

Illinois State Board of Education
School District Technology Plan Blueprint and Criteria

Developed cooperatively by the Illinois State Board of Education, Regional Offices of Education, Intermediate Service Centers, Learning Technology Centers, various Local Education Agency staff members, and peer reviewers.

August, 2003

This document integrates features of the September 1997 *School District Technology Plan Blueprint*, the September 1997 *Technology Plan Progress Guidelines*, and the March 2003 *School Improvement Plan (SIP) Rubric Components and Criteria for Development, Evaluation, and Revision*. This document incorporates the state and federal criteria that are used to review district technology plans and replaces the September 1997 *Blueprint and Progress Guidelines*. To ensure a school district's eligibility for state and federal technology programs, the district's technology plan must successfully address all criteria listed. (Note: A School Improvement Plan is still required by School Code. This document does not replace the SIP or the SIP rubric.)

Required Components/Criteria	Criteria Defined	Planning Guide
<p>1. Table of Contents A listing of all technology plan components with corresponding page numbers is provided.</p>	<ul style="list-style-type: none"> • All sections are labeled with corresponding page numbers or links. 	<ul style="list-style-type: none"> • <i>Table of Contents directs reviewers and readers. This will be automatically created in the online format.</i>
<p>2. Acknowledgements and Stakeholder Involvement</p> <p>a. Stakeholder participation in the planning and development of the technology plan includes representation from the community.</p> <p>b. An explanation is provided of how participants are included in the planning process on an on-going basis.</p>	<ul style="list-style-type: none"> • Provide a narrative or chart that identifies current stakeholders involved, their role(s), and the stakeholder group they represent. • Provide a narrative or chart indicating stakeholder involvement in the planning, implementation and assessment of the technology plan. 	<ul style="list-style-type: none"> • <i>Narrative should demonstrate how your stakeholders participate. Stakeholders (parents, business representatives, community leaders, educators, administrators, students, etc.) may be involved in different parts of the process (planning, implementation, assessment).</i>
<p>3. District/Community Profile</p> <p>a. The district/community profile provides the reader with a description of community characteristics.</p> <p>b. Student, staff, and community</p>	<ul style="list-style-type: none"> • Information and demographics are included for: <ul style="list-style-type: none"> ○ Students (can include or link to the District Report card) ○ Staff (can include or link to the District 	<ul style="list-style-type: none"> • <i>The profile should be in narrative form and give a clear picture of the community and school district.</i> • <i>The School and District Report Cards and School Improvement Plans, as well as the</i>

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<p>demographics are provided.</p> <p>c. The profile highlights the attributes and challenges of the district and community as a whole.</p>	<p>Report card)</p> <ul style="list-style-type: none"> o Community (community profiles can be found at The US Census Bureau website in the Fact Sheet section: http://factfinder.census.gov) <ul style="list-style-type: none"> - Size - Location - Economic status <p>• Attributes and Challenges of the district and community are provided.</p>	<p><i>Census Bureau, are good sources for District and Community Profile information.</i></p> <ul style="list-style-type: none"> • <i>Attributes and challenges will vary from community to community depending upon profile characteristics and community expectations.</i>
<p>4. Vision</p> <p>a. An explanation is provided on how the vision was developed/determined.</p> <p>b. The vision is clearly stated.</p> <p>c. The vision captures the district and community's ideal preferred future of technology's role in promoting educational excellence and opportunity for all learners.</p>	<ul style="list-style-type: none"> • Narrative of how vision was developed or reaffirmed is provided. • The vision statement, which includes the role of technology, is provided. 	<ul style="list-style-type: none"> • <i>Provide a brief explanation of how the technology plan vision was derived and/or reaffirmed. Helpful information includes the process used, the stakeholders involved, and a discussion of the vision's history. A technology plan's vision may be a separate district vision for technology, or a restatement of the district's strategic vision with an explanation of how the technology plan supports the district vision.</i> • <i>The vision is a clear, unique, shared statement of the principles and beliefs of an organization. While normally short (3 to 5 sentences), the vision should be sufficient to capture the community's "ideal" preferred future.</i> • <i>A technology vision that addresses the community's preferred future in the areas of community involvement, curriculum & instruction, professional development, and technology deployment is more easily supported by the Data Collection & Analysis and Action Plan.</i>

