Goals with Objectives and Strategies

Combined work of Technology Advisory Council and Curriculum Technology Specialists to help define the direction of technology in DISD

Goal 1 – By spring of 2014, all educators will routinely infuse technology through curriculum to ensure that all learners are prepared for competition in a global society.

> **Objective 1.1:** Denton ISD will continue to revise, create, and implement standards and learning objectives using technology for all content areas that reflect 21st-century expertise and the power of technology to improve learning.
>> **Strategy 1.1.1:** Relevant training of teachers in 21st century applications and programs to increase awareness – i.e. – PLCs, professional development, Moodle Courses for teachers, elluminate or other whiteboards for training, Project Share, ibvc, etc.
>> **Strategy 1.1.2:** Create lessons using 21st century applications and programs to allow students to explore the content of the lesson – blogs, podcasts, digital story-telling, etc.
>> **Strategy 1.1.3:** 21st century tools and resources are infused in teacher-directed tasks that emphasize higher levels of student cognitive processing relating to the content under investigation – i.e. wikis, online collaboration sites (livebinder, live@edu, etc.).
>> **Strategy 1.1.4:** Use of 21st century tools and resources is inherent and motivated by the drive to answer student-generated questions that dictate the content, process, and products integrated in the learning experience – i.e. learning analytics, cloud computing and collaborative environments.
>> **Strategy 1.1.5:** The complexity and sophistication of the 21st century tools used in the learning environment have expanded to include (1) the diversity, inventiveness, and spontaneity of the teacher's experiential-based approach to teaching and learning and (2) the students' level of complex thinking (e.g., analysis, synthesis, evaluation) and in-depth understanding of the content experienced in the classroom – i.e. mobile devices, learning analytics, cloud computing and collaborative environments.
>> **Strategy 1.1.6:** The pervasive use of and access to 21st century tools and resources provides a seamless medium for information queries, creative problem-solving, student reflection, and/or product development. Students have ready access to and a complete understanding of a vast array of collaboration tools and related resources while refining their 21st century skills to accomplish any particular task – i.e. gesture based computing (Wii, etc.), game based learning, mobile devices, learning analytics, cloud computing and collaborative environments.

> **Objective 1.2:** Denton ISD will continue to implement learning resources that capitalize on the flexibility and power of technology to reach all learners anytime and anywhere.
>> **Strategy 1.2.1:** Relevant training of teachers in collaboration and project based learning to increase awareness of technology that can reach all learners – i.e.: Skype, blogs, Wikis, Web conferencing, etc.
>> **Strategy 1.2.2:** Create lessons using collaboration and project based learning to allow students to explore the content of the lesson – i.e.: live@edu, project share, schoology, livebinder, etc.
>> **Strategy 1.2.3:** Collaboration and project based learning are infused in teacher-directed tasks that emphasize higher levels of student cognitive processing relating to the

content under investigation – i.e.: udl book builder, prezi, movie maker, power point, digital storytelling, animoto, etc..

Strategy 1.2.4: Use of collaboration and project based learning is inherent and motivated by the drive to answer student-generated questions that dictate the content, process, and products ==integrated== in the learning experience – i.e.: online whiteboards, google docs, ePortfolios, Moodle, TxVSN etc.

Strategy 1.2.5: The complexity and sophistication of collaboration and project based learning used in the learning environment have ==expanded== to include (1) the diversity, inventiveness, and spontaneity of the teacher's experiential-based approach to teaching and learning and (2) the students' level of complex thinking (e.g., analysis, synthesis, evaluation) and in-depth understanding of the content experienced in the classroom – i.e.: Web 2.0 tools, Moodle, TxVSN etc..

Strategy 1.2.6: The pervasive use of collaboration and project based learning provides a seamless medium for information queries, creative problem-solving, student reflection, and/or product development. Students have ready access to and a complete understanding of a vast array of collaboration tools and related resources while ==refining== their information, communication and technology literacy to accomplish any particular task – i.e.: Web 3.0 tools, Moodle, TxVSN.

