

**Waterbury/Duxbury School District**  
**Thatcher Brook Primary School**  
**Crossett Brook Middle School**

**Local Technology Plan**  
**June 2007**

**I. Executive Summary**

A review of the status of Information Technology in the Waterbury/Duxbury schools should be divided into two categories: Access to resources and applications of technology. Since the establishment of this local District in 1997 the primary focus has been on providing adequate resources for our teachers and students, with less emphasis on whether these resources are used effectively or have significant impact on teaching and learning in our classrooms. Goals established in the 2002 and 2004 technology plans can also be separated into these two categories (Access and Application), and it is clear that we have been more successful in one area than the other. There can be little question that our schools have more than adequate resources to apply technology in whatever ways teachers and students wish. In fact, informal contacts by our Technology Coordinator with others in similar positions around the state indicate that our hardware and software resources are superior to many schools in Vermont!

From a historical perspective, the creation of a Technology Coordinator position in 2001 brought much-needed support for technology into our schools. In terms of leadership the Coordinator assumed the responsibilities previously held by the Technology Committees for purchasing, maintenance and long range planning as well as day-to-day support of equipment and users. For a few years this enabled the committees to shift their focus to the applications of technology, and attempts to establish goals around technology use and curriculum integration. Significant factors outside of the control of these committees hampered efforts to establish building-wide goals around integration, and ultimately little systemic change was achieved. Since the 2005-2006 school year, time for local committee work has no longer been available and the Technology Coordinator has worked alone on these issues. There is no established mechanism for communication and dialog about the role of technology in our school programs.

A significant component of the 2004 technology planning process was an evaluation of the role of leadership. This is an issue that our schools are still struggling with in 2007. Our Supervisory Union does not have personnel specifically focused on supporting technology, and technology is not part of the district-wide conversation about curriculum and standards for students and teachers. Although we do have a district technology committee, this group serves only in an advisory capacity. Local administrators have asked teachers to include a "personal technology goal" in their annual goals for several years. Teachers were accountable to Ed Leaders for technology goals, however information and results could have been better utilized to improve integration and instruction. No specific time was afforded for staff training on integration strategies nor was time set aside for administrators and the Technology Coordinator to discuss and evaluate the progress and achievement brought by the establishment of these goals. This is not to say that these goals had no effect at all: those teachers who were already using technology increased their use, and for a small number of teachers these goals at least put technology standards "on the map" where they had not been before. However the lack of accountability prevented this initiative from having more significant impact.

The need to incorporate technology tools into curriculum and instruction has been just one of a myriad of pressures faced by school administrators and teachers in the past few years.

Although it is generally understood that technology should play a role in our school programs, the focus on mandated testing and “coverage” of content standards has overshadowed the goal of integrating technology. Our school communities have not embraced technology as a means through which to improve student learning, and the instruction and opportunities provided to our students varies widely from classroom to classroom and grade to grade. Staff training has been and continues to be provided 1:1 and in small groups by the Technology Coordinator, but “by request” vs. reaching all staff. The result is that those who understand the importance of technology skills to our students continue to improve their skills while the percentage of staff who have not accepted technology as part of “what we do” fall further and further behind. In only a few cases have we seen teachers willing to adapt their teaching practices to include technology. In the past year a widening gap has become apparent in our upper middle school students between students who “can” and students who struggle with technology use. Much of this divide can be directly attributed to the different levels of instruction, practice and opportunity students have had in their classes.

There are some excellent examples of technology use and application in our two schools, and in some classrooms and programs students are provided with instruction, opportunities and challenges aligned with Technology GCEs. The issue we face is consistency, and how to assure that *all* students are receiving appropriate instruction and ample opportunity to develop appropriate technology skills. Our hope for the coming years is that curriculum integration will become part of the “professional conversation” in our buildings, and that there will be stronger leadership at the Supervisory Union and building Administration levels to achieve this. Technology tools should be available to students in all classes, and teachers in all subject areas should do their best to provide students with appropriate opportunities and instruction to help them build appropriate skills. In order to achieve this we will need to establish some form of accountability for technology goals, and the conversation about including technology in curriculum and instruction needs to be supported by more than just the Technology Coordinator.