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<p>5. Data Collection & Analysis</p> <p>a. Data are used from multiple and varied sources including state assessments.</p> <p>b. A description of the process by which data were analyzed, gaps identified, and priorities determined is included.</p> <p>c. The data analysis considers each of the following:</p> <ol style="list-style-type: none"> 1) Current student achievement data for two or more years. 2) Student achievement data that are disaggregated according to the following sub-groups: low income, limited English proficiency (LEP), students with disabilities, racial/ethnic groups (Caucasian, Afro-American, Hispanic, Asian, and American Indian). 3) Educator qualifications. 4) Educator professional growth data and needs. 5) District technology infrastructure and inventory data. 6) Local strategic, school improvement, and technology plans. 7) Other district data at the district's discretion. 	<ul style="list-style-type: none"> • Provide description of the process that was used to collect and analyze data. • Provide documentation containing: <ul style="list-style-type: none"> ○ List of data instruments utilized ○ Summary of relevant data that directly supports the goals/strategies in Section 6 - Community Involvement, Curriculum and Instruction, Professional Development, and Technology Deployment and Sustainability ○ An analysis of the relevant data, summarized and logically organized into gaps, comparisons and trends used to develop goals and strategies in Section 6. • In addition to the data required in 5c, the following technology deployment and sustainability documents must also be considered in data collection and analysis: <ul style="list-style-type: none"> ○ Infrastructure Design ○ Electrical Capacity ○ Hardware inventories ○ Software Inventories ○ Redeployment plan ○ Network Software ○ Technical Support ○ Previously approved technology plan 	<ul style="list-style-type: none"> • <i>Potential sources of data are: State and Federal Technology Plans, Student Assessment Results, School Improvement Plans, Strategic Plans, Surveys, Staff Development Plans, Budget Documents, Staff Qualification Information, Focus Groups, Interviews, Meeting Summaries, Inventories, Web Site Statistics, Usage Logs, Grant Applications, Correspondence, etc.</i> • <i>Data collection and organizing systems such as the School Improvement Planning Process, NextSteps and EnGauge are helpful tools for collection and analysis.</i> • <i>The professional development needs of all staff segments should be considered by the plan.</i> • <i>A review of educator qualifications might consider multiple areas like: certifications, education, experience, and skills in planning, curriculum development, pedagogy, classroom management, assessment, technology use/integration, etc.</i> • <i>School Improvement Plans (or extracts and summaries of the plans) are helpful supporting documents.</i> • <i>See 6d for requirements on technology deployment and sustainability documents.</i>

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<p>6. Action Plan (Goals and Strategies)</p> <p>a. The action plan considers the gaps between the current reality and district vision in four major goal areas (Community Involvement, Curriculum & Instruction, Professional Development, and Technology Deployment & Sustainability).</p> <p>b. Goals, strategies and/or activities include timeframe, person responsible, estimated cost, and funding source.</p> <p>c. Goals, strategies and/or activities are specific, measurable, achievable, results oriented, and have a target date.</p>	<ul style="list-style-type: none"> • These criteria apply to all four action-planning areas. 	<ul style="list-style-type: none"> • <i>Listing too many responsible persons can equate to no one being responsible. Consider listing the person or position most concerned with the success or failure of the specific strategy.</i> • <i>Example Action Plan Templates are available.</i>
<p>6a. Community Involvement</p> <p>a. Goal(s), strategies and/or activities serve to bring community members into the educational process.</p> <p>b. Goal(s), strategies and/or activities provide community benefits.</p> <p>c. Goal(s), strategies and/or activities establish and maintain awareness of why technology is important for today's learners.</p>	<ul style="list-style-type: none"> • The gaps identified during the data analysis, leading to the goals in this section, are clearly stated. • Goals, strategies and/or activities focus upon identified gaps/needs, including: <ul style="list-style-type: none"> ○ Community awareness ○ Community involvement in educational process ○ Community benefits 	<ul style="list-style-type: none"> • <i>Goals, strategies and/or activities may consider the educational community and the wider community.</i> • <i>Community involvement in all aspects of the planning process (e.g. planning, development, implementation, evaluation, revision) should be encouraged.</i> • Please note: <i>Component 7 - Assessment and Evaluation, will require a statement of Impact on Student Achievement for each component, and the following for each goal: Expected Results, Indicators of Success, Measurement Instruments, and Frequency of Analysis. You may find it helpful to determine this information as you create your goals in Component 6a.</i>
<p>6b. Curriculum & Instruction</p> <p>a. Goal(s), strategies and/or activities for improving teaching and learning</p>	<ul style="list-style-type: none"> • The gaps identified during the data analysis, leading to the goals in this 	<ul style="list-style-type: none"> • <i>Provide goals and strategies that focus on the Indicators of Engaged Learning, the</i>

