

**NJ Department of Education
South Orange & Maplewood School District
Three-Year Educational Technology Plan Checklist**

TASK	Completed
<p>ATTACHMENTS: Attach the title, name and signature of each member of the technology planning committee. It is expected that there will be representation from at least nine of the positions indicated on the stakeholder sample table. Please provide an explanation if there is not a minimum of nine members on the technology planning committee.</p>	Pg. 3,4
<p>DATE: Provide your technology plan's creation date (the date when the technology plan first contained all of the required elements in sufficient detail to support the products and services requested on the Form 470). Tech Plan creation date: <u>March 2013</u></p>	X


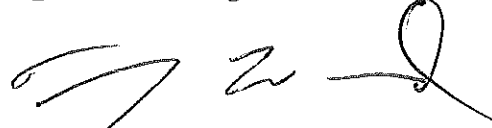
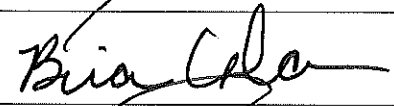

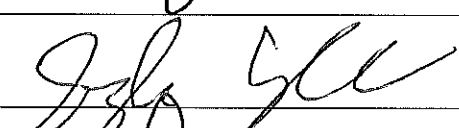
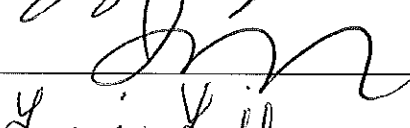
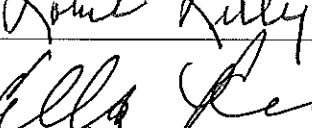
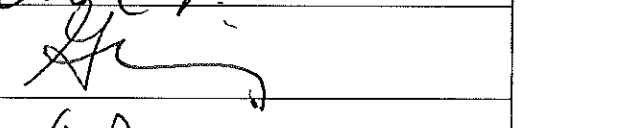
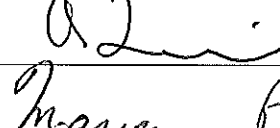
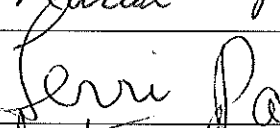


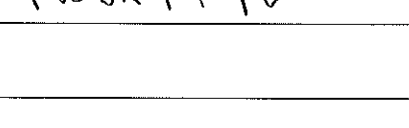

- For purposes of this document, "educators" are defined as school staff members who teach children, including librarians and media specialists.

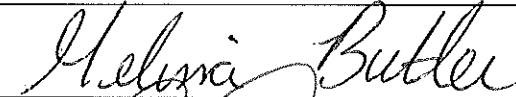


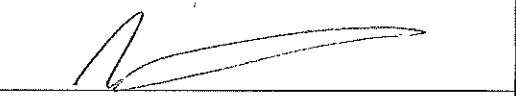


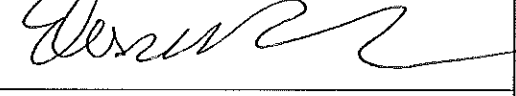
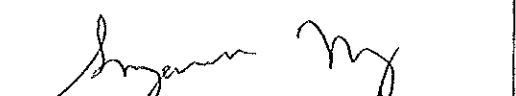

