

CONNECTICUT STATE DEPARTMENT OF EDUCATION

EDUCATIONAL TECHNOLOGY PLAN

July 1, 2009 – June 30, 2012



ED 616

Section 254(h)(1)(B), of the Telecommunications Act of 1996, and FCC Order 97-157, Paragraph 573
Elementary and Secondary Education Act (ESEA) 20 U.S.C. § 6777

**Prepared by the Weston Board of Education
Weston, Connecticut**

Published: May 2009

Submissions to RESCs for review due before March 9, 2009

Submission to SDE due June 15, 2009

CONNECTICUT STATE DEPARTMENT OF EDUCATION

Mark K. McQuillan
Commissioner of Education

“The State of Connecticut Department of Education is committed to a policy of equal opportunity/affirmative action for all qualified persons and does not discriminate in any employment practice, education program, or educational activity on the basis of race, color, national origin, sex, disability, age, religion or any other basis prohibited by Connecticut state and/or federal nondiscrimination laws. Inquiries regarding the Department of Education's nondiscrimination policies should be directed to the Equal Employment Opportunity Manager, State of Connecticut Department of Education, 25 Industrial Park Road, Middletown, Connecticut 06457, (860) 807-2071.”

AN EQUAL OPPORTUNITY/AFFIRMATIVE ACTION EMPLOYER.

TABLE OF CONTENTS

OVERVIEW OF EDUCATIONAL TECHNOLOGY PLANNING	1
EDUCATIONAL TECHNOLOGY PLAN APPROVAL PROCESS	3
COVER PAGE	4
TECHNOLOGY PLAN PREPARATION CHECK-OFF PAGE	5
LEA FEDERAL GRANT PROGRAM COMPLIANCE FORM	6
DISTRICT’S CURRENT STATUS	7-15
LEA Profile	7
Technology Planning Committee	8-11
Vision Statement	12
Needs Assessment	12-15
PLAN IMPLEMENTATION: ADDRESSING STATE AND DISTRICT GOALS	16-32
Technology Funding Sources and Costs	33-38
CHILDREN’S INTERNET PROTECTION ACT (CIPA) CERTIFICATION	39
APPENDIX A: Educational Technology Planning Toolkit	40
APPENDIX B: Technology Plan Review Guide	41
APPENDIX C: Optional Reporting	42
APPENDIX D: Optional Reporting: Benchmarks	43-72
APPENDIX E: Optional Reporting: District Technology Competency Survey	73-93

OVERVIEW OF EDUCATIONAL TECHNOLOGY PLANNING

What skills, attitudes and attributes do our students need to succeed in our 21st century, information intense society?

Literacy in the 21st century requires more than the ability to read, write and compute. The State Board of Education believes that every student must develop strong technological skills and continually use them in order to function adequately in our 21st century world. Connecticut schools must ensure that technology resources are integrated across the curriculum in PK-12 and become part of the fabric of instruction. Students must use appropriate technologies to access worldwide resources in order to become more productive learners as part of their regular classroom routine. They must be able to use the many forms of technology to access, understand, manage, interpret, evaluate and create information. They also must be able to analyze information for content, relevancy and accuracy, and be able to present that information in a variety of formats, including those with technology platforms.

An education that is technologically rich produces high school graduates with the tools, competencies and level of sophistication necessary to be successfully employed in an ever-changing global economy. Such an education enables all students to understand and use current and emerging technologies in their personal, academic and work environments. For many students, especially those with disabilities, technology often provides access to the general curriculum and allows them to perform tasks or demonstrate skills they would otherwise be unable to do.¹

In order to help students be successful in a technologically rich economy:

- educational leaders must establish a vision for this transformed view of teaching and learning, and they must model this transformation in their own learning and work experiences;
- learners and their families must have equal access to tools that support their learning;
- the locus of control for learning must shift from teacher-directed to student-directed learning;
- learners must master the information literacy skills to access, investigate and apply information;
- every classroom in Connecticut must be connected to the statewide network with access to digital resources and curricula;
- learners must demonstrate their understanding and skills relative to measurable performance standards; and
- technology must be a vital link among the staff, students, parents and the expanded community.²

¹ Connecticut State Board of Education Position Statement on Educational Technology and Information Literacy, 12/4/04

² CAPSS Technology Position Statement, 12/14/01

This template is designed to help every school district use technology effectively by developing a comprehensive educational technology plan that addresses: district strategic initiatives, curriculum development and implementation, professional development, infrastructure, hardware, technical support, software, community involvement, fiscal planning, data management, monitoring and evaluation as they relate to the teaching and learning process.

High-quality comprehensive, educational technology plans must be collaborative and include ideas and suggestions from all members of the educational community. These stakeholders may include: faculty, staff, parents, students, and others. The planning process must be a shared activity that not only involves schools and school districts, but also the community-at-large. Resources and links have been provided in the appendices to assist in the development of local educational technology plans. Please refer to them as you begin the planning process.