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<p>include technology use, are supported by scientifically-based research, and have evidence of raising student achievement.</p> <p>b. Goal(s), strategies and/or activities demonstrate the alignment of curriculum, instruction and assessment with the Illinois Learning Standards, 21st Century Skills, and National Educational Technology Standards for Students.</p>	<p>section, are clearly stated.</p> <ul style="list-style-type: none"> • Goals, strategies and/or activities focus upon identified gaps/needs. • Scientifically-based research is referenced. 	<p><i>Six Essential Learnings, 21st Century Skills, NETS and linkages to the Illinois Learning Standards.</i></p> <ul style="list-style-type: none"> • <i>Scientifically-based research is research that involves the application of rigorous, systematic, and objective procedures to obtain reliable and valid knowledge relevant to education activities and programs. See “Scientifically-based Research” in the glossary for further explanation and links to sites providing sbr.</i> • <i>21st Century Skills include Digital Age Literacy, Inventive Thinking, Effective Communications, and High Productivity. See http://www.ncrel.org/engage.</i> • <i>See the glossary and www.ncrel.org for an explanation of Engaged Learning, an ISBE sponsored program for improving student achievement through technology use and the Six Essential Learnings.</i> • <i>The Illinois Learning Standards are available online at www.isbe.net.</i> • Please note: <i>Component 7 - Assessment and Evaluation, will require a statement of Impact on Student Achievement for each component, and the following for each goal: Expected Results, Indicators of Success, Measurement Instruments, and Frequency of Analysis. You may find it helpful to determine this information as you create your goals in Component 6b.</i>
<p>6c. Professional Development</p> <p>a. Strategies provide professional development that promotes teachers becoming highly qualified and supports highly qualified teachers in their content area.</p>	<ul style="list-style-type: none"> • The gaps identified during the data analysis, leading to the goals in this section, are clearly stated. • Professional development is tied to instructional goals. 	<ul style="list-style-type: none"> • <i>The plan addresses the qualities of professional development:</i> <ul style="list-style-type: none"> o <i>A variety of teaching models are used (e.g., collaborative inquiry, workshops, conferences, study groups, mentoring, coaching, etc.)</i>

