TO: The Honorable the Members of the Board of Regents
FROM: David M. Steiner
SUBJECT: Regents Statewide Learning Technology Plan
DATE: January 28, 2010
STRATEGIC GOAL: Goals 1-4

AUTHORIZATION(S):

SUMMARY

Issue for Decision

Does the Board of Regents wish to approve the Statewide Learning Technology Plan? This updated plan includes specific actions, responsibility for accomplishing the actions, and dates for implementation of the actions.

Reason(s) for Consideration

The Statewide Learning Technology Plan was developed from statewide public input on recommended actions to achieve the goals and realize the Regents’ vision of technology to transform learning and teaching.

Proposed Handling

This item will come before the Full Board for action in February 2010.

Procedural History

The full Statewide Learning Technology Plan (Attachment A) is an expansion of drafts discussed at the March 2009 and May 2009 meetings of the Full Board. At those meetings, the Regents supported consultation with the field on a draft vision and goals, and for input on the necessary actions to accomplish the goals and realize the vision. Outreach to multiple statewide organizations began in April 2009 through online surveys and regional community forums (Attachment B).
Background Information

The USNY Technology Practices and Policy Council (TPPC), in its September 2007 report to the Board, offered eight recommendations regarding digital capacity, content, and use. The Council further called on the Board and the Department to implement these recommendations with careful leadership. In response to the report, the Chancellor appointed a Regents Work Group, comprised of Regent Charles R. Bendit, Regent Joseph E. Bowman, Jr., and Regent Harry Phillips, to consult with the field and provide guidance on next steps.

The Regents Work Group presented its recommendations to the Board in July 2008. The Group recommended, as first steps, formalizing a statewide learning technology plan (Attachment A) and establishing a Department office to oversee implementation. An office was created in April 2009. The New York Comprehensive Center (NYCC) has assisted SED in the development of this plan by identifying and engaging key experts in this area with strong experiences at state, national, and international levels. An SED Instructional Technology Task Force developed the vision, goals, and action steps with a proposed time frame for implementation based on public input.

Three major themes have emerged from public input. Each theme is significant for the success of this plan:

- Ensuring access to learning opportunities and instructional materials through digital content.
- Ensuring teacher and leadership training and professional development to transform learning and teaching.
- Connecting all of USNY around the vision for learning technology.

Recommendation

It is recommended that the Regents approve the Statewide Learning Technology Plan.

Timetable for Implementation

Transformation is not accomplished in a prescribed sequence; instead, it occurs at different entry points and in different stages depending on the strengths and needs of each USNY institution. Each of the following actions addresses multiple goals simultaneously to maximize the transformation of learning and teaching through technology.
Actions are organized around the following developmental framework for change:

- **Foundational change (Years 1 – 3):** Actions at this level are designed to establish the work and support for building the vision across USNY. A major part of this effort involves meetings with practitioners, leaders, experts, and students, who will be asked to identify clear, actionable steps to achieve a joint vision. These partners will become major authors in developing the plan.

Future actions for consideration and approval by the Regents will build upon the actions for “foundational change” and will be organized around the following framework:

- **Connective change (Years 2 – 4):** Actions at this level are designed to foster partnerships and connections across USNY and New York State for collective action to achieve the goals.

- **Systemic change (Years 3 and forward):** Actions at this level are designed to harness the capacity of USNY to transform learning environments through technology.

Attachment A: Statewide Learning Technology Plan

Attachment B: Summary of Stakeholder Outreach
MISSION

The education technology mission of the Board of Regents is to develop policies, recommend practices, advocate for resources, and create incentives for action that turn our vision into reality. Our mission, through the University of the State of New York (USNY)*, is to provide a user-friendly and seamless technology-enhanced learning environment that serves the increasing needs of our citizens.

VISION OF TECHNOLOGY FOR TEACHING AND LEARNING

The Regents have an urgent need to raise the knowledge, skill and opportunity of all the people of the State of New York. New technologies have created powerful new learning tools which will transform the learning environment for students of all ages. Learning technologies will be seamlessly integrated into teaching and learning to increase student achievement. USNY will use technology to measure performance and communicate results to learners, teachers, leaders, and citizens. Through USNY, New York citizens will benefit from technology that brings information and knowledge to improve their lives.