EDUCATIONAL TECHNOLOGY PLAN APPROVAL PROCESS

1. Complete your local technology plan using the template that follows on pages 5-21.
2. Once completed, your local technology plan must be reviewed by your Regional Educational Service Center (RESC) before submission to the Connecticut State Department of Education (CSDE). Submit *two hard copies* of your plan by March 9, 2009, to the following RESC staff for an initial review.

RESC Region	Staff	Phone	Fax	Email
ACES	Barbara Haeffner	203-407-4418	203-407-4590	bhaeffner@aces.org
CES	Esther Bobowick	203-365-8883	203-365-8878	bobowice@ces.k12.ct.us
CREC	Doug Casey	860-524-4092	860- 246-3304	dcasey@crec.org
EASTCONN	Jane Cook	860-455-0707	860-455-0691	jcook@eastconn.org
Education Connection	Jonathan Costa	860-567-0863	860-567-3381	jcosta@educationconnection.org
LEARN	Karen Urgitis	860-434-4800	860-434-4837	kurgitis@learn.k12.ct.us

3. When your local plan has been reviewed, necessary revisions have been completed, and it has been signed off by your Superintendent or director and by the RESC reviewer*, submit the plan to your local board for approval.
4. Once the plan has received local board approval, submit a hard copy and a CD-ROM version of your plan by June 15, 2009, for final review/state certification.

Send to:

Arthur Skerker
Connecticut State Department of Education
165 Capitol Avenue – Room 215
Hartford, CT 06106

5. Upon review and approval by the CSDE, a letter of state certification will be sent by the CSDE to the superintendent.

* *The RESC reviewer's task is not to evaluate your technology plan but to check it for completeness. Once a plan has received the RESC reviewer's signature (and your board's approval) it is ready for submission to the state.*

Cover Page

EDUCATIONAL TECHNOLOGY PLAN – July 1, 2009-June 30, 2012

District/Agency:	Weston Public Schools	
LEA Code:	157	
Technology Plan Contact:	Mr. Erik Haakonsen, Director of Technology	
Phone:	203-291-1400	
Fax:	203-291-1420	
Email:	erikhaakonsen@westonk12-ct.org	
Address:	24 School Road, Weston, Connecticut 06883	
Name of Superintendent or Director:	Jerome R. Belair	
Email:	jerrybelair@westonk12-ct.org	
Signature of Superintendent or Director:		Date:
Date Submitted to Board of Education:	May 2009	
Date Approved by Board of Education:		

For RESC/SDE Use Only:

RESC Regional Reviewer:		Date:
RESC Recommendation for Approval:	Yes / No / Conditional	Date:
CSDE Authorization:		Date:

Technology Plan Preparation Check-Off Page

The submitted plan has the following:

- ⊗ Cover Page
- ⊗ Technology Plan Preparation Check-Off Page
- ⊗ LEA Federal Grant Program Compliance Form
- ⊗ LEA Profile
- ⊗ Technology Planning Committee
- ⊗ Vision Statement
- ⊗ Needs Assessment
- ⊗ Goal 1
- ⊗ Goal 2
- ⊗ Goal 3
- ⊗ Goal 4
- ⊗ Goal 5
- ⊗ Goal 6
- ⊗ Goal 7
- ⊗ Technology Funding Sources and Costs
- ⊗ Children's Internet Protection Act (CIPA) Certification
- ⊗ Optional Reporting

Signature of Authorized LEA Agent

Date

LEA Federal Grant Program Compliance Form

Weston Public Schools, Weston, Connecticut

Local Education Agency (LEA) submitting this plan.

Developing a comprehensive technology plan based on the educational goals of the school system will ensure that the most appropriate technologies are effectively infused into your instructional and/or administrative programs. Thorough planning also ensures that all parties have equitable access and achieve the greatest benefit from routine use of educational technology. The comprehensive technology plan should demonstrate clear targets for technology use, spell out desired goals for learners, create visions for future directions, build "buy-in" from stakeholders, and demonstrate to those who might provide funding that a district or charter holder is ready to act.

School districts, consortia or charter schools (LEAs) who apply for technology funding through any Federal grant program are required to have developed a comprehensive, three-year plan, which outlines how the agency intends to utilize and integrate educational technology.

The applying agency (check all that apply)

is compliant with the provisions of the Children’s Internet Protection Act (CIPA) [20 U.S.C. § 6777]

will be CIPA compliant by this date. _____

has applied for E-Rate Funding for FY 2008.

The LEA’s comprehensive technology plan must be approved by the local board of education.

Date the plan was approved: _____

OR

Date the plan is to be submitted for board approval: May 2009

Certified by:

Signature of Superintendent or Director

Date

Jerome R. Belair
Printed Name of Superintendent or Director

LEA Profile

This information should provide a “snapshot” of your district and help planners and reviewers to understand areas of need. This information will also assist the CSDE to establish priorities in the provision of resources to districts. The CSDE is particularly interested in the capability that each LEA has to access resources that will be placed onto the Connecticut Education Network (CEN). The new questions about technological literacy and professional development are asked as a result of additional federal reporting requirements.