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<p>b. Strategies make effective use of technology to support student learning and achievement of the Illinois Learning Standards and Applications of Learning.</p> <p>c. The plan uses National Staff Development Council professional development standards.</p> <p>d. Strategies target ongoing professional development for administrators, teachers, paraprofessionals, and other applicable personnel.</p> <p>e. Illinois Professional Teaching Standards (IPTTS), National Educational Technology Standards for Teachers (NETS-T), and Technology Standards for School Administrators (TSSA) are considered and incorporated into strategies.</p> <p>f. Strategies support state and local requirements for teacher re-certification.</p>	<ul style="list-style-type: none"> • Inclusion and opportunities for all levels and groups are planned (teachers, administrators, paraprofessionals and other applicable people). • The following evidence is provided (list of primary CPDU or graduate credit providers serves as evidence): <ul style="list-style-type: none"> ○ district is offering technology courses approved under the district's provider status for teacher recertification, and/or ○ technology professional development opportunities are offered through an approved provider. 	<ul style="list-style-type: none"> ○ <i>Skills and practices with technology are articulated and expected for students and staff (teachers, library media personnel, and administrators);</i> ○ <i>Incentives and evaluations are built into the learning expectations (e.g., Indicators of personal and organizational growth may include satisfaction surveys, frequency of use/application, classes or workshops completed, behavior changes, classroom changes, student achievement, etc. Results may be measured through rubrics, observation, case studies, portfolios, learning logs, standard assessments, etc.)</i> ○ <i>Inclusion and opportunities for all levels and groups are planned (teachers, administrators, school library media personnel)</i> • <i>The National Staff Development Council professional development standards are twelve standards for effective staff development organized into context, process and content categories. See www.nsd.org.</i> • <i>The Illinois Professional Teaching Standards include the general teaching standards, core Language Arts standards, core Technology standards and Content Area standards. See http://www.isbe.net/profprep.</i> • <i>See http://www.iste.org/standards for information on NETS-T and TSSA.</i> • Please note: <i>Component 7 - Assessment and Evaluation, will require a statement of Impact on Student Achievement for each</i>

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		<p><i>component, and the following for each goal: Expected Results, Indicators of Success, Measurement Instruments, and Frequency of Analysis. You may find it helpful to determine this information as you create your goals in Component 6c.</i></p>
<p>6d. Technology Deployment & Sustainability</p> <p>a. District online infrastructure and inventory summaries are completed.</p> <p>b. Strategies address infrastructure, connectivity, interoperability and equitable student/staff access to technology.</p> <p>c. Strategies consider appropriate life cycle management issues (e.g. redeployment, upgrades, salvage, disposal).</p> <p>d. The plan provides proof of adoption and review of school policies, procedures and guidelines for acceptable use, and shows compliance with any applicable Federal or State legislation, including the Children's Internet Protection Act (CIPA) and Section 427 of the General Education Provisions Act (GEPA).</p> <p>e. Strategies address technical support issues.</p>	<ul style="list-style-type: none"> • The gaps identified during the data analysis, leading to the goals in this section, are clearly stated. • District inventory is done online, and is verified through the letter from the Superintendent (see below). • District infrastructure is provided in the form of a map or narrative, includes details for each building, and is well articulated with plans for ongoing support. • Goals and strategies focus on identified gaps/needs, including: <ul style="list-style-type: none"> ○ Infrastructure ○ Equitable access ○ Connectivity ○ Interoperability • Letter from District Superintendent is included which verifies: <ul style="list-style-type: none"> ○ local policies ○ Acceptable Use Policy ○ CIPA ○ GEPA ○ completion of ISBE's most recent technology inventory survey • Goals/strategies support implementation of curricular goals in Section 6b. 	<ul style="list-style-type: none"> • <i>The plan should consider Total Cost of Ownership (TCO) & life cycle management issues. Additional information on TCO and online tools are available from the Consortium for School Networking at www.cosn.org.</i> • <i>Letter from the District Superintendent template is available.</i> • <i>Infrastructure design: E-rate requires assessment of telecommunication services, hardware, software and other services that will be needed to improve education services.</i> • Please note: <i>Component 7 - Assessment and Evaluation, will require a statement of Impact on Student Achievement for each component, and the following for each goal: Expected Results, Indicators of Success, Measurement Instruments, and Frequency of Analysis. You may find it helpful to determine this information as you create your goals in Component 6d.</i>

