

IBM Reinventing Education 3 - Letter of Interest

The Vermont Department of Education (VTDOE), University of Vermont (UVM), and Vermont State Colleges (VSC) are pleased to submit a “Letter of Intent” for consideration under IBM’s Reinventing Education 3 (RE3) program. The advent of e-mail, threaded discussions, video conferencing and other tools of technology has opened up opportunities previously unimagined. Teachers, school leaders, and teacher educators in all areas of the state, including the most remote regions, can now work together in productive, meaningful ways. The purpose of this IBM proposal is to refine and bolster the use of existing IBM Learning Village tools across schools and institutions of higher education as a venue for engaging prospective, new, and experienced teachers in reflecting upon and strengthening the effectiveness of their teaching practices. We believe focusing on teaching practices and teacher quality is the best way to address the learning gaps found in the different members of our student population.

Vermont is uniquely poised to improve how practicing and prospective teachers communicate and collaborate in their efforts to provide students high quality learning opportunities. Vermont schools, the VtDOE, and institutions of higher education share a 10-year history of active, intentional collaboration in the development of standards, assessments, teacher quality standards, curriculum development tools, and distance learning networks. Invaluable lessons have been gained from these collaborative efforts. Two lessons stand out from our pioneering work in developing and implementing the first generation of IBM Learning Village tools. First, we discovered the tremendous potential that technology has for supporting teachers and school leaders in their efforts to deliver high quality lessons in environments that challenge students to do their best while also attending to students’ complex social and emotional needs. Second, we discovered the critical importance of focusing our efforts on the most important aspects of technology support within the available resources and given timeframe. Both lessons have helped to shape the vision and direction of this proposal.

The applicants, acting through a pre-existing collaborative known as the Vermont Public Education Partnership (VPEP), intend to use the RE3 opportunity to substantively improve pre-service preparation, including our alternatively licensed teachers, and professional development programs for teachers by building on Vermont’s previously established “Standards Into Action” initiative. The vision that drives this project is focused on the belief that **improved teacher quality leads to improved student learning**. Our intent is to create a well-planned continuum of teacher development that spans four phases of a teacher’s professional life. This continuum begins at the pre-service level as prospective teachers complete the final two years of their teacher preparation program (Teacher Preparation - Phase 1) and extends throughout their first few years of teaching (Teacher Induction - Phase 2). Over time, teachers attain greater competence with content, pedagogy, classroom management and other professional responsibilities that reflects maturity in their teaching (Professional Teacher - Phase 3) that may ultimately result in teachers becoming invaluable resources or curriculum leaders (Teacher Leader - Phase 4) for their colleagues. The common element that supports improved student learning, through each of these phases, is the engagement of teachers and prospective teachers in a learning community that systematically reflects on teaching practices.

Partners: The VTDOE, UVM, and the VSC represent all of public education in Vermont. The VTDOE, located in Montpelier, is responsible for all facets of Vermont’s public education processes including, policy, curriculum, instruction, and assessment affecting our 103,000 students and 9800 classroom teachers. The VTDOE provides a great deal of professional development and resources to teachers currently working in the field. Three of Vermont’s five state colleges (Castleton, Lyndon, and Johnson) offer teacher preparation for both bachelor’s and master’s degrees. About 650 students are currently enrolled in programs that represent the entire range of educational endorsement areas in

Vermont. UVM's College of Education and Social Services has more than 1000 undergraduate and graduate students enrolled in diverse educational and social service programs, including all educational endorsement areas. These institutions prepare the great majority of Vermont teachers.

The VPEP partners have identified and addressed teacher quality both together and separately for several years. What will be new with this project is the unifying role and usefulness of a set of common technology tools that will be invaluable in all phases of a teacher's professional life.

Policy and Practice - Reform Efforts Underway: The following state-level policies and standards illustrate our commitment to significantly improved learning opportunities for all students: • The adoption of student standards and recommended teaching practices as published in the Vermont Framework of Standards and Learning Opportunities (1996). • The decision by the State Board of Education to focus intensely on educator quality through improved pre-service preparation programs, teacher testing, mentoring and induction programs, mid-career enhancements, National Board Certification incentives, leadership development, and other professional development initiatives. • The revision of the higher education approval process (Results Oriented Program Approval, or ROPA) to focus more intently on results and performance with a clear assessment process targeting continual improvement. • The adoption of the five Professional Development Standards every educator must meet through the license renewal process (Learning, Professional Knowledge, Collegueship, Advocacy, and Accountability).