USNY will provide learning technologies that change how students learn, what they learn, and why they learn. Students will access information to broaden and deepen knowledge about subjects in ways unimagined by prior generations.

All students will access learning materials in electronic form, including video, text, and other digital content related to the school curriculum. Students will create work, define and solve problems, and research and evaluate information using technology. Students will manage the flow of information and use technology to work with others from diverse backgrounds and locations. Our students will develop innovative approaches to communicate and collaborate.

Multiple environments will exist for teaching and learning, unbound by place, time, income, language or disability. The classroom, gymnasium, laboratory, library, theater, and museum will be a workspace for teachers and learners but will not always be a physical space. Students will access learning resources anywhere, anytime through the use of technology.

Technology is a path for teaching and learning, but it is also a body of practices, skill, and knowledge to be learned. All New York State learners will develop technological literacy to enter college, become productive members of the workforce, and succeed as citizens. Students, teachers, and leaders will have clear standards for what students should know and be able to do with technology; when various elements of technology will be taught; and how to embed technology in learning throughout the curriculum. These standards will be visible to the public to drive the standards even higher.

*The University of the State of New York (USNY) is the most complete, interconnected system of educational services in the United States. USNY includes 7,000 public and private elementary and secondary schools; 248 colleges and universities; 251 for-profit schools; nearly 7,000 libraries; 750 museums; the State Archives, Library and Museum; vocational rehabilitation services for adults with disabilities; State schools for the blind and for the deaf; 25 public broadcasting facilities; and more than half a million licensed professionals.
THE GOALS

1. DIGITAL CONTENT – Standards-based, accessible digital content supports all curricula for all learners.
2. DIGITAL USE – Learners, teachers, and administrators are proficient in the use of technology for learning.
3. DIGITAL CAPACITY AND ACCESS – New York’s technology infrastructure supports learning and teaching in all environments.
4. LEADERSHIP – USNY institutions are united in realizing the vision.
5. ACCOUNTABILITY – Information is easy to obtain and understand about the results achieved by New Yorkers in their efforts to build knowledge, master skills, and grasp opportunities for a better life.
6. FUNDING – Adequate funding is coordinated, equitably distributed, and sustainable.

FOUNDATIONAL CHANGE PHASE (2010 – 2012)

<table>
<thead>
<tr>
<th>THE ACTIONS</th>
<th>ADVANCES GOAL(S)</th>
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<tbody>
<tr>
<td>1. Engage all of USNY to implement the plan, ensure achievement of its goals, monitor successes, and make recommendations for improvement to prepare students for college, the global economy, 21st century citizenship, and lifelong learning.</td>
<td>● ● ● ● ● ● ●</td>
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<tr>
<td>2. Analyze regulations, policies, and systems to eliminate barriers, and provide effective guidance and support for ongoing collaboration among school districts, families, policymakers, and the public.</td>
<td>● ● ● ● ● ● ●</td>
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<tr>
<td>3. Establish standards for desired knowledge, skills, and performance in the use of technology, which are interconnected and aligned to other standards developed by and implemented throughout USNY.</td>
<td>● ● ● ● ●</td>
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<tr>
<td>4. Provide policies, standards, and guidance on quality digital content development and delivery; accessibility; information literacy; and ongoing, sustained professional development in pre-service and in-service education.</td>
<td>● ● ●</td>
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<tr>
<td>5. Analyze all existing funding streams for learning technology. Recommend specific improvements and alignment with statewide learning technology priorities.</td>
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### The Actions