Objective 1.3: Denton ISD will use advances in learning sciences and technology to enhance the National standard of STEM (science, technology, engineering, and mathematics) learning and develop, adopt, and evaluate new methodologies with the potential to inspire and enable all learners to excel in a global society.

Strategy 1.3.1: Work together to co-ordinate the STEAM elements within the existing STEM goals, making sure of alignment with the priorities identified in the national and state standards.

Strategy 1.3.2: Strong STEAM provision and delivery is essential for learning providers to be able to ensure that all learners have the opportunity to improve their scientific literacy, knowledge of the arts and provide a foundation for those who will specialize in STEAM subjects in the learning and skills through web resources, coherent delivery, variety of training, peer to peer coaching, PLCs

Strategy 1.3.3: Enhancement, enrichment and aspiration-raising activities for students will be provided through web resources, peer to peer coaching, extra-curricular activities, links with employers and universities, work experience, career advice, and awareness of available strands at the ATC and of what STEAM has to offer

Strategy 1.3.4: All learners will have access to and information about initiatives – STEAM Website, TechKnow

Goal 2: Increase effective integration of technology through personal and professional development to engage all learners.

Objective 1: The district and campuses will provide high quality, on-going professional development so that educators will effectively integrate technology in the teaching and learning process.

Strategy 2.1.1: Every secondary campus will employ one CTS per campus to provide support and standardized training in the context of technology integration.

Strategy 2.1.2: Specific technology learning objectives/competencies for all DISD employees will be identified and published. TAC, Library Services and technology staff

will work together to identify objectives through the use LoTi, the TAC survey, NETS, and SBEC competencies to identify levels/objectives.

Strategy 2.1.3: In Eduphoria or Project Share, teachers will upload artifacts (create a portfolio) that demonstrate their mastery of the objectives/competencies above.

Strategy 2.1.4: Staff development courses will be developed and implemented to provide opportunities for all employees to meet the objectives above. Course mode should be varied (online, webinar, face-to-face).

Strategy 2.1.5: Annual Technology Integration Academy will provide opportunity for all staff to receive support in utilizing technology to maximize teaching and learning

Objective 2: The district will provide training to develop a cadre of teachers who will become digital mentors/leaders at their campuses.

Strategy 2.2.1: Online Professional Learning Communities (consisting digital leaders from each campus - - including CTSs) will be established to support faculty in using technology to maximize teaching and learning.

Strategy 2.2.2: Set up cadres by geographic boundaries and have CTSs facilitate online PLC for a cadre of teachers from their feeder schools and/or into which their schools feed.

Strategy 2.2.3: Members of online learning communities will participate in staff development every six-weeks through a variety of modes – i.e.: webinar, elluminate, face to face, etc.

Strategy 2.2.4: After a year in an Online PLC, digital leaders at each campus will facilitate a campus-based PLC.

Objective 3 – Professional development and integration of technology will be supported via PDAS and PLCs.

Strategy 2.3.1: PDAS evaluators will participate in specific staff development on technology integration and the TA Technology TEKS so that they are prepared to better support the integration of technology through the PDAS.

Strategy 2.3.2: PLCs will be implemented as described in Objective 2 Strategies.

Goal 3 – DISD will provide effective technology support systems to administrators, teachers, students, parents, and community members to direct current and further integration of technology.

Objective 3.1: Increase awareness of technology resources available in the schools and community and provide all stakeholders appropriate access.

Strategy 3.1.1: Benchmark awareness of technology resources available in the schools through targeted surveys of administrators, teacher, students, parents, and community members.

Strategy 3.1.2: Benchmark awareness of technology resources available in the community through targeted surveys of parents and community members.

Strategy 3.1.3: Review, revise, and benchmark current network access policies for DISD stakeholders including administrators, teachers, students, parents, and community members.

Strategy 3.1.4: Define marketing plan to initiate and increase awareness of technology resources to each sub-group listed in Strategy 3.1.2 and 3.1.3.

