# Appendix I

## **Research Direction**



### **Research Direction**

Across the state, there have been several cutting-edge pilot projects using laptops, which have gained national recognition. Anecdotal evidence from these efforts has been largely positive, and encourages us to pursue this concept on a larger scale. Before a complete state-wide implementation of laptops to every student, further investigation should be conducted on a larger scale, and under more controlled conditions. Such research should build upon the lessons learned from previous smaller-scale pilot projects, and should be designed to follow rigorous scientifically-based research methods.

In undertaking a state-wide laptop initiative, Florida has a unique opportunity to conduct and disseminate research that is far ahead of what others have done. However, it is important that the pilot program be carefully designed in a way that is optimal for rigorous academic research to be conducted. A simple project evaluation at the end of the pilot is not sufficient. In order to carry out the research that a project of this scale demands, it will be necessary to assemble a team of academicians who are nationally recognized for their experience and expertise in educational research, and to carefully design the implementation of the initiative to optimize conditions for rigorous research.

#### **Research Team**

It is recommended a team be assembled of six to seven researchers from universities across the state of Florida. The lead researcher will be appointed by the task force, and will participate in final selection of the remaining team members. Team members will be identified based upon their expertise in different types of research, covering a range of quantitative and qualitative expertise. Team members should also have presented at state and national conferences on research conducted dealing with educational technology. Selecting researchers who are affiliated with colleges of education in Florida will have an additional benefit of enhancing and informing pre-service teacher education.

#### **Design of the Laptop Initiative for Research Purposes**

**Select a proven device.** It will be critical to select a laptop device that is currently in use in Florida schools, has shown positive results, and has proven ready for use in a larger study. A careful comparative analysis should be conducted of all the leading laptops used in one-to-one initiatives in Florida schools. The laptops selected should have characteristics of those used in the most successful district pilot initiatives. A new or untested device should not be used in a project such as this.

**Consistent Implementation.** There must be a consistent implementation of the laptop devices across study sites, including hardware, software, teacher training, and technical support. Variations in these elements will greatly diminish the inferences that can be made from research results from this initiative. Another important issue is that the laptop device should be one that is robust with key features, while

requiring a minimum of technical support. If the laptops require extensive initial training and continued support, these factors run the risk of confounding study results.

#### Deliverables

In order to get a complete picture of results, the Research Team will be charged with completing a series of research studies that employ a full range of educational research methods. These methods should include quantitative, qualitative, and mixed methods approaches. The final report from this team should include a complete set of academic papers, suitable for publication in peer-reviewed educational research journals.

The research team will be asked to present their findings at state and national academic conferences including, but not limited to, Florida Educational Research Association, Florida Educators Technology Conference, American Educational Research Association, Association for Educational Communications & Technology. Given the range of research methods that will be employed and the common theme, the team will be encouraged to submit proposals and present findings in a symposium format. Once the final report is completed, the team should submit individual papers to peer-reviewed academic journals for publication.