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<p>7. Assessment & Evaluation</p> <p>a. The assessment & evaluation plan identifies the methods to be used for evaluation.</p> <p>b. The plan identifies expected results/success indicators for each goal, strategy and/or activity.</p> <p>c. Data collection methods used include both quantitative and qualitative measures.</p> <p>d. The frequency and methods for technology plan assessment, evaluation, revision and reporting are described.</p> <p>e. The assessment & evaluation plan addresses how acquired technology is integrated into the school curriculum and affects student achievement.</p>	<ul style="list-style-type: none"> • Narrative or chart provides qualitative and quantitative methods and frequency of ongoing technology plan goal assessment/evaluation. • The following is provided for each goal (this information is optional for strategies and/or activities): <ul style="list-style-type: none"> ○ Expected Results ○ Indicators of Success ○ Measurement Instrument(s) ○ Frequency of Analysis • Narrative is provided on how acquired technology will be integrated into the curriculum and how the overall plan will impact student achievement. 	<ul style="list-style-type: none"> • <i>Provide a narrative or chart that identifies expected results/success indicators for Community Involvement, Curriculum & Instruction, Professional Development, and Technology Deployment and Sustainability by which the district/school will be able to judge the success of the goals of the plan.</i> • <i>Consider using varied measures and indicators when determining technology's impact upon student achievement (e.g. standardized assessments, surveys, student artifacts, etc.).</i>
<p>8. Timeline</p> <p>a. A timeline is defined for a minimum of three years.</p> <p>b. The timeline includes a summary list of major strategies for each year of the plan.</p>	<ul style="list-style-type: none"> • Three-year chart is provided that includes: <ul style="list-style-type: none"> ○ Overall timeline for each year of the plan ○ Summary list of all major activities for each year of the plan. 	<ul style="list-style-type: none"> • <i>Provide a chart that is well defined and includes an overall timeline for each phase of the plan and a summary list of all major activities for each phase of the plan.</i> • <i>The technology plan must be for a period of at least three years and be attainable.</i> • <i>Within each year, the timeline does not have to be divided into components (Community Involvement, Curriculum and Instruction, Professional Development, Technology Deployment and Sustainability). The timeline can be organized by date, providing a flow of activities from the beginning to the end of each year.</i>

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<p>9. Budget/Financial Plan</p> <ul style="list-style-type: none"> a. The overall budget reflects the priorities established in the plan. b. The budget plan details estimated costs and funding source for all strategies and years. c. Funding sources reflect linkages to appropriate state and federal programs. 	<ul style="list-style-type: none"> • The Budget/Financial Plan should attempt to coordinate local, state and federal funds. 	<ul style="list-style-type: none"> • <i>Listing more than one source of funds is acceptable (for example: Local Funds & CTG).</i>
<p>10. Appendices</p> <p>Appendices are present and provide information adequate to support the planning sections.</p>		<ul style="list-style-type: none"> • <i>Appendices may include: definition of terms, data collection/gap analysis support documentation, artifacts (notes from meetings, press releases, community fairs, etc.), and any other documents referenced in the technology plan.</i> • <i>While the appendices section is not evaluated in the review process, the presence or absence of supporting information that the appendices provide may influence the successful review of other areas of the plan.</i>

GLOSSARY OF TERMS AND ACRONYMS

21st Century Skills: A set of skills identified in the NCREL EnGauge planning process. 21st Century Skills include Digital Age Literacy, Inventive Thinking, Effective Communications, and High Productivity. See <http://www.ncrel.org/engauge>.

Blueprint: A document that supports school districts as they work with their communities in designing a plan for improving learning and bringing new opportunities to communities through technology and telecommunications.

CIPA: Children's Internet Protection Act. A federal act that requires schools to meet a defined set of Internet filtering and protection criteria in order to receive federal technology funds.

Components: The contents of a district's technology plan that enable them to meet state and Federal requirements.

Criteria: State and Federal (NCLB and FCC) requirements.

Closing the Gap (CTG): An Illinois State Board of Education technology funding program for school districts. CTG provides funding to districts on a recurring basis according to population and need indicators (e.g. average daily attendance and property equalized assessed valuation). CTG replaced the ISBE Technology Integration Program (TIP).

Current Reality: The district's current status with technology, based on an analysis of data collected from a variety of instruments.