LEA NAME:	
How many Grade 8 students were evaluated for technological literacy, based on your district's standards, during the 2007-08 school year?	180
Based on that evaluation, how many of those students were considered technologically literate?	201
How many hours of technology related professional development were offered to certified educators in 2007-08? <i>(Include workshop hours that are offered to all of your educators-both teachers and administrators. These sessions may be online and may include full-day or partial-day sessions provided by RESC personnel. Although both mentoring and coaching are considered very effective methods of offering pd, do not include any of those hours.)</i>	150 hrs.
How many hours of technology related professional development were offered to administrators in 2007-08? <i>(Count only those pd hours offered specifically for administrators.)</i>	35 hrs.
What fraction of your certified staff in Grades K-8 does your district consider technologically literate? <i>(Do not reduce the fraction to lowest terms; the fraction's denominator should reflect the actual number of professional K-8 staff. For example, if out of 120 certified staff, 110 are considered technologically literate-the answer would be 110/120.)</i>	See Appendix D
What fraction of your certified staff in Grades 9-12 does your district consider technologically literate? <i>(Do not reduce the fraction to lowest term. The fraction's denominator should reflect the actual number of professional 9-12 staff.)</i>	See Appendix D

When filling out the table below, please consider the following conditions:	
<ul style="list-style-type: none"> ▪ the number and percentage of each grade level of students that can have high-speed internet access at the same time; ▪ that students are grouped in clusters of no more than thirty and no less than ten; and ▪ that students remain in their own school. 	
Maximum number of Grade 4 students who could be accommodated under the above conditions.	500
Percentage of Grade 4 students who could be accommodated under the above conditions (number accommodated/total number of Grade 4 students).	100%
Maximum number of Grade 6 students who could be accommodated under the above conditions.	500
Percentage of Grade 6 students who could be accommodated under the above conditions (number accommodated/total number of Grade 6 students).	100%
Maximum number of Grade 8 students who could be accommodated under these conditions.	500
Percentage of Grade 8 students who could be accommodated under the above conditions (number accommodated/total number of Grade 8 students).	100%
Maximum number of Grade 10 students who could be accommodated under the above conditions.	500
Percentage of Grade 10 students who could be accommodated under the above conditions (number accommodated/total number of Grade 10 students).	100%

TECHNOLOGY PLANNING COMMITTEE

The Technology Planning Committee should represent all stakeholders. Development of the technology plan and implementation of the plan should enable parents, educators, students and community members to benefit from the investment in technology and all should have representation on the committee.

The Technology Planning Committee core group will be made up of representatives from the following groups:

- Director of Technology
- Superintendent or Assistant Superintendent
- Director of Facilities
- CIL Representative
- Tech Mentor Representative (1 from K-5 and 1 from 6-12)
- Library Media Specialist Representative
- Student Representative (School)
- Parent Representative
- Board of Ed Representative
- Principals Representative
- Teacher Representative

Member	Title	Constituency Represented
Erik Haakonsen	Director of Technology	District Staff
Jerry Belair	Superintendent	District Administration
Thomas Scarice	Assistant Superintendent	District Administration
Jo-Ann Keating	Director of Finance & Operations	District Administration
Lois Pernice	Director of Pupil Services	District Administration
Daniel Clarke	Director of Facilities	District Staff
Sydney Girardi	CIL - Fine/Performing Arts K-12	High School Staff
Christina Donigian	CIL - World Language K-12	Middle/High School Staff
John Drummond	CIL - Math/Science 6-12	High School Staff
Doris Fiotakis	CIL - Language Arts/English 6-12	High School Staff
Kara Sweezey	CIL - Social Studies 6-12	High School Staff
Linda Froschauer	CIL - Math/Science K-5	Hurlbutt/Intermediate Staff
Malvene Ravage	CIL - Language Arts/Social St K-5	Hurlbutt/Intermediate Staff
Kim Kus	CIL - Physical Education/Health K-12	Intermediate School Staff
Nancy St. Clair	CIL - Guidance 9-12	High School Staff
Richard Blozie	Tech. Mentor Teacher	High School Teaching Staff
Linda Lazar	Tech Mentor Teacher	Elementary Teaching Staff
Kathryn Cioffi	Tech Mentor Teacher	Middle School Teaching Staff
Jane Sabini	Tech Mentor Teacher	Intermediate Teaching Staff

Member	Title	Constituency Represented
Sharon Rodko	Library/Media Specialist	Elementary School Staff
Storm Snaith	Library/Media Specialist	Intermediate School Staff
Maxine Petrucelli	Library/Media Specialist	Middle School Staff
Larry Schackner	Library/Media Specialist	High School Staff
High School Student Grade 12	Zak Goldmanscher	Student Body
Jim Valovich	Network Administrator	Network Systems
Martina Kaeslin	Parent	Community
David Lustberg	Parent	Community
Ellen Uzenoff	Board of Ed Chairperson	BOE member
Philip Schaefer	Board of Ed Vice Chairperson	BOE member
Lyn Kimberly	Board of Ed Secretary	BOE member
Les Wolf	Board of Ed member	BOE member
Joseph Fitzpatrick	Board of Ed member	BOE member
Richard Bochinski	Board of Ed member	BOE member
Dana Levin	Board of Ed member	BOE member
Lisa Wolak	Weston High School Principal	District Staff
Kenneth Craw	Weston Middle School Principal	District Staff
Mark Ribbens	Weston Intermediate School Principal	District Staff
Joanna Genovese	Hurlbutt Elementary School Principal	District Staff