## **II. Review of Previous Plan**

The 2004 Waterbury-Duxbury technology plan was comprised of five specific goals and a number of action steps. The most significant success was experienced in goal areas related to Access and Support. Our Educational Leaders and School Board continue to support our technology programs during budget time, and after several years’ work we have achieved budgets that provide for a 6-year replacement cycle of all computer equipment. Technology staffing has increased from 1.5 to two full-time positions with the addition of a full-time Technician assisting our Technology Coordinator. This step was supported in order for the Technology Coordinator to have more time supporting teachers and students in the classroom. In order for this support to be effective, our next step must be to adjust compensation for the Technician so as to attract and keep a skilled person in that position. The most recent purchasing cycle brought increased portability to both of our schools, with two portable labs in the Middle School and one in the Primary School. Although recent purchases have not increased the number of computers available to staff and students, access to newer and particularly portable equipment has increased the use of computer technology in our classrooms. As mentioned above, however, this equipment is generally used by a small number of teachers and not all students have benefited from the increased access.

2004 goals related to curriculum integration have met with some success as well. During the 2005-2006 school year our Technology Coordinator was afforded some staff time specifically for the introduction of VT GCEs for IT and discussion of how our schools can begin to implement these in curriculum. Meetings at the 5-8 level were on a monthly schedule and thus

more progress was made, while meetings at the K-4 level only occurred twice during the year. The involvement of Ed Leaders in some of these meetings was a significant measure of support, however at this point teachers are not required to implement technology into curriculum, and no staff time or specific professional development plan is in place to support this process. Consistency and accountability are the primary issues we face, with some students having very rich technology experiences and some little or none. No specific meeting times were established for the 2006-2007 school year, and the result was less communication about integration and embedding technology into curriculum than in the previous year. The Technology Coordinator continued to provide training, co-planning and classroom support by request, however the requests come from only a small percentage of teachers.

Several of the action steps contained in the 2004 plan were tasks recommended to the Technology Coordinator by the existing tech committees. Data collection, documentation of existing practice, curriculum development (outside of collaborative relationships), web page development and more have all been accomplished to some extent. The limitation on much of this work is again the fact that it is left to one person to carry out these tasks in addition to supporting equipment and users on a day-to-day basis. Not enough time in the day!

A significant goal of both local and SU plans in 2004 was the implementation of district-wide Student Management System. In September 2005 Washington West S.U. established a PowerSchool server for six of the seven schools in the SU, and our two schools began to use this system for attendance. Since the initial setup there has been very little forward movement of this initiative: our secretaries continue to be the sole users of the system, and PowerSchool has done little to “provide teachers and administrators vital information... (concerning) our students’ performance and achievement.” The PowerSchool initiative has been hampered by several factors: lack of personnel to carry out the project (a part-time “data specialist” was hired in the second year), the absence of a cohesive implementation plan and minimal participation on the part of Ed Leaders. Until recently our Technology Coordinator was not able to afford time for this initiative, but in the spring of 2007 a four-year implementation plan was laid out and “next steps” identified for our two school to more fully take advantage of the capabilities that PowerSchool offers. These include “live” attendance, teacher access to student information, PowerLunch, and ultimately electronic schedules, grades and report cards.

The 2006 Waterbury-Duxbury Action Plan includes the goal of “Aligning each curricular area to Grade Expectations and develop a system to collect data in order to improve student performance” for several program areas including Educational Technology. Although this is a very broad plan and there are many higher priorities, the inclusion of a technology goal in the Action Plan was one goal of our 2004 technology plan. The 2004 goal of including evidence of technology proficiency/implementation in the supervision and evaluation process was also not achieved, as time was never afforded for collaboration on this goal by the Technology Coordinator and Ed Leaders. All in all the mixed success of our 2004 Technology Plan goals was due primarily to the lack of involvement by any but the Technology Coordinator in trying to achieve the goals. It is interesting to note that several of the goals outlined below were also included in the 2004 plan, and some even date back to the 2002 plan. The means to achieve these goals is beyond the capacity of one individual!