These State Board policy initiatives have led to the creation of several teacher preparation and professional development vehicles including: • The Vermont Commission for Educator Quality (VCEQ) which focuses on issues related to teacher recruitment and retention, teacher preparation, licensing and induction, professional development, mentoring, and colleague support for teachers, teacher leaders and administrators. • The creation of five (5) Teacher Quality Networks (TQN's) which serve all five regions of the state and represent pre-school through graduate school partnerships that span the entire career continuum and support the work of this proposal. • Higher education-based programs such as the Vermont Math Initiative (VMI), Vermont Reads Institute (VRI), and Vermont Science Institute (VSI) which provide a rich and vigorous content focus for professional educators. • Creation and implementation of the "Standards Into Action" website through a previous Reinventing Education grant. • The UVM's "Preparing Tomorrow's Teachers to Use Technology (PT3) grant (2000) which supports the development of a standards-based teaching and learning environment at the College of Education and Social Services.

Design elements and implementation: These existing initiatives provide support for teachers at all phases of the continuum: preparation, teacher induction, professional teacher, and teacher leader. With support through RE3, Vermont envisions improving our existing Standards Into Action tool set *and* creating new tools. These new tools, to be piloted initially, and refined with selected sets of teachers at each level of the continuum, will enhance their ability to communicate and collaborate through a consistent pattern of reflection on their practice. Ultimately the tools will be made available system-wide in Vermont. In particular, a reflective practice tool, an electronic portfolio tool, and an on-line mentoring tool will be created and embedded in several key areas on the continuum. **As a first example**, a project underway in Castleton State College's teacher preparation program currently supports work in reflective practice using a digital video of teaching practices from Vermont classrooms. An online, reflective practice tool, supporting the integration of streamed video clips and developed by experts in reflective practice, will enhance this project and become a pilot for future development across our teacher preparation programs. **Second**, the teacher preparation program at UVM, working within the "PT3" initiative will be the focal point for the development of an online

electronic portfolio tool. Portfolios function well in a reflective environment since they foster discussion and deep thinking about important concepts fundamental to teaching. This tool will facilitate the creation and discussion of online electronic portfolios for teacher preparation and development. Once established as part of our teacher preparation programs, the electronic portfolio tool may become part of a teacher's tool set through their entire career and will lend itself to reflective practice over time. **Third**, at the Professional Teacher and Teacher Leadership levels, both the reflective practice tool and the electronic portfolio tool will become integral to the Vermont Math Initiative (VMI). An established and highly effective program with an annual \$.5 Million budget, the VMI works with classroom teachers to support rigorous math content, effective teaching practices, classroom-related action research, and evolving leadership. VMI will play a key role in shaping these tools as its participants develop their peer coaching and mentoring skills, and engage in action research projects that are already an integral part of their program. **Fourth**, the Teacher Quality Networks (TQN's) will support the implementation of an on-line mentoring tool that will be used as part of their mentoring project that is already underway. They will also seek to use and improve tools already existing in our Standards Into Action tool set. Such tools as the Instructional Planner, Home Page Designer, Strategies, and Team Projects will be helpful and this project will support the development of improvements to each of these tools as we further refine their use. Significantly, reflective practice has been shown to strengthen teacher retention needs as well. Teacher retention is a major focus of the TQN program. **Furthermore**, these existing tools will also be applicable in the aforementioned teacher preparation components as they lend themselves well to collaborative reflective practice activities. In this regard two other state colleges will be active. Both Lyndon State and Johnson State will support the development of and experiment with the improved Standards Into Action tools as a part of their existing teacher preparation programs.

In-Kind Contributions: In-kind contributions will fall into three categories: personnel, programmatic, and infrastructure. All involved parties (VTDOE, higher ed institutions, VMI, TQN) will provide personnel time cumulatively totaling approximately 4.0 Full-Time Equivalency (FTE) per year. Programmatic support will occur when the partners integrate the new and existing tools into their programs. Selected higher education courses at undergraduate and graduate levels (including a large summer program) will involve participants in development, testing, and integration of the tools in their work. The TQE, with an annual budget averaging \$1 Million and reaching all five regions in Vermont, will involve many practicing teachers in use of the tools as well. In all, several hundred pre-service and practicing teachers will be involved in this initiative at assorted levels of involvement. Existing infrastructure resources will be used to support the communication and collaborative aspects of this initiative. Vermont's school-based video-conferencing network, our existing Standards Into Action website, and the state's telecommunications network (GovNet) will all be active in this regard.

Monitoring and Evaluation: The evaluation of this RE3 project will target on all participating groups: students, pre-service teachers, and existing teachers, and will focus on a core question: *What changes do we expect to see as a result of reflective practice?* A collaborator in the evaluation will be the evaluation team from the Vermont Institute for Science, Math, and Technology and their team of highly experienced evaluators. We will select relevant teacher and student indicators from existing tools and protocols currently used by our partner organizations, including the Vermont Comprehensive Student Assessment Program, ROPA, TQN evaluation protocol, and the Vermont Classroom Observation Tool. We will document changes in the patterns of usage of the Standards Into Action tools as engendered by this program and analyze the collective insights and knowledge gained through reflection on effective use of these tools so that we can refine our usage of the Learning Village tools as we move beyond the grant period.