PROPOSED
TECHNOLOGY MEETING DATES
(7/1/2009 – 6/30/2012)

*All meetings to be held in the
Central Office Annex Conference Room*

Technology Committee
Four (2-hr) meetings / per fiscal year
All meetings 9:00-11:00 AM

Thursday, September 17, 2009
Thursday, December 17, 2009
Thursday, March 18, 2010
Thursday, June 3, 2010

Thursday, September 16, 2010
Thursday, December 16, 2010
Thursday, March 17, 2011
Thursday, June 2, 2011

Thursday, September 15, 2011
Thursday, December 15, 2011
Thursday, March 15, 2012
Thursday, June 7, 2012

CIL's & Director of Technology
Three (2-hr) meetings / per fiscal year
All meetings 9:00-11:00 AM

Wednesday, September 9, 2009
Wednesday, January 13, 2010
Wednesday, May 19, 2010

Wednesday, September 8, 2010
Wednesday, January 12, 2011
Wednesday, May 18, 2011

Wednesday, September 7, 2011
Wednesday, January 11, 2012
Wednesday, May 16, 2012

Library/Media Specialists & Director of Technology
Three (2-hr) meetings / per fiscal year
All meetings 9:00-11:00 AM

Tuesday, October 6, 2009
Tuesday, February 2, 2010
Tuesday, May 25, 2010

Tuesday, October 5, 2010
Tuesday, February 1, 2011
Tuesday, May 31, 2011

Tuesday, October 4, 2011
Tuesday, January 31, 2012
Tuesday, May 22, 2012

Principals, Tech Integrators & Director of Technology

Three (2-hr) meetings / per fiscal year

All meetings 9:00-11:00 AM

Wednesday, October 21, 2009

Wednesday, January 27, 2010

Wednesday, April 28, 2010

Wednesday, October 20, 2010

Wednesday, January 26, 2011

Wednesday, April 27, 2011

Wednesday, October 19, 2011

Wednesday, January 25, 2012

Wednesday, April 25, 2012

The Committee must:

- *write a description of the technology committee's role in developing, implementing and evaluating the technology plan. This description should include how committee members were selected and the role each is expected to play. Tentative plans for scheduling meetings for the next school year should also be included;*

The Weston Technology Committee will be responsible for monitoring, adjusting and implementing the Weston Technology Plan. While the many of the committee listed above contributed to the development of the new plan through a variety of research and develop tasks and activities, other members are new to the committee for next year. In addition to members listed above, the Technology Plan was also developed with the assistance of the district Curriculum Council, school-based technology mentor teachers and library/media specialists. The new Technology Plan was reviewed by members representing various constituencies and will be on the Board of Education agenda for May of 2009. The new committee will have its first meeting in May of this year to begin its focus on the implementation of the new plan. The plan is for the overall committee to meet four times per year with four sub-committees meeting four times a year as well. The majority of research work and planning will be done in sub-committees, presented to the committee at large and then to district constituencies. It should be noted that the expectation is that sub-committee membership will extend beyond the overall Technology Planning Committee and will include members from all staff constituencies and the community. The Technology Planning Committee will annually evaluate the degree of achievement of the plan and its effectiveness. Staff assessments both written surveys and focus groups will be conducted. The committee will also review student products, teacher planning and curriculum documents and various benchmarks to provide feedback and assessment of plan implementation. These documents will also help to adjust and revise the plan. Our goal is to implement a plan that involves stakeholders in all schools and all areas.

- *describe the evaluation strategies (e.g., interviews, questionnaires, classroom observations, teacher-driven action research projects, analysis of student products or scores) that will be used to provide the data needed to address your evaluation questions;*

The evaluation strategies are under development in a number of areas and the finding will be worked into our overall technology plans as we move forward. Please see Appendix D for the District Frameworks we have outlined for technology integration. Our goal is to blend technology seamlessly into the curriculum over the next five years.

VISION STATEMENT

“It is the mission and purpose of the Weston Public Schools Technology Plan to provide all students and staff with the tools, skills and technical literacy necessary to support learning and the learning process to prepare our students for citizenship in the 21st Century. The integration and utilization of technology into all curricular areas are essential in supporting in-depth student learning. To facilitate our goal of continuous improvement; we will strive to be proactive and continually improve, adjust, and modify our technology plan on a quarterly basis to remain technically sound, educationally prudent, and fiscal responsible.”

NEEDS ASSESSMENT

In this section you are to assess and describe your LEA’s **current technology status** in five categories: curriculum integration, professional development, equitable use of technology, infrastructure and telecommunications services, and administrative needs.