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<tr>
<th></th>
<th>Advances Goal(s)</th>
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<tr>
<td>6.</td>
<td>Develop a performance measurement, determine current capacities, and explore ways to ensure the reliability of a digital technology infrastructure. Implement a process to track technical support for technology integration.</td>
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<tr>
<td>7.</td>
<td>Develop and/or revise Commissioner's Regulations and Department policies to promote sustained support for the delivery of quality instruction for all learners through digital means.</td>
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<tr>
<td>8.</td>
<td>Determine and continuously review the benchmarks for USNY institutions to demonstrate how they are achieving the actions of each goal, and the degree to which they meet the respective standards in technical support for technology integration.</td>
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<tr>
<td>9.</td>
<td>Identify and/or develop incentives for the expansion of digital learning across USNY.</td>
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<tr>
<td>10.</td>
<td>Promote and enable effective technical supports to implement the plan, and advocate as necessary to ensure that all learners have access to equitable and sustainable resources.</td>
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<td>11.</td>
<td>Develop USNY.net as an information access tool to provide rich data that facilitates decision-making at the classroom, school, district, and state policy levels. This tool will be a place to share resources and promising practices for quality digital content, sustained digital use, accountability, and effective funding.</td>
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<tr>
<td>12.</td>
<td>Determine future actions for the connective and systemic levels of change.</td>
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### Respective Roles and Responsibilities

**Commissioner:** Accountable to the Board of Regents for the quality of the plan; effectiveness and efficiency of implementation; ongoing communication on progress to the Board; and advocating for support from high-level stakeholders.

**Senior Deputy Commissioner for P-12 Education:** Accountable to the Commissioner and to the Board for the quality of the plan; effectiveness and efficiency of implementation; strategically engaging external stakeholders; ensuring adequate staffing and resource allocation to this endeavor; and working with other NYSED executives to oversee a coordinated Department-wide involvement.
All Deputy Commissioners: Accountable to the Commissioner and to the Board for the effectiveness and efficiency of implementation; strategically engaging their USNY stakeholders around the plan; ensuring adequate staffing and resource allocation to this endeavor; and working with other NYSED executives to oversee a coordinated Department-wide involvement.

Associate Commissioner and Coordinator of Technology Policy, Office of Instructional Support and Development, P-12 Education: Accountable to the Senior Deputy Commissioner and to the Commissioner for developing the plan; implementing the plan; reporting progress on specific actions; strategically engaging external stakeholders; and coordinating Department-wide involvement through an NYSED Learning Technology Workgroup.

USNY stakeholders: Partners in developing the plan; committing resources to implement the plan; and leading the engagement of their respective constituents to achieve specific actions of the plan.

Other NYSED Program Areas: Partners in developing the plan; committing resources to implementing the plan; and leading the engagement of their respective constituents to achieve specific actions of the plan.

**HOW PROGRESS AND PERFORMANCE WILL BE ASSESSED**

- Was the action completed on time?
- Does the action taken have a strong evidence base (i.e. relevant research studied, promising practices examined)?
- Does the action taken reflect significant and diverse stakeholder engagement and input?
- Is the outcome aligned with the New York State Learning Standards and/or other appropriate standards (e.g., ISTE National Educational Technology Standards [NETS])?
- Does the action taken include an analysis of New York State Law, Commissioners’ Regulations, and Department policies to identify needed changes?
- Was the action taken/outcome produced consistent with Board of Regents policy? If no policy existed, did staff raise the relevant policy issue with the Board in a timely manner?
- Can the outcome be sustained (financially, politically, and with adequate staffing and resources)?
The Statewide Learning Technology Plan was developed based on public outreach conducted by the Department during the summer and fall of 2009. Tens of thousands of New Yorkers recommended actions to the Department and provided comment on the technology plan, and they represent students, parents, teachers, administrators, community members, licensed professionals, and educators at higher education and cultural institutions. Input was received from local communities and professional associations statewide.

**Student Technology Survey**

Over 16,000 students responded to two surveys on the Department’s Web site, posted in June and September 2009. Students were asked about their technology use both in and out school, and the types of technology they would like to see in school. Students identified themselves (in order of frequency) at the middle school, high school, elementary school, and college levels. They represented (also in order of frequency) suburban, rural, big city, and urban locations. Student predominantly came from public and private schools, with limited numbers representing charter or home schooling.