District Technology & Learning Report Card: A planning document used by district's to assess the current technology and technology integration posture of the district. Evaluated areas include (see www.isbe.net or contact the local Learning Technology Center for a copy).

Educational Community: Students, teachers, staff, administrators, parents, and representatives of educational organizations e.g., PTA/PTO, LSC, School Board, employees.

Engaged Learning: The indicators of Engaged Learning are:

- Learners will be energized by learning, responsible for their own learning, strategic and collaborative.
- Tasks will be challenging, authentic, and multidisciplinary.
- Assessment will be performance-based, generative, seamlessly interwoven with curriculum and instruction so that it is ongoing, and reflects equitable standards.
- Instructional models will be interactive, and generative.
- Learning context (conditions) in the classroom will be knowledge building, collaborative and empathetic learning environments.
- Grouping students by flexible, heterogeneous, and equitable means.
- Teacher roles include facilitator, guide, co-learner, and co-investigator.
- Student roles include explorer, cognitive apprentice, teacher, and producer of knowledge.

For more information about Engaged Learning, visit the North Central Regional Education Laboratory (NCREL) at www.ncrel.org.

EnGauge: A technology planning, implementation and assessment process sponsored by the North Central Regional Education Laboratory (see <http://www.ncrel.org/engauge>)

eLearning: A division of the Illinois State Board of Education that administers the Technology for Success Program. See <http://www.isbe.net/learn-technology>.

Equitable Access: Equal access to the technology tools and initiative.

ESEA: Elementary and Secondary Education Act (also known as “No Child Left Behind”). The full act can be found at www.ed.gov/legislation/ESEA02.

Expected Results: Articulated and meaningful goals representing what will be changed or different.

Gap: The difference between the current reality and the district’s vision for technology, based on data analysis from a variety of instruments.

Gap Analysis: The process of identifying the difference between an organization’s current posture or reality and the organization’s vision or preferred future.

GEPA: General Education Provisions Act. A federal act designed to help assure equitable access to and participation in federally funded programs by teachers and students with special needs.

Goal: A broad, general statement for closing the gap area, complete with timeframe. Goals are the achievement or milestones you reach as you make your way to your ultimate vision.

Guiding Comments/Questions: A description/explanation of each component of the technology plan to assist districts in meeting the criteria outlined in the Blueprint and Criteria.

Illinois Learning Standards: The Illinois Learning Standards (ILS) define what all students in all Illinois public schools should know and be able to do as a result of their elementary and secondary schooling in the core areas: English Language Arts, Mathematics, Social Science, Science, Physical Development/Health, Fine Arts, and Foreign Languages. The Illinois Learning Standards have not changed since their adoption in 1997. The Performance Descriptors and ILS-aligned Classroom Assessments were developed by Illinois teachers for Illinois teachers to enhance the ILS and to serve as resources to help teachers determine local performance expectations for the Illinois Learning Standards at each grade level. The ILS are online at www.isbe.net/ils.

Illinois Professional Teaching Standards: The Illinois professional education standards establish the:

- framework for the improvement of teaching and learning
- foundation for the design of educator preparation programs at colleges and universities
- criteria for the approval of preparation programs at colleges and universities
- basis for state certification tests; guidelines for the induction of novice teachers
- foundation for ongoing professional development.

Learning Technology Center (LTC): The Illinois State Board of Education established the Learning Technology Program (LTC) in 1995 to provide Illinois school districts with the technological resources to improve academic achievement and prepare students for the 21st Century. LTCs work in cooperation with the Regional Offices of Education and Intermediate Service Centers and higher education, special education and vocational education partners. LTC support of State Board of Education initiatives in K–12 schools includes:

- Individual assistance to help districts consider ways to close the achievement gap using technology.
- Technology planning to guide districts through the development and peer review approval process.
- E-rate application.
- No Child Left Behind Ed Tech grant writing and support.
- Expertise to handle network issues including security, virus protection and website filtering.
- Network design and redesign of existing networks.
- E-mail and web sites for schools.
- Professional development to help educators integrate technology into classroom instruction.
- Workshops and Administrators' Academy on legal issues and intellectual property.
- Data collection and analysis to identify future technology needs.
- Leverage of national, state, regional and local resources to benefit schools.
- Support for statewide events: TECH 2003, Illinois Education Technology Conference, Technology Conference for Educators and other special events and projects.