Curriculum Integration

- *When evaluating your needs, consider:*

Current curriculum strengths and weaknesses and the process used to determine these strengths and weaknesses;

Weston does not currently have a blended K-12 Technology curriculum and this is something we are working on within our ITL Meetings. We are in the process of creating the metrics and implementation timelines using the Frameworks provided in Appendix D. Additionally, the Technology Team will be working with each curriculum area to help facilitate the integration of technology into the curricular as each department rolls thru its five year realignment process. We feel this is the best time to implement the wholesale changes. We have installed 70 Smartboards for the start of this year and will have another 25 installed prior to the start of next year and these technologies are being integrated as teachers complete PD.

How curriculum strategies are aligned to state standards;

Currently the curriculum that each school implements has been aligned to the Connecticut standards to some degree. The problem lies in accountability and inconsistency across the District. The state has updated its standards and ISTE has updated its standards. Teachers want to follow the ISTE, AASL standards and NETS-S when developing curriculum because they represent the best and most current researched findings on technology in education. Weston needs to revise its own standards to reflect more current research, but it also needs the state to revise its standards to match NETS-S.

The current procedures for using technology to address any perceived curriculum weaknesses.

Teachers, Administrators, and Staff look to find ways to make technology work as a tool to correct any perceived weaknesses. The hardware and software are purchased via a process that involves the Staff, Curriculum Instructional leaders, Technology Department, and Technology Integrators who all review the software and hardware requests to make sure they meet all curricular and technical needs before they are purchased and deployed.

How teachers integrate technology into their lessons - including ways technology is presently used for entire classroom and for small group instruction.

Teachers use SmartBoards and various software and web based products to integrate technology into their lessons. Additionally, we have closed-captioned TV in two of our schools and have just completed the installation of two V-Brick streaming media systems that will allow teachers to access Videos on Demand, TV programming that is curricularly significant, and the rollout of 50 netbooks by the end of the school year will enable our Middle School to join the Elementary and Intermediate Schools with the ability to begin podcasting. Additionally, every school has computer labs and Computer on Wheels that allow teachers to give their students one to one computing or work in collaborative groups. The District has just purchased the first phase of wireless access points. We are committed to have all schools fully

wireless by the end of the 2009-2010 school year to better leverage our laptops and increase the ability of teachers to use them anywhere within the schools and common areas.

Professional Development

- *When evaluating your needs, consider:*
 - *the process the LEA uses for assessing the technology professional development needs of teachers, administrators and noncertified staff;*
 - *the technology professional development activities that have been offered to teachers; and*
 - *how the effectiveness of the professional development activities will be assessed.*

We are in the process of revising how we do Professional Development as we are looking to create two types of PD. One is relevant to emerging technologies. We use this model to support teachers who are getting new smartboards and will be using this process to train teachers on the new Power School modules they will be using for next year. We are also working on a three year technology training process that will acclimate teachers to the current technologies we have in the District and how they are to be used. The PD training continuum will be a program that gives CEU credits to teachers for completing core Technology PD training. Our goal is to get all staff and teachers a solid technology foundation they can take back into their classrooms and District Roles to improve their ability to use technology in their day to day activities. The framework will be attached to the Technology Plan once completed by the Technology Integrators and our effectiveness will be determined by the end users who will rate our class effectiveness.

Equitable Use of Technology

- *When evaluating your needs, consider:*
 - *the availability of technology to students and staff in the district – all students should have equal access to the technology;*
 - *the amount of time available for the use of technology by students and staff; and*
 - *a description of the types of assistive technology tools that are provided for students with disabilities where necessary/applicable.*

The following matrix **may** be used to determine the extent technology is available to staff.

	Please include information about the type and availability of staff access both on and off campus.
Administrators	Administrators have laptops and VPN access to all data from both on and off campus. Administrators also have PDA phones that give them real-time access to campus mail, meeting, and appointments.
Teachers (preschool)	All teachers have a computer in their classroom and we plan on implementing remote access via VPN or Sharepoint services by the end of the 2011 school year. Teachers will have access to all Student Data in and out of school for the 2009 School year and currently have access to their mail from home.
Teachers	All teachers have a computer in their classroom and we plan on implementing remote access via VPN or Sharepoint services by the end of the 2011 school year. Teachers will have access to all Student Data in and out of school for the 2009 School year and currently have access to their mail from home.
Noncertified staff	Have computers if needed and email available via the internet inside and outside of the District. Additional access via smartphones or VPN as needed.

The following matrix **may** be used to determine the extent technology is available to students.