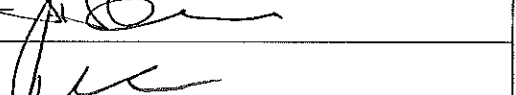
<p>TECHNOLOGY INVENTORY: 1. Describe the technology inventory <u>needed to improve</u> student academic achievement in the 2013-2014 school year that informs the basis for the Form 470. Include in the description the internal connections and basic maintenance for 12 months of the e-rate funded year, such as the following areas: a) Technology equipment including assistive technologies b) Networking capacity c) Filtering method d) Software used for curricular support and filtering e) Technology maintenance and support f) Telecommunications equipment and services g) Other services</p>	Pg. 5-8
<p>THREE-YEAR GOALS: 2. List clear goals for 2013-2016 that address district needs. There must be strong connections between the proposed physical infrastructure (bandwidth, cabling, electrical systems, networks) and goals. Include goals for using telecommunications and technology that support 21st century learning communities.</p>	Pg. 9-10
<p>THREE-YEAR IMPLEMENTATION AND STRATEGIES TABLE: 3. Describe the realistic implementation strategies to improve education. Include in the description the timeline, person responsible and documentation (or evidence) that will prove the activity occurred. Address each of the following areas: a. telecommunications, b. educational technology (including assistive technologies), c. information technology, and d. student technology readiness in preparation for online testing in 2014-2015.</p>	Pg. 11
<p>PROFESSIONAL DEVELOPMENT STRATEGIES: 4. Provide the name and title of the person responsible for coordinating the professional development activities noted in this plan. Terry Woolard – Technology Director</p>	X

<p>5. Professional development strategies should ensure that staff (teachers, school library media personnel and administrators) knows how to effectively use the technologies described in this plan to improve education, and will continue to support identified needs through 2016.</p> <p>Describe the planned professional development strategies by addressing each of the following questions:</p> <p>a) How will ongoing, sustained professional development be provided to all educators, (including administrators) that increases effective use of technology in all learning environments, models 21st century skills, and demonstrate learning experiences through global outreach and collaboration in the classroom or library media center?</p> <p>b) What professional development opportunities, resources and support (online or in person) exist for technical staff?</p> <p>c) How will professional development be provided to educators on the application of assistive technologies to support educating all students?</p>	Pg. 12-13
<p>NEEDS ASSESSMENT:</p> <p>6. Describe the needs assessment process that was used to identify the necessary telecommunication services, hardware, software, and other services to improve education.</p>	Pg. 14
<p>EVALUATION PLAN:</p> <p>7. Describe the evaluation process that enables the progress and effectiveness of goals to be monitored.</p>	Pg. 14
<p>8. Describe the process to make mid-course corrections in response to new developments and opportunities as they arise.</p>	
<p>FUNDING PLAN (July 2013 – June 2016):</p> <p>9. Provide the anticipated costs for 2013-2014 by source of funds (federal, state, local and other) and include expenses such as hardware/software, digital curricula including NIMAS compliance, upgrades and other services including print media that will be needed to achieve the goals of this plan. Allow specific provisions for interoperability among components of such technologies to successfully achieve the goals of this plan.</p>	Pg. 15

Three-Year Local School District/Charter School Technology Plan
(2013-2016)

Stakeholder/Committee Members

Stakeholder Table		
Title	Name	Signature
CIO (Co-Chair)	Paul Roth	
Technology Director (Co-Chair)	Terry Woolard	
Superintendent	Brian Osborne	
Grant Write / Communications	Suzanne Turner	
Principal	Joe Ugliodoro	
Principal	Jeff Truppo	
Principal	Lovie Lilly	
Supervisor	Ella Rideau	
Supervisor	Gary Pankiewicz	
Supervisor	Al Levin	
Teacher	Marian Power	
Teacher	Terry Paisner	
Teacher	Beatrice Greenberg	
Teacher	Kevin Mason	
Teacher	Kathy Hester	

Teacher	Melissa Butler	
Teacher	Scott Stornetta	
Teacher	Carolyn Campbell	
Teacher	Jen Cudmore	
Librarian / Media Specialist	Mary Sciaino	
Librarian / Media Specialist	Elissa Malespina	
Librarian / Media Specialist	Suzanne NG	
Parent	Jerry Kaiser	
Parent	Jim Lo Stuto	
Network Administrator	Gerry Archibald	
Technician	Tom Jeron	

**Do not use a business member who may wish to provide the district with e-rate services. Providers of e-rate services should not be part of the committee's make-up. Follow district and state ethics policy as it relates to conflict of interest.*

TECHNOLOGY INVENTORY

Currently, The South Orange Maplewood School District provides technology instruction in kindergarten through grade five in combination with library skills. All students in grades six through eight are enrolled in a technology course each year and students in grades nine through twelve have the option to enroll into a variety of both in district and online technology courses (i.e. graphic arts, TV production, photography, journalism, CAD, etc.).

