

TECHNOLOGY PLANNING ELEMENTS: PROCESS AND TOPICS

Following are descriptions of the planning process and examples of important topics to consider when developing a long-range education technology plan.

DISTRICT MISSION STATEMENT

Developing an effective technology plan requires involvement of key personnel: district leaders and people with vision, those who will be responsible for implementing or evaluating the plan, and other stakeholders. The committee should develop a vision and mission statements – that align with the district's overall mission – will help focus planning efforts.

- focus on integration and student achievement (keeping the end in mind)
- reflect current district mission statement and CSIP goals AND direct implementation of TFAs
- demonstrate a clear connection between education technology distribution (access) and use

NEEDS ASSESSMENT

*Take stock of the current status and analyze the gap between what is and the committee's vision of what could be. Examine multiples years of data for trend analysis. Include a variety of data sources that are tied to key educational goals and the **technology focus areas (TFAs)**.*

- **Student Learning** (varied sources, multiple years for trend analysis)
 - standardized assessments (MAP, ITBS, etc.)
 - local performance assessments (pre/post-tests, scoring guides/rubrics, checklists, observations, etc.)
 - surveys and records (COT, TAGLIT, Profiler, teacher/administrator/staff/student needs assessments, service records, satisfaction surveys, etc.)
 - curriculum standards, including technology standards
 - student technology standards
- **Teacher Preparation and Delivery of Instruction**
 - teacher and administrator standards (Show-Me Standards, local curriculum/technology, NETS, etc.)
 - professional development data, trainer evaluations, training outcomes, etc.
- **Administration/Data Management/Communications**
 - An infrastructure that supports district's vision for technology and the goals and expectations for effective district administration
 - administrative networking tools (fiscal management, purchasing and budget management systems, etc.)
 - data management tools (student information systems, grade books, attendance, etc.)
 - communication tools (e-mail, Internet, Intranet, telephony, voice mail, etc.)
 - policies/procedures (equity, copyright, AUP, licensing, CIPA, filtering, web, computer donations, security, etc.)
 - technology budget and total cost of ownership (TCO)
 - facilities that accommodate different activities and durable enough to stand up to continuous use: sufficient power and wiring, adequate number of electrical outlets, surge protection and grounding, lightning protection, backup systems, telephone outlets, static reduction, temperature and humidity control, acoustical treatment (for multimedia application), lighting and light control, security devices
- **Resource and Technical Support**
 - infrastructure that supports the district vision for technology and the goals and expectations for teaching and learning
 - computers of sufficient power and sophistication that are networked and connected to the Internet (located in classrooms and not solely in lab environments)
 - ample computer-based equipment and peripherals
 - appropriate video resources such as TVs, VCRs, DVDs, cable, and satellite
 - information technology facilities that foster safe and easy use
 - telecommunications network and other technologies for two-way communication of voice, data, and graphics (teleconferencing, videoconferencing, web)
 - platform (computers, networking, applications software, voice and video applications, etc.) for delivery of technology services both within and among buildings
 - standards to achieve cost savings and reduce possibility of purchasing several solutions to the same problem
 - clearly defined roles and responsibilities for the management and support of technology use throughout district

GOALS

Effective technology plan goals should align with and support the district's comprehensive school improvement plan. They should reflect the needs assessment (gap analysis) and identified strengths and weaknesses.

- identify needs/weaknesses identified in needs assessment, related to CSIP goals and TFAs
- align plan with state education technology plan goals and objectives
 - address Title II.D Program goals (technology integration and 8th grade tech literacy)
- build on progress and status of previous plan's goals

OBJECTIVES, STRATEGIES, AND ACTION STEPS

Identify the major objectives that will map progress and indicate goal attainment, and identify major strategies and action steps that must be taken to meet the objectives. Objectives should be specific, measurable, attainable, relevant, and timely.

- **Objectives:**
 - are relevant – if attained, the objectives would help district reach its stated goal
 - align to MSIP standards
 - address weaknesses identified in data analysis
 - are attainable and beneficial – objectives show changes/growth from previous plan, are reachable, and will result in beneficial change/growth
 - are specific – objective address
 - what progress is expected (desired level of attainment)
 - how and when the progress will be measured (measurement tool and its administration and data analysis)
 - establish a planned timeline and provide at least three years' of targets/benchmarks
- **Strategies and Action Steps:**
 - describe the actions that will take place
 - identify person(s) responsible
 - indicate source(s) of funding
 - note start and end dates
- **Objectives, strategies, and action plans specific to CSIP goals and/or TFAs**
 - **Student performance / Student learning**
 - address various learner needs
 - **Highly qualified staff / Teacher preparation and delivery of instruction and/or Technical Support**
 - benefit teacher preparation (professional development) in using technology to deliver/enhance instruction
 - address various and multiple teacher needs (disciplines, grade levels, technology integration, uses of resources, etc.)
 - training that integrates technology into the classroom and revolutionizes the teaching and learning process
 - assist staff in making the paradigm shift required to enable technology to best support instruction
 - address technology professional development needs
 - provide adequate training and support for the initiation, implementation, and the institutionalization phases of technology integration
 - provide a variety of technology related staff development opportunities that focus on effective applications of technology in innovative ways
 - training that focuses on classroom use rather than on technical mastery
 - **Governance and/or Parent and community involvement / Administration, data management, communications**
 - address various administrative needs (fiscal, accounting, attendance, grades, etc.)
 - multiple and varied systems for support
 - established, appropriate policies and procedures
 - interoperability
 - data security, disaster recovery
 - **Facilities, support, and instructional resources / Resource distribution and/or Technical support**
 - address appropriate and equitable access to technology
 - desired levels of access (hardware, software, online resources, etc.)
 - established, appropriate policies and procedures (e.g., for distribution, maintenance/upgrade/replacement, acceptable use, safety, and security)
 - address necessary and appropriate technical support and instructional technology support
 - desired levels of support
 - established, appropriate policies and procedures

EVALUATION

Effective planning also requires effective monitoring and evaluation. The plan should be reviewed quarterly – annually, at the very least – to ensure it is addressing current needs and serves as a guide or roadmap for future success and improvement.

- communicate/disseminate the work of the plan to keep key stakeholders informed and invested in seeing the plan succeed
 - make extensive or innovative use of technology to help inform and communicate with stakeholders and policymakers
- develop a system or mechanism for timely and ongoing monitoring to make sure the plan is being implemented as intended
 - determine person(s) responsible
 - establish review dates
 - develop correction strategies, as needed
- develop a system or mechanism for ongoing and extensive evaluation to determine whether goals and objectives are being met
 - conduct formative assessment to determine effectiveness of plan implementation
 - conduct summative assessment to determine whether plan is reaching its goals and meeting district needs
 - identify what is working and not working, and why
 - update/revise plan, as needed
 - communicate/disseminate findings and future changes/plans

ADDITIONAL ELEMENT (FCC)

The Universal Service Fund E-rate Program states that district long-range plans must address five essential elements:

- clear goals and realistic strategies for using telecommunications and information technology to improve education services;
- professional development strategies to ensure that staff know how to use these new technologies to improve education services;
- assessment of the telecommunication services, hardware, software, and other services that will be needed to improve education services;
- sufficient budget to acquire and support the non-discounted elements of the plan: the hardware, software, professional development and other services that will be needed to implement the strategy; and
- evaluation process that enables the school to monitor progress toward the specified goals and make mid-course corrections in response to new developments and opportunities and they arise.