	Please include information about availability in classrooms, the library-media center and all other areas where students have access. Mention the extent of supervised access before and after school.
Students (preschool)	One teacher computer, usually two student machine in each classroom, four Computer on Wheels available on an as needed basis. One computer lab and no student access in the Library. Usage is supervised.
Students (elementary)	One teacher computer, usually two student machines in each classroom, four Computers on Wheels available on an as needed basis. One computer lab and no student access in the Library. Usage is supervised. Smartboards in Grade 2 with Grade 1 and Grade 3 to be complete prior to start of 2009 school year. Grades 1 thru 5 to be completed by start of 2010 school Year.
Students (middle school)	One teacher computer, 20% of classrooms have student computers, 5 Computer on Wheels available on an as needed basis. Two computer labs and student access in the Library to desktops and laptops. Usage is supervised. Twenty-one SmartBoards installed with all classrooms to be completed by start of 2010 school year.
Students (high school)	One teacher computer, 25% of classrooms have student computers, 5 Computer on Wheels available on an as needed basis. Five computer labs and student access in the Library to 25 desktops and 25 laptops. Usage is supervised. 70% of classrooms have Smartboards.
Students (with disabilities)	Students have access to Technology as listed above or by IEP. We expect to standardize all Special Education software and hardware during the 2009 school year by migrating to Windows based systems k-12.

Infrastructure and Telecommunication

- *When evaluating your needs, consider:*
 - *the current technology infrastructure of each school in your district - explaining the type of data and video networking and Internet access that is available;*
 - *the effectiveness of the present infrastructure and telecommunication services that have been provided by the district; and*
 - *how E-Rate has allowed the district to improve or increase its technology infrastructure.*

We currently have a GB network in all buildings with redundant 2-4 GB backbone fiber runs between buildings. All switches are new HP layer III switches with multicasting enabled and layer III routing enabled. The District has 100MB of internet access to all our buildings that can be upgraded to a 1000MB connection if CEN allows us to upgrade. All our computers in the District have internet access via our Web filtering software and the CEN filtered network. We have four Technology Integration teachers who work with teachers to embed technology in the classroom and make technology more seamless to both teachers and students. We offer ongoing training through professional development and have trained over 70 teachers this past year in Smartboard use. We have 106 teachers with smartboards in their classrooms and all teachers manage and maintain a website for communication with students and parents inside/outside of school. As teachers are given new technology to use as part of their instruction, they are provided PD opportunities. The new technology is rolled up into their professional goals for the year; so administrators can monitor and offer corrective actions if needed. Our telecommunications plan is open ended and changes based on curricular and environmental needs. We have the ability to increase our internet bandwidth by 100% and can increase our inter-building connectivity by the same factor. Our current network infrastructure was rebuilt during the 2009 school year and our current network traffic is now utilizing less than 10% of our available bandwidth between buildings and inside buildings. We look to rollout our full V-Brick systems by the beginning of the 2010 school year and install another 30+ smartboards throughout the District. With the support of the Board of Education, teachers and staff, the Weston Education Foundation, and the School PTO's, we hope to continue to provide a high performing technology platform for the students and staff in Weston.

Administrative Needs

- *When evaluating your needs, consider:*
 - *how do administrative (certified and non-certified) staff use technology, including accessing data for decision-making, student information system reporting, communication tools, information gathering, and record keeping; and*
 - *the professional development opportunities that are available to administrative staff.*

We have made many strides this past year with technology for the Administration. We have rolled out VPN access for all Administrators so they have access to all their data at home and in the office and access to email via PDA phones which connect them in real-time to school mail, meetings, and alerts. We are also in the process of converting to Power School which will make student data and District reporting much more compact, relevant, and real-time for better understanding of what has happened and where we need to go. We upgraded our Accounting Software package this year and are looking to move toward employee self-service portals to reduce the paperwork required for payroll and time and attendance. Currently our PD for Administrators is in need of an overhaul, but we will be rolling out an aggressive PD schedule this Spring as we prepare for the Power School training and will continue the PD training for administrators next year with monthly training available for those in need.

PLAN IMPLEMENTATION

LEA Technology Goals and Strategies

The LEA technology plan should be aligned to the State Plan and include the State Goals. The LEA may include any additional goals that apply to their technology plan.

Goal 1: Improve student academic achievement through the use of technology in elementary and secondary schools.

Goal 2: Ensure that all educators are proficient in the use and integration of technology and ongoing professional development activities are provided.

Goal 3: Ensure that all K-12 educational institutions have the capacity, infrastructure, staffing, and equipment to meet academic and business needs for effective and efficient operations.

Goal 4: Ensure that K-12 resources are available for all students, regardless of race, ethnicity, income, geographical location, or disability, so they can become technologically literate by the end of eighth grade and achieve their academic potential.

Goal 5: Develop a continuous process of evaluation and accountability for the use of educational technology as: a teaching and learning tool, a measurement and analysis tool for student achievement, and a fiscal management tool.

Goal 6: Develop a schema of current and future financing requirements to support the LEA's Technology Plan.

Goal 7: Develop a telecommunications services plan that will support both instructional needs and administrative requirements.

Goal 1: Improve student academic achievement through the use of technology in elementary and secondary schools.

Your plan must:

- describe how the LEA will ensure all students have educational opportunities to achieve academic success through proven strategies of researched-based successful practices;
- describe how the LEA will address the [National Educational Technology Standards for Students](#);
- describe how the LEA will provide resources that reflect scientifically-based research and best practices focused on improving student achievement; and
- describe how the LEA will encourage the development and utilization of innovative strategies for the delivery of specialized or rigorous academic courses and curricula through the use of technology. Include any plans to promote technology-based distance learning opportunities to meet the educational needs of those who have limited access to such courses and curricula due to geographical isolation or insufficient resources.

