

Maine School Administrative District #75
Strategies for Improving Academic Achievement and Teacher Effectiveness

“ . . . a description of how the applicant will use Ed Tech funds to improve the academic achievement, including technology literacy, of all students attending schools served by the LEA and to improve the capacity of all teachers in schools served by the LEA to integrate technology effectively into curriculum and instruction.”

1. Technology and steps to increase accessibility. One-to-one computing is available for all 7th and 8th grade students and full time supporting staff, as part of the state Maine Learning Technology Initiative (MLTI) program. Increased accessibility to the internet, software, instructional and learning time. Improved resources for 7th and 8th grades in the middle school translate to greater availability for existing District resources for the 6th grade as well.

2. Integrating into curricula, instruction, and assessment. Integration at the high school is currently engaged in supporting a pilot program that will acclimate students and staff with one to one computing, a concept already in practice at the middle school. Through a grant funded by the Rural Education Achievement Program, the Math and English departments at the high school have begun utilizing wireless laptop technology to foster improved learning results.

By integrating this technology into identified core assessments, the goal is to increase the academic achievement of all students. Different strategies have been developed on a departmental basis in order to reach these goals. These approaches include:

Math: Web server and local CD-ROM based learning tools that facilitate student comprehension of concepts related to measurement and deriving formulas pertaining to area, surface area and volume. Other tools include interactive simulations and virtual manipulatives.

English: By implementing laptop technology, the fundamental classroom environment will evolve, promoting an atmosphere of accelerated learning. Projects include creative writing assignments that incorporate Internet research to support student writing. Integrating laptop technology will make strides towards achievements of ELA standards, especially Standards E and H.

3. Professional development needs

- a. Professional development plan developed with and by teachers, aligning with instructional focus and identifying responsibilities, strategies and time lines with review of effectiveness.
- b. Peer to peer mentoring program in instructional areas/academic software.
- c. Ongoing workshops using scheduled time for training- by qualified staff and vendors.
- d. Funding will be needed for substitutes and/or teacher release time for professional development

4. **Software and/or web subscriptions necessary to achieve district goals**
 - a. Maintain/purchase any web subscriptions deemed necessary for supporting the districts academic goals.
 - b. Maintain/purchase any software deemed necessary for supporting the districts academic goals.
 - c. Leverage both and look for opportunities to deliver those resources in a timely, costly and reliable manner

5. **Peripherals such as scanners, microscopes, probes, LCD projectors, digital movie cameras and digital cameras**
 - a. Improve the availability of all peripherals to match student needs in schools, while supporting and reinforcing the curriculum.
 - b. Higher concentration of computing or learning could necessitate additional devices as needed.

6. **Repair, upkeep, and replacement of current hardware and network**
 - a. Develop yearly maintenance plan to clean, maintain, upgrade and/or replace all District hardware, including any grant funded hardware absorbed by the district.
 - b. Possible additional support personnel to support extra hardware.

7. **Increasing accessibility through availability.** The District is taking steps to increase the availability of technology in the schools through various methods and resources.
 - a. **Expansion and Mobile Labs.** Providing computers that are available to support a classroom of students.
 - b. **Fixed Labs.** Providing locations within each school where a class may be conducted using technology.
 - c. **Computer in every classroom.** Providing each teacher with the means to conduct administrative business conveniently and to allow them to augment instruction or permit a student to use technology independently.
 - d. **District-wide Network Login.** Providing District staff the ability to move throughout the District and still login to the network to access information as required.
 - e. **Home Access.** Access to e-mail is made available from home through the Web Access application. Access to other systems will be made available after they are evaluated for security vulnerabilities.

8. **Increasing accessibility to students with special needs.** The District recognizes the challenge for students with special needs and strives to ensure their needs are met in many ways.
 - b. **Specialized Equipment.** With the support of the Special Education Department, the Technology Department will assist in integrating specialized hardware such as oversized keyboards, trackballs, oversized monitors, and microphones to support students with special needs.
 - c. **Operating System Configuration.** With the support of the Special Education Department, the Technology Department will assist with customizing an Operating System to support students with special needs. This

includes the integration of specialized hardware with the operating system, use of oversized fonts as required, and activating other accessibility features as may be found in the operating system.

- d. Specialized Software.** With the support of the Special Education Department, the Technology Department will help install, configure, and maintain specialized software in support of students with special needs. This may include applications to enhance reading and writing, applications that convert speech to text, applications that convert text to speech, and applications that convert text to brail. Various other software applications are made available for differentiated teaching methods.