## Recommendations

After careful consideration of existing laptop initiatives, relevant research and literature, and the personal experience and professional expertise of individual members, the Laptops for Learning Task Force hereby makes the following recommendations for the implementation of a statewide laptop initiative in Florida

## I. The Task Force recommends that any laptop initiative conform to the following nine guiding principles:

- All students must have access to appropriate tools and to challenging curriculum in order to bridge the digital divide by moving beyond basics and towards 21st century skills.
- 21st century curriculum must be infused with skills necessary for living and working in an everchanging society. Relevant, real world education should include:
  - information and communication skills
  - thinking and problem-solving skills
  - interpersonal and self-directional skills
- Teachers must create instructional environments in which students use higher order cognitive skills to construct meaning or knowledge, engage in disciplined inquiry, and work on products that have value beyond school.
- Successful professional development:
  - must be held on a continuous basis
  - provides mentors, coaches, or peer teammates to model appropriate integration strategies in actual classrooms
  - gives teachers feedback on their own performance
  - holds teachers accountable for implementing instructional strategies and student learning
- Preservice teachers must:
  - experience good models of technology integration in all their preservice classes
  - have access to a laptop computer to support their coursework and field experiences
  - have field experiences that include an opportunity to teach in a 1:1 environment

- Students and teachers must have access to rich multimedia resources to:
  - extend their world and life experiences
  - engage their senses
  - incorporate into their own multimedia projects
  - provide building blocks of instruction
- Laptop hardware and software must be sufficient to allow students to be creators of content, not merely passive receivers of content. The laptop must be available to use as a cognitive tool wherever and whenever the student is working.
- Tech support procedures and planning must be adequate to prevent disruptions in laptop availability. Support should be handled at the lowest level practical.
  - The end-user (teacher or student) should be taught to exercise problem-solving skills in handling routine maintenance.
  - A school-based support staff should be able to handle the majority of technical issues on a timely basis and provide a loaner laptop while the repair is being made.
  - District support or other outsourcing should be available to handle major repairs.
- In addition to the testing of basic skills, students should be given the opportunity to demonstrate 21<sup>st</sup> century skills through the use of technology-infused, authentic assessments. Assessment should become more integrated with instruction.

## II. The Task Force recommends that school-site projects include the following elements:

- The laptop computer designated for this project should be selected from among those in current use in Florida schools based on demonstrated promise in current initiatives and should have the following minimum characteristics:
  - wireless connectivity
  - adequate battery life for school use
  - FireWire (IEEE 1394)
  - o USB

- The laptop computer designated for this project should come equipped with and be capable of running the following software:
  - word processing
  - graphic organizer
  - spreadsheet
  - multimedia authoring
  - video and sound production
  - web browser with links to state curriculum resources
  - e-mail, messaging, and conferencing capabilities subject to school site control
- Teacher machines should match student machines and include links to training resources.
- Projects must provide professional development for all teachers and administrators in 21<sup>st</sup> century skills, their implementation, and assessment using technology, as well as training in the integration of technology into the teaching of basic skills and content. Such professional development must:
  - be held on a continuous basis
  - provide mentors, coaches, or peer teammates to model appropriate integration strategies in actual classrooms
  - give teachers feedback on their own performance
  - hold teachers accountable for implementing instructional strategies and student learning
- Projects must provide for equity of access at school and at home for all students.
- Projects must provide for equity of curriculum for all students. A project must not provide an environment of learning with technology for some students, while limiting other students to learning from technology.
- Projects must be designed so that the laptop computer becomes an integral part of all subject areas.
- Projects must include a technical support plan designed to minimize disruptions in the availability of technology to students and teachers.

## III. The Task Force recommends that a statewide initiative include the following elements:

- Research Team. A research team should be assembled representing academicians from major Florida universities who are nationally recognized for their experience and expertise in educational research. The first responsibility of the research team will be to carefully design the implementation of the initiative in order to optimize conditions for rigorous, scientifically-based research. Additional recommendations and specific guidelines for the research team are included in Appendix I.
- **Preservice Education.** The implementation of this initiative should be designed to coordinate and support efforts in the preservice program of at least one Florida college of education to prepare graduates to teach in the 21<sup>st</sup> century classroom. The designated college(s) must agree to allow researchers access to their efforts and must be willing and able to share the results and products of their efforts with other colleges of education in Florida.
- Advisory Board. An advisory board of Florida educators, business and community leaders, parent partnerships, LEA representatives, and experts in the field of foundation management should be convened to develop a plan for long-term sustainability of a state-wide laptop initiative. The plan should include the establishment of a foundation to continue fund-raising activities and serve as economic advisors to a statewide laptop initiative.
- Center of Academic Excellence. A Center of Academic Excellence should be established to administer the statewide laptop initiative. The center would be responsible for facilitating and monitoring the implementation of the program and related research.
- Multimedia Repositories. The implementation of this initiative should also be designed to coordinate and fund efforts to create free online resources to support student access to rich, multimedia sources for use in student-created projects and to support teacher access to learning objects and other resources for the development of lessons.