<u>Elementary Objective</u>	<u>Strategy</u>	<u>Accountability Measure</u>	<u>Timeline</u>
Improve student academic achievement through the use of technology in elementary and secondary schools with a target of fully integrating technology into the academic curriculum.	In order to achieve Goal 1, Hurlbutt Elementary School has designated a part-time technology mentor to work with Curriculum Instructional Leaders, the media specialist, and grade level teachers in the development of technology-rich curriculum. The technology mentor and library media specialist are actively involved in curriculum revision that supports the seamless integration of technology.	As curricular areas are developed to reflect content standards and benchmarks, the Weston school district has also been committed to the revision of the Information Literacy Benchmarks. Over the past two years, technology mentors and library media specialists in the district have been revising Information Literacy benchmarks for Grades 2, 5, 8, and 12. Performance assessments are now being developed along with rubrics to assist in assessing Information Technology skills.	2011 School Year
Identify/provide skills that meet the ILT Benchmarks. Curriculum revision on cycle to provide technology-rich curriculum.	Work with ITL team in the development of Performance Assessments that align with the Benchmarks already developed for Grades 2, 5, 8, and 12. Work with CILs in the development of technology-rich curricular lessons. PD for teachers to implement technology integration.	Give performance assessments	2010 School Year

<u>Intermediate School Objectives</u>	<u>Strategy</u>	<u>Accountability Measure</u>	<u>Timeline</u>
1. Identify skill sets students require to be effective 21 st century learners	Weston Public Schools ITL (Information & Technology Literacy) team comprised of library media specialists and technology integrators has developed a Standards/Benchmarks Framework based on the State of Connecticut Information and Technology Literacy Framework	List of Skills presented	Complete by End 2009 School Year
2. ITL assessments will address both the District ITL Framework and the NETS	The ITL team, supported by the Assistant Superintendent of Curriculum and Instruction will develop performance assessments that measure student mastery of District ITL benchmarks and NETS benchmarks.	Mr. Scarice has indicated to the ITL team that a consultant has been hired to support us in this effort during the spring of the 2008-2009 school year.	Ongoing currently
3. Integrate ITL assessments into the general curriculum	Look at curriculum locations	Review if assessments are used.	2010

<u>Middle School Objectives</u>	<u>Strategy</u>	<u>Accountability Measure</u>	<u>Timeline</u>
1. Developed benchmarks for ILT skills for K-12 students.	<ul style="list-style-type: none"> Shared benchmarks w/ CILs to look for opportunities within curriculums to embed ILT skills. 	<ul style="list-style-type: none"> Make document available to all staff. 	2008-2009
2. Map where skills are currently being taught and assessed.	<ul style="list-style-type: none"> Meet w/ classroom teachers to determine where ILT skills are currently in the content areas. 	<ul style="list-style-type: none"> Develop curriculum map to organize where these skills are currently taking place within the content areas. 	2009-2010
3. Analyze Curriculum maps to determine where skills are NOT being taught within content areas.	<ul style="list-style-type: none"> Meet with teachers to share discreet skills which need to be embedded within curriculum. 	<ul style="list-style-type: none"> Determine best content areas to embed these skills. 	2010-2011
4. Provide staff with professional dev't opportunities to embed skills within the content areas and to develop assessment tools.	<ul style="list-style-type: none"> Provide a professional development program for staff. 	<ul style="list-style-type: none"> Staff will be able to assess students for ILT skills. 	2010-2011

<u>High School Objectives</u>	<u>Strategy</u>	<u>Accountability Measure</u>	<u>Timeline</u>
Evaluate proven strategies of research-based successful practices by grade level.	<p>Compile a list of proven strategies of research-based successful practices by grade level.</p> <p>Assess, modify, and implement ILT Benchmarks.</p> <p>Align benchmarks and standards with current and new curricular initiatives.</p> <p>Review, and adjust where necessary, assured experiences and benchmark assessments.</p>	Benchmarks complete.	2010
<p>Implement NETS-S 2007, NETS-T 2008, and NETS-A 2009.</p> <p>Review and update STATE and Weston's ILT frameworks.</p>	<p>Revise Weston's current standards to reflect changes in NETS-S 2007.</p> <p>Adopt and implement NETS-T 2008, and NETS-A 2009</p> <p>Develop, adopt and implement ILT standards.</p> <p>Develop and implement iSafe or comparable online safety curriculum.</p> <p>Identify, explore and implement innovative tools and practices to enhance student learning.</p> <p>Develop and implement formal, grade-specific technology assessment instruments to evaluate skills.</p>	Give grade assessments	2010
<p>Ensure that each student participates in an online experience before graduation.</p> <p>Provide Web 2.0 opportunities to foster innovative learning opportunities.</p>	<p>Develop online curricula for student body.</p> <p>Explore outside resources for online learning.</p> <p>Students will identify and choose the appropriate Web 2.0 application to help demonstrate their understanding of the</p>	Use Sharepoint services and modify District policies	2009

<u>High School Objectives</u>	<u>Strategy</u>	<u>Accountability Measure</u>	<u>Timeline</u>
	<p>subject matter.</p> <p>Develop common rubrics to assess student learning and understanding incorporating district benchmarks, NETS-S 2007 and new ILT benchmarks.</p> <p>Provide ongoing Web 2.0 PD for staff members.</p>		
Provide a central location, online or physical space, for storing exemplars and best practice materials for others to review.	Setup new teacher server	Server installed an activated	2009

Goal 2: Ensure that all educators are proficient in the use and integration of technology and ongoing professional development activities are provided.

