

Technology Empowerment for Students,
Teachers and Low-Income Families

Best Practices in Innovation and
Sustainability

Gateway Regional School District One-to-One Program

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Program Name: Gateway Regional School District One-to-One and Mass 1-to-1

Current Deployment: Supporting seven rural towns in western Massachusetts, the Gateway Regional School District (GRSD) created a program that uses multi-year leasing and purchase options to equip students in grades seven through twelve with a laptop computer. Middle and high-school students also have access to laptops in school with the option to take them home for projects. Teacher professional development is comprehensive. The creators of this program have started a new nonprofit, Mass One-to-One, to support other Districts looking to replicate this model.

Superintendent: Dr. David Hopson
Technology Director: Paul Facteau

Web site: <http://www.grsd.org/1to1/>

Mission: The Gateway Regional School District has implemented a self-sustaining one-to-one laptop initiative as part of the school district's technology program. The program is based on the following principles:

- Students utilize technology best when they have direct access to it. Going to the lab to use the computer at a scheduled time does not allow for dynamic "teachable moments."
- Technology only breaks down the barriers of the classroom when every student has access to it. We need to avoid promulgating the digital divide.
- Education is a lifelong process and should not stop when the last school bell rings. Technology needs to serve the needs of students before school, during school and at home.
- Teachers need training and support to utilize technology in the classroom. Our students are digital natives; many of us are digital immigrants. We need to help teachers learn to use the tool to its fullest capacity. This means far more than visiting web sites and sending IM's. It means changing how we think, design, communicate, control workflow and evaluate what our students create.

Approach: The Gateway Regional School District (GRSD) modeled its PC program on the program they used to help students lease musical instruments. Key program elements include: teacher training and support, an innovative financing model to lease laptops, curriculum integration, a strong technical support structure and the extension of school assets to the community.

- **Teacher Training and Support:** The District provides each teacher with a laptop and "extensive professional development opportunities to help teachers integrate laptop technology into their curriculum, encouraging students to learn from the laptop both in and out of the classroom."¹ Program Director, Paul Facteau has also worked with the Westfield State College to develop a series of graduate-level courses aimed at using laptop technology to assess students and to evaluate programs. Teachers can work towards a Master in Education right on the GRSD campus. "Teachers use on-line calendars, post curriculum and homework on their course web sites and communicate with students and other teachers electronically."¹
- **Innovative Financing Model:** The Gateway Regional School District uses shared wireless laptop carts for students in Grades three through six, deployed in the schools with a ratio of one computer for every two students. A low cost thirty-six month lease program helps families purchase laptops for students in grades seven through twelve. The District designed the lease program to include the PC, warranty, insurance and pre-loaded software with monthly payments of less than \$35.00 a month. The District currently uses the Apple® laptop PC with open-source software and a few specific educational packages including NoteTaker™. The lease has a \$1.00-buy-out option and is designed so that students can get a new PC as they enter their sophomore year of high school. "Students who qualify for free or reduced lunch pay one-quarter or one-half, respectively, of the monthly fee, a cost that is offset by funds appropriated in the district technology budget. Additionally, the school owns laptops for students to use during school hours if their families have chosen not to participate."¹

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¹,H. Barondess, T. Plati, and D.Stein, Building Blocks Promising Practice, The Building Blocks Initiative for Standards Based Reform, Mass Insight.

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- **Curriculum:** The District encourages teachers to integrate technology into their curricula. The District provides workshops and templates for web site design and uses a content management system for lesson plans. An indication of the District's commitment to using technology to support education is the redefinition of the job description for "Curriculum Supervisor" to "Curriculum and Technology Integration."
- **Technical Support:** GRSD has an extensive technical support program for teacher and student laptops. A single manager works with a staff of eight to ten students to provide a help desk for equipment and software. Regular seminars are provided for the teens and these tech-savvy teens help to train others. Additionally, the school's contract with Apple® computer includes Depot Service for quick turn around repairs, replacements and re-imaging, if necessary.
- **Extending School Assets to the Community:** Community support and partnership are central to the Gateway initiative. Families have shown their support for the program and for their children by subscribing to the laptop lease program with a participation rate of nearly 60%. The GRSD has structured its programs to support families and students at home by providing free dial-up access, family training and by making it clear that the laptops are for family use, not just for students.
 - **Free Dialup Access through the Schools:** In rural western Massachusetts, only two of the seven communities in the Gateway region are served by any broadband Internet Service Provider. While the schools all have wireless broadband connections on campus, GRSD has expanded its network to allow students and their families to access the District's modem pool to get free dial-up service. While home broadband access is still a community goal, the no-cost local dial-up offer does help families connect.
 - **Family Computing and Training:** The District leases the laptops to families, not to students. Families are encouraged to use the laptop outside of school. The District offers a series of workshops for students and parents to help families understand everything from PC basics and networking to digital photography and video editing.

What Makes Gateway's Program Unique? The Gateway District uses a "public private partnership" to make one-to-one computing available and sustainable. The foundation of the Gateway program is excellent support for teachers: teacher laptops, professional development, and extensive technical support. Integrated curriculum and laptop labs available for students in grades four through six build a foundation and value for students. The collaboration with families expands at grade seven by offering an attractive family lease program, dial-up access and family training. The choice to lease a laptop and the responsibility for the PC and payments lies with the family.

Scaling and Expanding this Model: The GRSD program continues to expand to keep pace with the opportunities posed by computers and the internet. Teacher professional development and open source tools are also a mainstay of both program maintenance and expansion. In response to inquires from other Districts, Paul Facteau and the Gateway Regional School District School Committee have created Mass 1-to-1 (<http://mass1to1.org>), an independent educational foundation, to provide consulting and leasing for other Districts.

Required Local Components: The laptop lease program is just one component of the Gateway Regional School District's technology initiative. Since one-to-one programs assume a high level of technology integration, strong professional development and curriculum integration are a required foundation in any program. Local technical support and a strong wireless network are also needed. The laptop lease program requires the District to manage vendor contracts, insurance and monthly collections – services that Mass 1-to-1 will provide if desired.

Results:

Piloted in 2000 and expanded in the following years, the Gateway Regional School District's one-to-one program is now serving 375 of the 600 students in grades 7-12. According to program director, Paul Facteau, "Parent feedback has been off the charts." Teachers are very appreciative of the program support and the opportunities for professional development. Student attendance among students with laptops appears to be 4% higher than those without laptops. This is a program that expands every year, building on strong community collaboration and commitment to educating children with skills for the 21st century.