Elementary Schools

Each elementary school is equipped with a computer lab (15 computers), 24 station laptop cart, 7 library computers, a laptop computer for every classroom, administrative computing and other peripherals as required. All 4th and 5th grade classrooms are equipped with smart boards, LCD projectors, teacher laptops and sound systems. Each elementary school building has wireless network services. Every 4th and 5th grade classroom have 12 iPods that are used in math instruction, teachers in grades k-2 are equipped with iPods to record student reading assessment data.

Middle Schools

Each middle school contains one classroom equipped with 26 computers lab to support the technology course, a 15 station library computer lab, three 25 station laptop carts, a fully automated library, a laptop computer in every classroom, and administrative computing. Many of the middle school classrooms are equipped with smart boards, LCD projectors, and sound systems. The middle schools have wireless network access.

High School

The high school contains a computer lab for each discipline (math, language arts, social studies, science, and world languages), two business labs, a CAD lab, a graphic arts lab, a photography lab, library lab, TV studio, two TV editing labs, a fully automated library, a writing lab, a computer in every classroom, and administrative computing. Many of the high school classrooms are equipped with smart boards, LCD projectors, and sound systems. The high school has wireless network access.

Software

Many software systems are used to record student assessment information, deliver instruction, and provide mission critical communications to staff, students, and parents. The main technology software items are: Student information system (PowerSchool), electronic grade book (PowerTeacher), parent portal (PowerSchool), library information system (Destiny), special services system (EasyIEP), personnel system (Systems 3000), finance system (Systems 3000), transportation system (Versa-Tran), emergency notification system (School Messenger), website hosting (Schoolwires), e-mail (Exchange), file storage, food service point of sales system (FastLane), and the facilities and technology work order system (SchoolDude).

District Resources

All buildings are connected via a 1gbps Wide Area Network. All computer systems have access to the internet through a centrally located 100mbps connection. The technology department maintains a central file server farm, local area networks (13 total – 1 in each building), auditorium sound equipment, auditorium lighting equipment, auditorium stage rigging, internet filtering, telecommunication services (phone system and voice mail), radio communication systems, video surveillance, and card access systems. Finally, IT, Assessment, Reporting, and Data Processing merged. All supplies and support for the functions fall within the Technology Department: Parent and teacher grade book portal, report cards K-12, New Jersey School Report card, Electronic Violence and Vandalism Reporting, Civil Rights Report, ELL state report, college transcripts, grade changes,

student attendance, scheduling, student transfers, 504 reporting, monthly superintendent report, state assessment testing and reporting, satisfaction surveys, recording and broadcasting of meetings, audio visual setups across the district, maintenance of stage lighting and sound equipment, support of DRA assessments, and general support of all connectivity issues for cell phones, PDA's, IPADS, and other devices.

To summarize, the district is supporting a large scale network and technology services for students, teachers, administrators, and support staff (About 7,000 people). All business and curricular areas use technology as part of the daily routine to provide services. The table on the following page summarizes the technology install base supported.

