



5.0 Technology and Infrastructure Goals and Objectives

Technology comprises a major part of a district budget. As experience has shown, there is much more to funding technology than purchasing the equipment. A Total Cost of Ownership approach includes training, support, and ongoing maintenance as well. More importantly, it should be purchased and implemented with purpose; that is, to fulfill the goals of an overall plan. A district must be careful to avoid the pitfalls of technology for the sake of technology and purchasing without a plan for use and implementation. The goals in this section are designed to ensure that the Broward County Public Schools uses a total cost of ownership approach to making technology-related decisions that are aligned to the district's strategic goals.

- TI-1: Achieve standardization of educational specifications for technology, infrastructure, training, use, and support throughout the district.*
- TI-2: Develop and implement a district-wide instructional and technical support model.*
- TI-3: All users will be able to access instructional and operational applications through an enterprise portal by 2010.*



TI-1: Achieve standardization of educational specifications for technology, infrastructure, training, use, and support throughout the district.

Vignette:

As Ms. Sloan travels to elementary schools throughout the district to conduct professional development activities, she finds that each school has a similar level of technology readiness. At one time this was not the case; she would find a wide variety and diversity of technology resources. Likewise, teachers at some schools were experienced and quick to grasp her concepts. At other schools she had to allow extra time to make sure that computers were properly configured. It was also necessary to assist teachers with basic skills needed to access training materials on the district's teacher portal so that they might access the activities she was presenting. By having schools at a more uniform level, teacher competencies are also more consistent; thus she can plan her workshops to accomplish more in a shorter time.



Objectives:

- TI-1.1 Develop and incorporate a technology component in the leadership development program by November 2007.

Action Steps (all will be completed by November 2007):

- Identify Technology KASABs (Knowledge, Aspirations, Skills, Attitudes, Behaviors) as defined in the Florida Leadership Operational Competencies
- Conduct online needs assessments in the area of technology to guide the Leadership development program.
- Develop SMART (Specific, Measurable, Attainable, Relevant, Timely) objectives.
- Design and implement events to provide technology related instruction for Data Analysis, Communications, Web Resources, Administrative Applications and the role of the principal as instructional technology leader.
- Provide training on the use of the IBM Toolkit.
- Provide training in Classroom Walkthrough 2.0 using palm-pilot technology.
- Continue to work in conjunction with HRD Leadership Development Program to incorporate the DETA for Administrators program in appropriate principal, assistant principal and district administrator professional development.

Projected financial impact: \$20,000 for content development and online access to content

- TI-1.2 Develop a prototype of school-wide operational and instructional technology including hardware, software, training, integration, use, and support for all



levels by December 2007.

Action Steps (all action steps will be completed by December 2007):

- 21st century learning team will develop and recommend a prototype for a 21st century school.
- Stakeholder groups, including teachers, parents, students, and administrators, will review the recommended prototype for further input.
- Recommended prototype will go through a TCO process to determine costs per elementary, middle, high and center schools.
- Prototype model will be presented to Executive Leadership Team for review.
- Prototype model will be aligned to educational specifications.
- Prototype model will include a comprehensive training plan that adheres to national and state professional development standards, models the use of technology, and includes an evaluation model to assess effectiveness of training.
- Prototype model and financial impact will be presented to the School Board for approval.

No financial impact until prototype model is adopted

TI-1.3 Conduct a gap analysis for individual school sites to determine which ones meet the prototype and what is needed to bring the others to that level by August 2008.

Action Steps:

- Gather data on current status on each individual school in relation to hardware, software, professional development, level of integration, principal leadership, business uses and technical support. Data collection sources will include the DOE Florida Innovates Survey results, school site survey, hardware and software inventory, professional development data, ITTS needs assessment results, school staffing and customer input by January 2008.
- Identify industry best practices and compare with school status by March 2008.
- Compare current reality with best practices to identify gap by June 2008. Report results to Executive Leadership Team and School Board by August 2008.
- Technology Infrastructure, Application/Integration, capital planning and Instructional Technology and HRD will work together to define and implement a strategy to provide equipment, training and support aligned to educational specifications and the prototype model that is being developed as part of this strategic plan.
- Based on current data analysis, insure that the refreshing of teacher laptops is prioritized in the phased plan development.
- This team will develop a multi-year phased plan based on available budget leading to the implementation of the prototype model in every school.



