

Times² Academy
Technology Plan
2008-2011

Mission Statement

The mission of Times² Academy is to develop intellectually curious and capable young people who are selfless contributors to both local and global communities, and who aspire to be ethical and compassionate leaders. Through a rigorous and innovative academic program in math, science and technology, in combination with the liberal arts, Times² Academy affords its diverse student population those experiences, skills and values that will prepare them for purposeful contribution in higher education and STEM-related fields.

School Statistics

Times² Academy was chartered in 1998 as a city charter school which services 648 students in grades K-12. It is located in the Smith Hill neighborhood of Providence, Rhode Island. The Academy has a fully functioning IT Committee whose members include: Stephen Mecca, Board of Directors' Vice-President, Jeri Thompson, Director of Curriculum and Instruction, Donna Chace-Larson, Director of Finance and Operations, TBD, Technical Services Coordinator, David Estes, Secondary Head of School, Nancy Mayer, Technology Teacher, Gail Thomas, IT Consultant, Ralph Gaboury, Board Member, and Don Stanford, Board Member. This Board Committee meets six times a year to identify technology needs, evaluate progress, and identify technology goals and objectives.

Part One: Equipment and Connectivity

Times² Academy has just completed an independent report of current resources and infrastructure.

1. Telephone System – installed within the last three years and is serving our needs. This system is reviewed on an annual basis.
2. Internet Access – Serving our two buildings with two T-1 lines. This is providing adequate access to the internet at this time. This is reviewed on an annual basis.
3. Wiring – With the completion of our elementary building three years ago, all wiring was reviewed and it is deemed adequate for now and the near future.
4. Server Upgrades – Currently utilizing 5 servers for different functions. We have determined that at least one is obsolete and in need of replacement.

5. Library Media Resource – with the use of Follett Library Software, we are linked to CLAN (Cooperating Libraries Automated Network) which appears to be adequate for our needs. This will be reviewed on an annual basis.

Part Two: Current and On-going Initiatives

The following goals for Times² Academy Technology Plan have been developed to work toward an innovative technological environment as well as to meet the National Education Technology Standards (see Addendum A):

- Maintain the four functional technologies (TraxLiteracy, eportfolios, Grade Quick, and EdLine) until the new Angel System becomes operational. Following implementation of the Angel System, dedicate the TraxLiteracy program to high level curriculum development and eliminate the use of eportfolios, Grade Quick, and EdLine.
- Establish one central data base for grades, progress reports, homework help, parent information on the progress of students (Angel System).
- Institute a Common Area Display system to provide information and innovations to students and faculty on a daily basis.
- Install Smart boards and related equipment to aid teachers in their craft.
- Provide a computer and network infrastructure that can maintain and grow to meet the current and future needs of our students.
- Improve connectivity and security for all users.
- Provide professional development to instruct staff on best practices for integrating technology in the day-to-day curriculum.
- Increase the number of computers available to students.
- Provide an orderly replacement of obsolete equipment. This is typically done on a 3-4 year basis.
- Augment wireless connectivity to all wings of the campus.

Specific initiatives include:

1. Angel Systems

This curriculum and course support tool is proposed as a web-centric software system to deploy successive elements of our curriculum at the classroom level. It addresses a standards-based curriculum as well as a secure platform for collaboration and use by the stakeholders at Times² Academy. This system will replace the multiple systems that are currently being used for grade-support, homework dissemination, and portfolio application.

Cost: \$65,000

2. SMART Board and Display Screen Technology

Through the use of this technology teachers will be able to facilitate learning that engages and causes students to manipulate information in ways that are integrative, student-centered, and project-driven. The goal is to purchase 4-8 SMART boards, related equipment and LCD projectors.

Cost: 48,500

3. Replacement of Computers

In order to ensure that computers and technology equipment are current and up-to-date, repairs and replacements will be made on an as-needed basis.

Cost: \$40,000 (General repairs and software license renewal)

Cost: \$25,000 (Replacement of computers)

Part Three: Current Conditions and Practices

The following equipment, software, and instruction are currently in place:

- Two computer labs; one seventeen workstation lab in the library and a 40 workstation instructional lab in the secondary school.
- Each classroom has two student workstations (total 136) and a color printer for small projects and research.
- Each classroom has one teacher workstation and color network printer for instructional purposes.
- WiFi capabilities providing the same resource access to the school's shared wireless laptops (total 23).
- On-line access to software to assist students and parents with access to homework assignments, to student progress, and to grades.
- 53 networked printers throughout building for student and faculty use.
- 2 multifunction printers (print, copy, scan to server).
- 5 Servers
- 533 Network drops.
- 5 LCD projectors can be signed out and used by teachers to enhance grade-level and content-specific curriculum.
- Library technology is currently utilizing Follett Library Software.
- Installed on elementary grade-level computers are a wide variety of curriculum-based software, including Kidspiration and Google Earth.
- Northwest Evaluation Association (NWEA) which is a state-aligned computerized adaptive tests that accurately reflect the instructional level of each student and measures growth over time. This assessment allows for triangulation of student proficiency in reading, mathematics, and language usage.