South Orange & Maplewood School District Three-Year Educational Technology Plan Checklist

Three-Year Technology Plan Inventory Table			
Area of Need	Describe for Year 1	Describe for Year 2	Describe for Year 3
Technology Equipment including assistive technologies	257 Smart boards, 255 classroom sound systems, 244 LCD Projectors, 1500 desktop computers, 1700 laptop computers (includes 700 new units to support PARCC), 800 iPads, 500 iPods.	264 Smart boards (includes 7 new units), 262 classroom sound systems (includes 7 new units), 251 LCD Projectors (includes 7 new units), 1500 desktop computers, 1700 laptop computers, 800 iPads, 500 iPods.	264 Smart boards, 262 classroom sound systems, 251 LCD Projectors, 1500 desktop computers, 1700 laptop computers, 800 iPads, 500 iPods.
Networking Capacity	Internet 100mbps, WAN 1gbps, network switches, wireless access points.	Internet 200mbps (increase of 100mbps), WAN 1gbps, network switches, wireless access points.	Internet 200mbps, WAN 1gbps, network switches, wireless access points.
Filtering Method	URL filtering by category	URL filtering by category	URL filtering by category
Software used for curricular support and filtering	Video Streaming System, Finance System, Food Service System, Library System, Anti-Spam, Anti-virus, CAD, PE Fitness Gram, PE Manager, Guidance System, Oracle Database, Principalm, Sibelius, Special Services System, Symphony, Lexia, Student Information System, Teleform, Citrix, Microsoft Exchange, Transportation System, Work Order System, Emergency Notification System, Web Hosting, Web filtering, DRA Reading Inventory System, Read180, Final Cut, Photoshop	Video Streaming System, Finance System, Food Service System, Library System, Anti-Spam, Anti-virus, CAD, PE Fitness Gram, PE Manager, Guidance System, Oracle Database, Principalm, Sibelius, Special Services System, Symphony, Lexia, Student Information System, Teleform, Citrix, Microsoft Exchange, Microsoft Office, Transportation System, Work Order System, Emergency Notification System, Web Hosting, Web filtering, DRA Reading Inventory System, Read180, Final Cut, Photoshop	Video Streaming System, Finance System, Food Service System, Library System, Anti-Spam, Anti-virus, CAD, PE Fitness Gram, PE Manager, Guidance System, Oracle Database, Principalm, Sibelius, Special Services System, Symphony, Lexia, Student Information System, Teleform, Citrix, Microsoft Exchange, Microsoft Office, Transportation System, Work Order System, Emergency Notification System, Web Hosting, Web filtering, DRA Reading Inventory System, Read180, Final Cut, Photoshop

Three-Year Technology Plan Inventory Table			
Area of Need	Describe for Year 1	Describe for Year 2	Describe for Year 3
Technical Support and maintenance	File server maintenance, computer repairs, network repairs, A/V equipment repairs, sound system repairs and services, stage lighting repairs and services, stage rigging repairs and services, intercom system repairs and services, bell system repairs and services. Includes replacement of aging equipment.	File server maintenance, computer repairs, network repairs, A/V equipment repairs, sound system repairs and services, stage lighting repairs and services, stage rigging repairs and services, intercom system repairs and services, bell system repairs and services. Includes replacement of aging equipment.	File server maintenance, computer repairs, network repairs, A/V equipment repairs, sound system repairs and services, stage lighting repairs and services, stage rigging repairs and services, intercom system repairs and services, bell system repairs and services. Includes replacement of aging equipment.
Telecommunications equipment and services	Telephone system repairs, telephone maintenance contracts, local, regional, long distance service, cell service.	Telephone system repairs, telephone maintenance contracts, local, regional, long distance service, cell service.	Telephone system repairs, telephone maintenance contracts, local, regional, long distance service, cell service.
Other Services:	Ink, toner, LCD bulbs, overhead bulbs, batteries, disks, tapes, postage, report card forms, assessment exams and administration, postage, professional development.	Ink, toner, LCD bulbs, overhead bulbs, batteries, disks, tapes, postage, report card forms, assessment exams and administration, postage, professional development.	Ink, toner, LCD bulbs, overhead bulbs, batteries, disks, tapes, postage, report card forms, assessment exams and administration, postage, professional development.