Prototype model TCO and multi-year plan will determine financial impact

TI-1.4 Define and implement a strategy to provide the additional equipment, training, and support and to continuously upgrade all operating systems to all schools by June 2010.

Action Steps (all action steps will be completed by June 2010):

- Identify industry best practices and strategies to manage workstations.
- Define a standard set of operating systems and software that would be used on SBBC desktops and laptops.
- Define and communicate standard operating procedures to upgrade all systems to current standards.

No financial impact

Alignment to Strategic Goals:

- Ensure that all students perform to their highest potential.
- Improve high school graduation rates.
- Develop an administrative structure that fosters streamlined district operations.
- Improve communications between the Board and its major stakeholders.
- Adopt best business practices.



TI-2: Develop and implement a district-wide instructional and technical support model.

Vignette:

A seventh grade team is working on a unit that will address math, science, and language arts standards. As they plan, they invite the school's instructional technology coach to join them and offer suggestions for how to effectively integrate technology skills into the unit. They decide upon a project-based assessment that includes podcasting, a technique that none of the teachers have attempted. Because the school's instructional technology coach is available onsite



throughout the activity, the teachers are confident that support is available if they are uncertain about the pod-casting process. In addition, student technology team members will be available to assist with setting up the hardware needed for that activity. In schools where these support resources are not available, teachers often do not attempt such projects without backup plans in case the activities do not go smoothly.

Objectives:

- TI-2.1 Research, define, and select a model(s) for instructional and technical support for the district by November 2007.

Action Steps (recommend action steps will be completed by March 2008)

- Form a work group of stakeholders to research instructional and technical support models with input from schools, areas, and 21st Century Learning Committee.
- Review instructional and technical support recommendations from IT Blueprint, the School and Department Based Technical Support Report, and best practices from other school districts and industry models.
- Review National Educational Technology (NETS) standards for teachers, students, and administrators and define the role of information and technology resource center staff
- Establish a process to collaborate training for technical staff with instructional needs; align the technical and instructional training programs
- Recommend a menu of models for instructional and technical support at SBBC schools aligned with the "Transform the Role of the Library/Media Centers to IT Centers" project
- Communicate the organizational menu options for school-based instructional and technical support to schools, get feedback, and revise models
- Establish a process for a decision-making group to select approved models for school use.

Projected financial impact: \$30,000 for consulting services. No further



financial impact until a model is approved.

TI-2.2 Establish the position of site-based instructional technology coach as defined in the support model by May 2008.

Action Steps (all action steps to be completed by May 2008):

- Assign the work group to develop the description of skills, proficiencies, roles and responsibilities for the site-based instructional technology coach.
- Establish a process to review the job description by a decision-making group and make recommendation for staffing levels
- Engage a decision-making group to address funding issues.
- Develop an implementation plan based on available funding.

Projected financial impact: \$2,000,000 for 08-09; \$4,000,000 for 09-10

TI-2.3 Develop a student technology model to provide additional technical support to schools by December 2007.

Action Steps (all action steps will be completed by December 2007):

- Research student technology models (examples, Student Help Desk, Apple Help Desk and Generation TECH)
- Define a menu of models based on school type including costs, training, and school responsibilities.
- Communicate the menu options to schools, get feedback, and revise models.
- Establish a process for a decision-making group to select approved models for school use.
- Develop an implementation plan.

Projected financial impact: \$400,000 for 08-09, \$400,000 for 09-10

Alignment to Strategic Goals:

- Ensure that all students perform to their highest potential.
- Improve high school graduation rates.
- Improve student health and wellness.
- Develop an administrative structure that fosters streamlined district operations.
- Adopt best business practices.
- Reward excellence.



TI-3: All users will be able to access instructional and operational applications through an enterprise portal by 2010.

Vignette:

Kim is a high school student with several homework assignments that involve the district's instructional technology resources. First she opens a browser window and goes to the district website. She reviews the assignment for her research paper on the teacher's website, then goes to the library website to use electronic databases, logging into each individually with a separate password. She then logs into the FCAT Explorer website to do the math exercises and finally logs into TeenBiz to read an article for her civics class. Without a portal, she must log into each of these applications separately. With a comprehensive enterprise portal, she will be able to access all of these tools from a single point of entry.