Strategy 3.1.5: Implement Awareness Marketing Plan

Strategy 3.1.6: Develop measurement instruments to gather data on the effectiveness of the group and sub-group awareness marketing plan.
Strategy 3.1.7: Measure effectiveness of awareness marketing plan
Strategy 3.1.8: Revise, based on gaps in the data and the inefficiencies in the implementation, the awareness marketing plan as an ongoing awareness implementation instrument.

Objective 3.2: Increase the accountability and expectations for technology integration through effective communication between central office administration and campuses.
Strategy 3.2.1: Incentives and recognition for best practice and technology integration;
Strategy 3.2.2: Incorporate technology integration as standard component in teacher evaluation
Strategy 3.2.3: Develop school administrator buy-in
Strategy 3.2.4: Develop effective communication protocols (i.e.: distribution lists, phone trees, e-Alerts, social networking, face-to-face, etc.)
Strategy 3.2.5: Designate person to monitor, lead, and organize effective, ongoing communication between central office administration and campuses
Strategy 3.2.6: Teachers will utilize and integrate technology into all aspects of curriculum development and instruction.
Strategy 3.2.7: Embed technology TEKS into lesson plans/curriculum
Strategy 3.2.8: Change master template in Eduphoria to include technology TEKS for the appropriate grade levels

Goal 4 – Denton ISD will provide adequate technology infrastructure to meet the instructional needs of students, teachers and administrators that will allow them to succeed in an ever-changing environment.

Objective 4.1: DISD will provide sufficient equipment to meet state and district standards based on staff and student populations.
Strategy 4.1.1: Purchase additional equipment for each campus to insure equity and achieve the state recommended 1:1 ratio.
Strategy 4.1.2: Plan and budget for replacement of obsolete and irreparable equipment utilizing a 4-year replacement schedule.
Strategy 4.1.3: Plan, budget, and set up new mobile laptop computer labs so that there is at least one on each campus.
Strategy 4.1.4: Plan and budget for tablets or comparable technology for staff to use for increased communication and productivity.
Strategy 4.1.5: Continue to investigate, plan, and implement wireless technology on all campuses.

Objective 4.2: Denton ISD will continue to maintain a standard base-line for instructional and administrative software
Strategy 4.2.1: Determine which productivity software is needed on all ISD computers as the base image.
Strategy 4.2.2: Determine which software is needed on each grade level/subject area as determined by the needs of the curriculum.

Strategy 4.2.3: Implement software standards and restrict loading and installation of additional software to the district staff so that standardization can be maintained, copyright infringement does not occur, and software conflicts are minimized.

Strategy 4.2.4: Continue approval process of additional software so that standardization can be maintained, copyright infringement does not occur, and software conflicts are minimized.

Strategy 4.2.5: Allow use of open educational resources that maintain the integrity of the network, hard drive, etc and meet the current approval process.

Objective 4.3: DISD will provide the necessary building space, equipment and support structure to maintain and expand the DISD infrastructure

Strategy 4.3.1: Expand the current Technology Center / Admin complex to adequately support the infrastructure.

Objective 4.4: DISD will maintain the infrastructure for continued access of files, software and accounts for students and educators.

Strategy 4.4.1: Increase the storage capacity for files to meet additional uses as more staff and students require more media access.

Strategy 4.4.2: Creation of meta-data repository utilizing various universal elements (i.e. names, addresses, asset tags, etc.).

Strategy 4.4.3: Fully expand IP telephones to their maximum capability and pilot wireless telephony in conjunction with 5.1.5.

Strategy 4.4.4: Continue to provide network services to every classroom and administrative complex.

Strategy 4.4.5: Continue and increase public network wireless services to every campus and administrative complex.

Objective 4.5: DISD will continue to maintain a district wide disaster recovery system.

Strategy 4.6.1: Create a written plan for a downed system, including replacement equipment if needed, backup retrieval and data restoration.

Strategy 4.6.2: Teachers and staff plan for system failure in the form of alternate lesson plans, alternate presentations methods, alternate communication methods, etc.