- Students said that they “sometimes”, “mostly” and “always” use computers during the school day (based on the highest numbers)
- Students said that their teachers use technology “daily”, “weekly” and “always” (based on the highest numbers)
- Students described their teacher’s use of technology as “good”, “very good” and “like an expert” (based on the highest numbers)
- Students who seemed not to have interactive boards in their schools listed interactive boards as a new technology they would like to see in their school.

**Most common technologies used outside of school:**

1. Computers / Laptops
2. Cell / Mobile / Smart Phone
3. MP3 Players
4. Gaming Systems

**Most common technologies used inside school:**

1. Computers / Laptops
2. Interactive Whiteboards
3. Blackboard Site / Infinite Campus
4. Phones / Cell Phones and Overhead Projectors

**Most common technology desired in school:** Laptops, tablet PC’s, and netbooks

The following page compares how various technologies are used both in and out of school.
<table>
<thead>
<tr>
<th>Technology Use</th>
<th>Outside of school</th>
<th>School or Work</th>
</tr>
</thead>
<tbody>
<tr>
<td>Amplifiers and speakers</td>
<td>X</td>
<td>Students felt these should be encouraged in school.</td>
</tr>
<tr>
<td>Social Networking (i.e. MySpace, Twitter, Facebook, YouTube, LiveJournal, blogging)</td>
<td>X</td>
<td>Students felt they should be able to access Youtube.com in school. Video games should also be implemented in schools (more simulation “real games” – not fake computer learning games). Students felt games were good to strengthen hand/eye coordination.</td>
</tr>
<tr>
<td>Playing video games with friends (e.g., PlayStation 2 &amp; 3, Game Boy, Xbox 360, GameCube, Wii, Nintendo DS Lite, PictoChat (“handheld gaming”) – includes online games like Pogo, Webkinz (virtual pets), Woogi World for internet safety games)</td>
<td>X</td>
<td>Students felt they should be able to access Youtube.com in school. Video games should also be implemented in schools (more simulation “real games” – not fake computer learning games). Students felt games were good to strengthen hand/eye coordination.</td>
</tr>
<tr>
<td>Joy from using technology</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Cell phone use (for text messaging, listening to music, and taking pictures)</td>
<td>X</td>
<td>Students text, although the practice is not encouraged. Students felt that texting should be encouraged in school, and that good behavior should be rewarded.</td>
</tr>
<tr>
<td>Computers / Laptops are useful to have (MAC and PC)</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Watching TV, shows on satellite</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>iPODS / iTunes / MP3 players</td>
<td>X</td>
<td>Students felt they should be allowed to listen to music in study hall.</td>
</tr>
<tr>
<td>Sorenson video phone (Assistive Technology for the Deaf)</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Smartboard / Blackboard make learning fun!</td>
<td>X</td>
<td>Students felt these should be installed and encouraged in school.</td>
</tr>
<tr>
<td>WiFi</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Internet-based work</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Digital cameras</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>DVD players</td>
<td>X</td>
<td></td>
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<tr>
<td>Internet</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Video and audio chat</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Technology to make music videos and upload them to Youtube.com</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Scanning drawings and loading them to a USB drive to view on TV</td>
<td>X</td>
<td></td>
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<tr>
<td>Wikis</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>PowerPoint presentations</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Personal Digital Assistants (PDAs)</td>
<td>X</td>
<td>Students felt these devices should be provided by schools.</td>
</tr>
<tr>
<td>Online university</td>
<td>X</td>
<td>Students found online “more useful” than face-to-face classes.</td>
</tr>
</tbody>
</table>
There were many general comments expressed about the role of technology in students’ lives, and the potential impact that greater access to technology would have on student learning in school. General comments were organized in three broad areas of need:

- examining policies and lifting restrictions on specific types of technology that would benefit learning if used responsibly;
- providing adequate technology for student engagement and increasing student achievement; and
- updating technology in schools appropriately.