Year 1 = First year of Educational Technology Plan Implementation
Year 2 = Second year of Educational Technology Plan Implementation
Year 3 = Third year of Educational Technology Plan Implementation

Goals and Objectives

The South Orange & Maplewood School District's technology plan contains four main goals: Infrastructure, Access, Professional Development, Curriculum / Assessment.

Goal 1: Infrastructure

New classrooms are currently under construction in Maplewood Middle School. The new addition will be connected to the middle school's existing network and wireless network access will be provided. Additionally, the wireless network will be upgraded to support additional mobile devices.

Goal 2: Access

The district will continue to replace computers and other electronic devices as they age out. An additional 700 mobile computer devices will be purchased support the PARCC initiative. PARCC is the New Jersey's new initiative to monitor students' progress toward college and career readiness. All assessments will available electronically. The equipment will be made available to teachers and students outside of the testing window. The state is still releasing information regarding PARCC. The selection and purchase of devices will be finalized when the state releases specifications later this year.

Professional Development

Professional Development is ongoing and will be provided using three different mechanisms; Integrated, small group, and individual. Professional development will be coordinated and provided by the Technology Director and Technology Trainers.

1. Integrated – The district has many initiatives which all demand use of the same meeting times. Technology professional development will be infused into building and departmental professional development sessions. The focus will instruct staff how to infuse existing technology into the classroom environment. This will help ensure technology is used to support district goals and objective to improve instruction.
2. Small group – Technology workshops will be scheduled during the year. Each workshop will provide instruction to what technologies are available and instruction on how to use them effectively.
3. Individual – Upon request, training sessions will be scheduled with staff to help integrate the use of technology into lesson plans, and model the use of technology in the classroom.

Curriculum / Assessment

South Orange Maplewood School District is firmly committed to "academic excellence" in its broadest terms as the foundation and focus of all its academic endeavors. Together we seek to develop self-sufficient students who possess the motivation, the skills and the knowledge to be life-long learners, effective researchers, creative problem solvers, and responsible citizens.

The goal is to continue integrating technology into all disciplines where students will use technology to consume, create, and analyze information as they pursue higher levels of knowledge. Additionally, technology tools enhance collaboration enabling students to gain a greater understanding of what they have learned with other students in group settings.

Technology components will be written into the curriculum as it is aligned with common core standards to help continue to infuse the tools of technology into the classroom.

The following table summarizes technology goals and objectives for the next three years.

South Orange & Maplewood School District Three-Year Educational Technology Plan Checklist

Three Year Goals and Objectives Table		
Goal	Objective	Target Date
1. Infrastructure: The South Orange Maplewood School district will establish and maintain the technology infrastructure required for all students, administrators and staff too safely and easily access digital content.	1.1 Modify internet filtering to the least restrictive settings to align with updated social networking, bring your own device, and acceptable internet use policies.	2013-2014
	1.2 Install network communication systems in the new middle school addition.	2013-2014
	1.3 Upgrade wireless network systems to support additional mobile network devices and PARCC.	2013-2014
	1.4 Purchase mobile computing devices for PARRC assessments.	2013-2014
GOAL 2: The South Orange & Maplewood School District will ensure educational technology will be accessible by students, teachers and administrators for instructional and administrative purposes in all learning environments. Specifically, every student and educator should have at least one Internet access device and appropriate software and resources for research, communication, multimedia content creation, and collaboration for use in and out of school. The use of personally owned devices will be included where possible.	2.1 Provide access to the following collaboration tools: Google Apps, Edmodo, and Evernote. Microsoft Office will be maintained for staff only. District will continue to use Microsoft Exchange as a back end e-mail system. Free software (Facetime, Google chat, Skype, etc.) will be used for video conferencing.	2013-2014
	2.2 Continue to maintain existing devices in classrooms that teach specific skills (i.e. graphic arts, CAD)	ongoing
	2.3 Teachers will be provided the ability to manage student passwords to minimize downtime due to password issues.	2014-2015
GOAL 3: All educators, including administrators, will attain the 21st century skills and knowledge necessary to effectively integrate educational technology in order to enable students to achieve the goals of the common core and core curriculum content standards and experience success in a global society.	3.1 Technology professional development will be integrated into building and departmental professional development sessions.	ongoing
	3.2 Provide regularly scheduled workshops on how to use existing technology and software systems.	ongoing
	3.3 Provide one to one training upon request.	ongoing
Goal 4: All students will be prepared to use 21st century skills	4.1 Embed technology components into curricular documents.	ongoing