NETS: National Educational Technology Standards. Sets of standards created by the International Society for Technology in Education (ISTE). The NETS standards are divided into standards for teachers (NETS-T) and standards for students (NETS-S). ISTE has also developed the Technology Standards for School Administrators (TSSA). See www.iste.org.

NCLB: "No Child Left Behind," an alternative name for the federal Elementary and Secondary Education Act (ESEA).

NCREL: North Central Regional Education Laboratory (see www.ncrel.org).

NextSteps: A collection of data collection, analysis and planning tools designed to assist organizations with the technology planning process.

Peer Review: A process that allows for evaluation of the district's technology plan by a facilitated team of independent reviewers. A peer review team uses the School District Blueprint and Criteria as the criteria for the review.

Phase: A segment of time to be determined by the district based on variables (funding, technology, deployment, professional development, etc.).

Progress Guidelines: The 1997 criteria used by peer reviewers to determine at what level a district's technology plan meets state and Federal requirements.

Six Essential Learnings in a Technological Society: Technology is defined to be the combination of human imagination, inventiveness and the electronic/optical tools to transform ideas into reality. Effective use of information and technology will require students to develop new roles in living, learning and working in an increasingly complex and information-rich society. The following essential learnings for technology are fundamental to the work of the Illinois State Board of Education as they develop content standards, performance standards, and assessments for all academic areas.

- The student as information seeker, navigator and evaluator. The student recognizes and values the breadth of information sources, browses those sources, differentiates and selectively chooses sources based on soundness and relevancy, and retrieves appropriate information/data using all forms of electronic/optical media, technology and telecommunications.
- The student as critical thinker, analyzer and selector of information and technologies appropriate to the task. The student uses problem-solving techniques and technology tools to review information and data from a variety of sources; analyze, synthesize and evaluate it; and then transform the myriad of ideas, data and information into useful information and knowledge. During this process the student discriminates among a variety of technologies and electronic/optical media to extend and expand his/her capabilities.
- The student as creator of knowledge using information resources and technology. The student, both individually and as a successful member of a team, constructs new meaning and knowledge in all content areas, combining and synthesizing different types of information through technology, telecommunications and computer modeling/ simulations.
- The student as effective communicator using a variety of appropriate technologies/media. The student creates, produces and presents ideas, stories and unique representations of thoughts through a variety of electronic/optical media by analyzing the task before him/her, the technology tools available, and appropriately selecting and using the most effective tool(s)/media for the purpose and audience.
- The student as a technologist. The student develops the confidence, competence, information management strategies and sufficient technical skills to successfully install, setup and use the technology and telecommunications tools in his/her daily life, work situations and learning environments.
- The student as a responsible citizen in a technological age. The student understands the ethical, cultural, environmental and societal implications of technology and telecommunications, and develops a sense of stewardship and individual responsibility regarding his/her use of technology, media and telecommunications networks.

School and District Report Cards: An annual report released by ISBE that provides school status and student performance data in several categories including student achievement and demographics. See <http://206.166.105.128/ReportCard/rchome.asp>.

School Improvement Plan: School improvement planning is an ongoing process for coordinating programs, activities and budgets and maximizing human, material, fiscal resources. Illinois Schools have been required to complete a school improvement plan (SIP) since 1986. See www.isbe.net/sos/improvement.