Public Survey on the Statewide Learning Technology Plan

Over 750 New Yorkers responded to a survey on the Department’s Web site, posted in between May and July 2009, on their comments and recommended actions for the Statewide Learning Technology Plan. Respondents were moderately distributed across urban, suburban, and rural communities, with the greatest numbers from suburban and rural locations. The overwhelming majority of respondents (78%) were faculty members, teachers, and administrators in a school, college, or cultural institution. Nearly 15% of respondents identified themselves as “other,” including students of multiple age groups, district technology coordinators, educational consultants, librarians, and more. Another overwhelming majority of respondents reported their place of employment as a Pre-Kindergarten – grade 12 school.

Promising actions and formidable challenges were identified in the areas of funding; professional development; learning standards for technology; and network capacity/infrastructure access. Additional suggestions were made in the areas of assessments; partnerships with professional organizations and businesses; virtual online environments; working with special needs populations; and ensuring marketing, awareness, and communication dissemination to implement the technology plan.

Recurring Themes across the Comments on the Proposed Vision and Goals

1. Technology needs to be a tool to create information.
2. There are disparities in access to technology.
3. Consideration for parental support.
4. Opportunities for various funding sources should be identified and increased.
5. Professional development must be more rigorous and sustained.
6. Standards should be integrated into already existing standards.

Recommendations for Action Steps

1. There needs to be adequate funding sources.
2. Time needs to be available for professional development.
3. Standards need to be integrated into existing standards.
4. Schools need to have flexibility to develop their own goals that match the needs of the community they serve.
5. There is a needs to include existing infrastructures.
Regional Community Forums

Nine (9) community forums were conducted across New York State between September and November 2009. Forums were held in the following regions:

- Buffalo (Erie 1 BOCES, West Seneca)
- Capital Region (Mohonasen High School, Rotterdam)
- Long Island (Western Suffolk BOCES, Wheatley Heights)
- Westchester (Putnam/Northern Westchester BOCES, Yorktown Heights)
- Rochester (Monroe 1 BOCES, Rochester)
- Syracuse (Roxboro Road Middle School, North Syracuse)
- Southern Tier (Broome-Tioga BOCES, Binghamton)
- New York City (United Federation of Teachers, Manhattan)
- North Country (Peru High School, Peru)

An estimated 800 New Yorkers participated in these forums. Participants included teachers, administrators, community members, representatives of higher education and cultural institutions, parents, and students. Participants recommended specific actions to achieve each of the six goals in the technology plan. Feedback and discussions were consistent across each forum. The most common needs discussed include:

- Defining what it means to be “technologically proficient.”
- Ensuring adequate, sustained professional development for pre-service and in-service educators and administrators in integrating technology across content areas, not as a stand-alone practice. Professional development was discussed as a requirement for permanent certification.
- Establishing more collaborative spaces online for vetting and sharing promising practices statewide.
- Removing the filters and blocks to access of specific resources (such as Internet sites) to allow for more innovation in instructional practice.
- Reviewing current funding streams to strongly align funding priorities to current needs. For example, exploring textbook aid.

Second Key Stakeholder Leaders’ Meeting

The second 90-minute facilitated conversation with leaders of major professional associations was held in Albany on Tuesday, November 10. This meeting continued the conversation from a previous meeting of statewide professional association leaders on the technology plan. Participants at the second meeting reviewed the draft technology plan and provided important input and affirmation of the actions needed to achieve the goals.

Meeting participants recommended that the technology plan needs the following:

- More specificity in the language throughout the plan;
- More about information literacy;
- More explicit references to professional development, preparing adults for change;
- More clarity about learning requirements;
- Clear connections to other initiatives related to reform of the larger education system and structure of schooling;
- A strong commitment by the Regents and SED for ongoing engagement in the further development and then implementation of this plan;
• Specific language about access to technology tools and devices;
• More specificity about where technology belongs in the standards.

Presentations and Collaboration with Statewide Organizations

The Department’s new Office of Learning Technology Policy and Programs has engaged multiple stakeholders statewide in building awareness of and providing input on the Statewide Learning Technology Plan. Organizations and groups with which the office have established connections to include (but are not limited to):

• New York State Computers and Technology in Education (NYSCATE)
• Staff and Curriculum Development Network (S/CDN)
• New York State Council of Educational Associations (NYSCEA)
• District Superintendents (BOCES)
• Regional Information Centers (RIC)