth and evolution yet to come.

References