Objectives:

- TI-3.1 Research the possibility of partnering on a portal project with other districts by September 2007.

Action Steps:

- Form a Portal Work Group consisting of Executive Leadership Team, Procurement, Application Technology, Infrastructure Technology, Curriculum, and other appropriate departmental staff, whose overall responsibility is to provide recommendations regarding portal development by August 2007.
- This committee will identify, schedule, and meet with other school districts to determine the potential of a portal partnership. This group will evaluate the opportunities and produce recommendations for partnership as appropriate by September 2007.

No financial impact

- TI-3.2 Release RFP/RFI for ~~Student~~ Enterprise Portal by ~~December 2007~~ March 2008.

Action Steps:

- Develop a prototype student portal, including student participation, using the current BEEP teacher portal structure and pilot with students for feedback by March 2008. Prototype will be incorporated into the specifications to demonstrate functionality needed in the Enterprise Portal.
- The Portal Work Group, consisting of cross-sectional representation, will develop an RFP/RFI detailing the functional and technical specifications for an Enterprise Portal which would include the Student Portal. The RFP/RFI will be presented for approval and release by March 2008.

Projected financial impact - \$225,000 for consulting/staff resources



<p>TI-3.3 Select and/or adopt a standard portal platform for the district by June 2008.</p> <p>Action Steps:</p> <ul style="list-style-type: none">• The Portal Work Group, consisting of cross-sectional representation, will evaluate the existing installed Broward Schools Websphere Portal platform and provide a comparison to other industry standard portal solutions which will include a Return of Investment (ROI) assessment based upon current initiative costs to date and provide a functionality matrix with Total Cost of Ownership (TCO). <p><i>Financial impact (see 3.7)</i></p>
<p>TI-3.4 Create a standardization of integrated learning systems by December 2008.</p> <p>Action Steps:</p> <ul style="list-style-type: none">• The Portal Work Group, consisting of cross-sectional representation, will evaluate current user access to the Districts integrated learning systems and develop a standard for all new initiatives with inclusion of existing systems. The standard will be presented for approval by December 2008.• Develop a plan to standardize current integrated learning systems throughout the schools. Include needs for middle school credit recovery program as part of the plan. <p><i>Financial impact will be determined based on the new standard of the Integrated Learning Systems (2008-2010) and middle school credit recovery plan.</i></p>
<p>TI-3.5 Establish a single sign-on for all users by June 2010.</p> <p>Action Steps:</p> <ul style="list-style-type: none">• The Portal Work Group, consisting of cross-sectional representation, will develop and implement a single sign-on strategy that incorporates the portal solution as well as sign-on to the Broward Schools domain by June 2010.• Implement Active Directory strategy which is required for portal implementation and other technology initiatives by June 2008 <p><i>Financial impact (see 3.7)</i></p>
<p>TI-3.6 Merge the teacher portal with the student portal by December 2010.</p> <p>Action Steps:</p> <ul style="list-style-type: none">• The Portal Work Group, consisting of cross-sectional representation, will develop and implement a strategy that will merge the existing teacher portal with the planned student portal by December 2010. This strategy is to include the development of functional and technical requirements necessary to incorporate the teacher portal into the new portal platform with the inclusion of standardized and integrated software systems. <p><i>Financial impact (see 3.7)</i></p>
<p>TI-3.7 Integrate these into one enterprise portal (students, teachers, parents, administrators, SBBC staff, and community) by December 2010.</p>



Action Steps:

- The Portal Work Group, consisting of cross-sectional representation, will develop and implement a strategy to integrate students, teachers, parents, administrators, staff and community into one enterprise portal by December 2010.

Projected financial impact: \$10.1 million for the three year project

Alignment to Strategic Goals:

- Ensure that all students perform to their highest potential.
- Improve high school graduation rates.
- Improve student health and wellness.
- Develop an administrative structure that fosters streamlined district operations.
- Improve communications between the Board and its major stakeholders.
- Adopt best business practices.
- Reward excellence.