- One full-time Technical Services Coordinator to provide equipment maintenance, assistance for teachers regarding hardware and software usage, and to ensure the implementation of network policies and procedures.
- One full-time Technology Teacher for students in grades 6-12. Students in grades 6-8 have one sixty minute period per week for the entire school year. The computer curriculum is aligned with the National Educational Technology Standards. In addition, students in grades 9-12 access the Technology Teacher and computer lab as a means to use technology as a resource for demonstrating content knowledge integrated with technology. The Technology Teacher assists all teachers in planning, implementing, and assessing technology projects within the scope of their grade-level and content specific curriculum.
- The laptop cart and computer labs are available to be signed-out or scheduled by teachers for instruction and students' use.
- Skype Application has been connected to the leadership team computers to allow for distance communication.
- A VPN appliance has been connected to the leadership team computers to allow for distance work.
- Acceptable Use of Technology Plan has been instituted and is reviewed by the IT Committee for meeting the needs of Times² Academy and its constituents.
- Public engagement of the use and abilities of technology are shared with students and with parents through parent information sessions, newsletters, and Times² Academy Website.
- A mapping of our system, including an inventory of current hardware and software, current needs, and projected needs and new technology to pursue by the Technical Services Coordinator in conjunction with the IT Committee.

Part Four: Sources of Support

Angel System (McAdams Charitable Foundation) – pending
If granted, will provide for the implementation of the system.

SMART Board and Display Screen Technology (Champlin Foundation)
Provided for middle school SMART Boards and additional SMART Boards in elementary and high school. Display Screens in secondary school building, with the possibility of an additional display screen in the elementary building.

Servers (ERATE)

Seeking reimbursement for replacement of obsolete server and a server to host the Angel System.

Telecommunications (ERATE)

Seeking reimbursement for fixed large screen monitors for meeting teleconferencing in conference room and upgrade of telephony in Executive Director's office.

Network & Hardware (ERATE)

Seeking reimbursement for wireless infrastructure (switches and routers and hubs) elementary and secondary buildings, including classrooms, common areas, and conference rooms; and for display screen technology.

Equipment Upgrades and Maintenance (Operating Budget plus sought after external sources of support – TBD)

The Academy's annual operating budget will help support annual equipment upgrades, insurance, technical support, and maintenance.

Professional Development (Operating Budget plus sought after external sources of support – TBD)

Annual training for Technical Services Coordinator and faculty to stay current with educational software enhancements and technology upgrades.

Addendum A : National Educational Technology Standards (NETS•S)

1. Creativity and Innovation

Students demonstrate creative thinking, construct knowledge, and develop innovative products and processes using technology. Students:

- a. apply existing knowledge to generate new ideas, products, or processes.
- b. create original works as a means of personal or group expression.
- c. use models and simulations to explore complex systems and issues.
- d. identify trends and forecast possibilities.

2. Communication and Collaboration

Students use digital media and environments to communicate and work collaboratively, including at a distance, to support individual learning and contribute to the learning of others. Students:

- a. interact, collaborate, and publish with peers, experts, or others employing a variety of digital environments and media.
- b. communicate information and ideas effectively to multiple audiences using a variety of media and formats.
- c. develop cultural understanding and global awareness by engaging with learners of other cultures.
- d. contribute to project teams to produce original works or solve problems.

3. Research and Information Fluency

Students apply digital tools to gather, evaluate, and use information. Students:

- a. plan strategies to guide inquiry.
- b. locate, organize, analyze, evaluate, synthesize, and ethically use information from a variety of sources and media.
- c. evaluate and select information sources and digital tools based on the appropriateness to specific tasks.
- d. process data and report results.

4. Critical Thinking, Problem Solving, and Decision Making

Students use critical thinking skills to plan and conduct research, manage projects, solve problems, and make informed decisions using appropriate digital tools and resources. Students:

- a. identify and define authentic problems and significant questions for investigation.
- b. plan and manage activities to develop a solution or complete a project.
- c. collect and analyze data to identify solutions and/or make informed decisions.
- d. use multiple processes and diverse perspectives to explore alternative solutions.

5. Digital Citizenship

Students understand human, cultural, and societal issues related to technology and practice legal and ethical behavior. Students:

- a. advocate and practice safe, legal, and responsible use of information and technology.
- b. exhibit a positive attitude toward using technology that supports collaboration, learning, and productivity.
- c. demonstrate personal responsibility for lifelong learning.
- d. exhibit leadership for digital citizenship.

6. Technology Operations and Concepts

Students demonstrate a sound understanding of technology concepts, systems, and operations. Students:

- a. understand and use technology systems.
- b. select and use applications effectively and productively.
- c. troubleshoot systems and applications.
- d. transfer current knowledge to learning of new technologies.