Scientifically Based Research: Research that involves the application of rigorous, systematic, and objective procedures to obtain reliable and valid knowledge relevant to education activities and programs; and includes research that:

- employs systematic, empirical methods that draw on observation or experiment;
- involves rigorous data analyses that are adequate to test the stated hypotheses and justify the general conclusions drawn;
- relies on measurements or observational methods that provide reliable and valid data across evaluators and observers, across multiple measurements and observations, and across studies by the same or different investigators;
- is evaluated using experimental or quasi-experimental designs in which individuals, entities, programs, or activities are assigned to different conditions and with appropriate controls to evaluate the effects of the condition of interest, with a preference for random-assignment experiments, or other designs to the extent that those designs contain within-condition or across-condition controls;
- ensures that experimental studies are presented in sufficient detail and clarity to allow for replication or, at a minimum, offer the opportunity to build systematically on their findings; and
- has been accepted by a peer-reviewed journal or approved by a panel of independent experts through a comparably rigorous, objective, and scientific review.

Scientifically-based research resources can be found at:

- Illinois State Board of Education - <http://www.isbe.net>
- Center for Applied Research in Educational Technology – <http://caret.iste.org>
- American Association of School Administrators – <http://www.aasa.org>
- State Educational Technology Directors Association – <http://www.setda.org>
- US Department of Education – <http://www.ed.gov>
- Children and Computer Technology – http://www.futureofchildren.org/pubs-info2825/pubs-info.htm?doc_id=69787
- Educational Technology Strategies – <http://www.learner.org/edtech>
- ERIC Clearinghouse on Information and Technology – <http://www.ericit.org> (*Click on the Research-Ed Tech link to access research-based materials.*)
- The Learning Return on Our Educational Technology Investment – <http://www.wested.org/cs/wew/view/rs/619>
- National Leadership Institute Toolkit – <http://www.setda.org/nli2002/CD/index.htm>
The State Educational Technology Directors Association (SETDA) is a group of technology directors and staff representing the departments of education from all fifty states, the District of Columbia, and the Bureau of Indian Affairs. Since the passage of NCLB, this group has hosted a National Leadership Institute with the purpose of developing the *SETDA National Leadership Institute Toolkit—States Helping States to Implement No Child Left Behind*. Released recently, this toolkit provides support in

five areas: Scientifically Based Research, Technology Literacy Assessment, Common Data Elements, Evaluating Effective Teaching, and the National Education Technology Plan. Read the section on scientifically based research to learn more about what it is and what steps districts must take when designing their own studies.

- Regional Educational Laboratories – <http://www.nwrel.org/national>
- Research on Computers and Education: Past Present and Future – <http://www.esd189.org/tlp/images/TotalReport3.pdf>
- Teaching, Learning, and Computing – http://www.crito.uci.edu/tlc/html/tlc_home.html

Stakeholder: Anyone who has a vested interest in the operations and functions of a school district. This could be anyone in the geographic boundaries of the school district and include: taxpayers, business/industry/agricultural entities, cultural groups, service groups, special populations, and any other person or group who directly or indirectly pay for support of or use the services of the school district.

Strategy: An activity that leads to the accomplishment of the goal. Key milestones by which you will make and judge progress towards your destination (goal).

Success Indicators: Identified indicators telling what to look for when goals are achieved.

Technology Plan: A three year document that addresses all components of the Illinois State Board of Education's School District Technology Plan Blueprint and Criteria.

Timeframe: A specific period of time e.g., Jan 03-Feb 04.

Timeline: A composite of the timeframes with the corresponding strategies for all phases of the three-year technology plan.

Total Cost of Ownership (TCO): A process of determining the costs associated with a network of computers or technology equipment. "Ownership" in this context includes all of the costs associated with using and maintaining networked computers, no matter whether an organization owns or leases them. TCO traditionally also includes calculations of costs that may not turn up in a budget, but that can still have an impact on operations--for example, when employees must take time out of their day to address their own technology support problems. See <http://www.classroomtco.org>.

TSSA: Technology Standards for School Administrators. See **NETS** above.

Vision: A vision is a clear, unique, owned statement of the principles and beliefs of an organization. A vision statement should be three to five sentences long and capture the community's "ideal" preferred future. The vision should articulate the stakeholders' key principles and beliefs.

Wider Community: Composed of representatives of community organizations, business, cultural institutions, institutions of higher education, adult literacy providers, public libraries and other community.