**South Orange & Maplewood School District
Three-Year Educational Technology Plan Checklist**

Three-Year Implementation Activity Table			
District Goal and Objective	Strategy/Activity	Timeline	Person Responsible
1.1.1	Map existing filtering settings and group. Review with central office and have modifications approved.	8/2013	Paul Roth
1.1.2	Update approved filter settings.	9/2013	Gerry Archibald
1.2.1	Purchase equipment for new classrooms in MMS	7/2013	Paul Roth
1.2.2	Install networking equipment and Wi-Fi access in the new addition to MMS	9/2013	Gerry Archibald
1.3.1	Purchase Wi-Fi equipment for PARCC	12/2013	Paul Roth
1.3.2	Install equipment for PARCC	2/2014	Gerry Archibald
1.3.3	Purchase mobile equipment for PARCC	2/2014	Paul Roth
1.3.4	Install mobile equipment for PARCC	6/2014	Gerry Archibald
2.1.1	Link active directory with cloud service providers	8/2013	Gerry Archibald
2.1.2	Provide teacher and student accounts and training on how to access the accounts	6/2014	Terry Woolard
2.2.1	Purchase and replace aging equipment	ongoing	Gerry Archibald
2.3.1	Provide mechanism for teachers to reset student passwords	9/2014	Gerry Archibald
2.3.2	Train teachers how to reset student passwords	6/2015	Terry Woolard
3.1.1	Integrate technology staff development with building and departmental staff development	ongoing	Dr. Furnari, Terry Woolard
3.2.1	Schedule and coordinate small group technology instruction	ongoing	Terry Woolard
3.3.1	Schedule and Coordinate individual technology instruction	ongoing	Terry Woolard
4.1.1	Embed technology components into curricular documents.	ongoing	Dr. Furnari

PROFESSIONAL DEVELOPMENT

Terry Woolard, The Director of Educational Media and Technology, is responsible for coordinating the professional development activities noted in this plan.

Professional Development Strategies

The training needs of educators are evaluated by using an annual survey online via "Survey Monkey", grade level meetings and monthly building and departmental meetings. Using this information, an assessment of professional development needs are determined and a calendar is produced with a list of courses help teachers learn how to use the technology and how to infuse the technology. The courses range from using a Smart Board to creating a PowerPoint presentation. Additionally, review of curriculum and resources is periodically done throughout the year to ensure that necessary training is occurring. Technology skills and integration courses are offered year round. Finally, one-to-one training is provided upon request.

Professional Development Resources and Opportunities

The Director of Technology and Media schedules the courses and one-to-one training sessions. A professional calendar is maintained by the Director's secretary. The district's media specialist and technology trainers provide the training. Links to technology professional development resources are posted on the district's website and maintained by the technology trainers.

Professional Development on the Application of Assistive Technologies

The Child Study Team identifies technology modifications to help students in need. The technology modifications are researched by the district technology and curriculum leaders and the selection of the technology is done collaboratively by those involved. The district technology trainers and curriculum leaders provide ongoing training and support to staff members responsible for these modifications.

Professional Development Table

Educators' Proficiency/ Identified Need	Ongoing, sustained, high-quality professional development planned	Support
New Employees	Summer institute. The purpose of this program is to inform new employees of the technology that is available in the district and how to use district database and communication systems such as e-mail and the student information system.	The Technology Director schedules the training session. Technology trainers provide instruction and follow-up support.
Integrating multi-media and web 2.0 technology across the curriculum	Professional development focuses on how to use multi-media equipment and software in combination with web 2.0 tools to improve instruction, assessment, communication and collaboration.	Media Specialists provide demonstration lessons. Technology trainers provide in class support and one on one instruction. The Technology Director works with Principals and Supervisors to incorporate technology training into building and departmental meetings.
Beginner, intermediate and advanced workshops on using productivity software and legacy database systems.	Workshops focus on providing instruction on how to use productivity software such as Microsoft Office and how to use various database systems such as PowerSchool.	The Technology Director schedules the workshops. Technology Trainers run the workshops and follow-up with staff as required.

NEEDS ASSESSMENT

A variety of student performance indicators, student surveys, community surveys, teacher surveys, staff development, and financial data are collected, analyzed and published (State of the District Report) annually. This information is used to establish district level goals and objectives to improve student learning. Building and department goals and objectives are aligned to district level goals and objectives. Principals, supervisors and administrators request resources to meet the respective goals and objectives. Technology requests are compared to existing technology inventories and expenditures. Gaps are identified and funding is requested through the budgeting process.

Evaluation Plan

Integrating technology

Maintaining a reliable high speed network is critical for integrating a variety of digital resources, including multimedia and video-streaming, into content-focused lessons. Effective use of technology improves communications with parents and students, delivery of instruction, and student assessment. The effectiveness of the resources, instructional strategies of teachers and integration proficiencies of the end-users is evaluated annually through:

- Staff survey of technology proficiency
- Student assessments of technology literacy
- Resources inventories
- Evaluation of Staff Development course offerings
- Evaluation of infrastructure by examining system logs and work order records

Enabling students to meet academic standards

Technology resources, including software, hardware and access to internet sources will continue to be required to support the opportunities and challenges of the 21st Century. The Information Technology Literacy assessments, administered to all students in grade 8, help us ensure that students have acquired the necessary technology skills to meet challenging state academic standards.

Develop life-long learning skills

The need to “keep current” makes studying an ongoing process, “Lifelong Learning”. The student population has not only grown larger; learning needs are more diverse. As a result, there is an increasing demand for a flexible learning framework, one that does not tie the learner down to a specific time or place. Differences between individuals require an adaptable pace and mode of study, suited to personal abilities and distinct learning styles. Traditional learning can no longer satisfy all learning needs. Technological advances have made individualized learning both viable and effective. Using Internet-based delivery makes it possible to provide first-class instruction by “Highly Qualified” teachers while maintaining interaction between the teacher, students and peers.

Process to make mid-course corrections in response to new developments and opportunities

Learning standards, state mandates, student needs, and technology are constantly changing. Information is constantly collected and analyzed. The results of the analysis often require changes to be made to the environment to continue to improve student learning. When new requirements need to be met, goals and objectives are updated through a collaborative process, a new “needs assessment” is conducted to identify gaps, and funding or changes to policies are requested to meet these needs.

South Orange & Maplewood School District
Funding Plan (2013-2014)

Three-Year Technology Plan Anticipated Funding Table (First Year- 2013-2014)					
ITEM	DESCRIPTION OF ITEM TO BE PURCHASED	FEDERAL FUNDING	STATE FUNDING	LOCAL FUNDING	MISC. (e.g. Donations, Grants)
Technology Equipment including assistive technologies	See Inventory Table			\$475,000	
Networking Capacity	See Inventory Table	\$129,840		\$194,760	
Software used for curricular support and filtering	See Inventory Table	\$8,400		\$232,600	
Technical Support and maintenance (Refresh existing equipment, parts, and contract services)	See Inventory Table			\$807,900	
Telecommunications equipment and services	See Inventory Table	\$26,000		\$86,000	
Other:	See Inventory Table			\$266,200	

Note – E-rate is the Federal funding source. All services must be budgeted and paid from the local budget. E-rate reimburses a portion of the expenditures the following year.