Your plan must:

- describe how the LEA will provide all teachers, (including library-media specialists, bilingual and ESL teachers, special and alternative education teachers) non-instructional staff, principals and administrators, incentives to become technologically competent;
- describe how the LEA will monitor staff technological literacy. Indicate how the LEAs monitoring of technological literacy impacts professional development;
- describe how the LEA will provide specific research-based professional development opportunities to all staff; and
- describe how the LEA will provide specific professional development opportunities to all staff that demonstrates the research connecting student achievement and the use of technology.

<u>Elementary Objectives</u>	<u>Strategy</u>	<u>Accountability Measure</u>	<u>Timeline</u>
Ensure that all educators are proficient in the use and integration of technology and ongoing professional development activities are provided.	Hurlbutt Elementary School’s Technology Mentor is available to provide teachers with in-class, “just-in-time” professional development. On-going district professional development also provides teachers with web site development as a communication vehicle, United Streaming for curriculum integration, student information program, as well as use of the district’s on-line equipment and maintenance program.	During the 2008-09 school year, Hurlbutt Elementary School has installed 12 SMARTBoards in all Grade 2 classrooms and 2 Special Education classes. The focus for SMARTBoard professional development has been presented in stages: Introduction, Notebook Software review, and content/lesson development. In addition to these initial sessions, on-going monthly professional development has been provided to the SMARTBoard users. Grade 2 teachers are grouped into content disciplines to develop content-rich, SMARTBoard lessons/activities which are shared with all Grade 2 teachers which are readily available on the district server. This format of professional development has been very successful providing teachers with the time to develop meaningful lessons addressing content standards. For the 2009-10 school year, Hurlbutt Elementary School is planning to install SMARTBoards in all K-1 classrooms. The professional development for the K-1	2 0 1 1

<u>Elementary Objectives</u>	<u>Strategy</u>	<u>Accountability Measure</u>	<u>Timeline</u>
		teachers will be implemented in the same manner as this year: Introduction, Notebook Software review, and content/lesson development. On-going, monthly professional development will be instituted as well due to the success of our Grade 2 implementation.	
Survey/assure that staff meet CT State Teacher Competencies and Performance Assessments Curriculum Revision (on cycle) – to reflect technology integration	Continue with Hurlbutt’s PD model that provides monthly release time for technology (provide specific focus: SMARTBoard) Provide on-going PD for staff (individually/group) with existing and new technologies as well as implementation of technology into curriculum	Schedule yearly PD plan prior to start of school year.	Y a r l y P r o c e s s

<u>Intermediate Objectives</u>	<u>Strategy</u>	<u>Accountability Measure</u>	<u>Timeline</u>
1. Ensure that all teachers have the knowledge/skills to support the delivery of the ITL curriculum.	Provide professional development opportunities to ensure that all teachers meet the NETS for teachers	Technology PD and CEU credits as part of staff goals assessments.	Yearly Process
2. Monitor staff technological literacy to inform professional development in the area of technological competency.	PD and Training	On-line Surveys On-line Staff Assessments	Yearly Process
3. Provide ongoing technology-related PD as new technologies are implemented in district (i.e. PowerSchool, V-Brick, Smartboard)	Schedule and publish training schedule and make part of yearly professional goals.	Part of yearly review by Supervisors	Yearly Process

<u>Middle School and High School Objectives</u>	<u>Strategy</u>	<u>Accountability Measure</u>	<u>Timeline</u>
Provide staff with ongoing differentiated professional development opportunities	Provide release time and coverage for PD opportunities.	Did the release time and PD happen	Yearly Process

<u>Middle School and High School Objectives</u>	<u>Strategy</u>	<u>Accountability Measure</u>	<u>Timeline</u>
	<p>Provide PD based on annual needs assessment.</p> <p>Develop needs assessment instrument for staff.</p> <p>Provide funding and support for Tech Integrators to attend local, state, and national conferences and workshops that will help them maintain their expertise and expose them to emerging technologies.</p> <p>Incorporate 21st-century skills and pedagogy into appropriate PD opportunities.</p> <p>Administrators will model effective use of technology and pedagogy using current technology.</p>		
<p>Research monetary and non-monetary incentives to encourage staff support with PD</p>	<p>Identify incentives to encourage staff participation.</p> <p>Develop incentive plan.</p> <p>Utilize the CEN and Internet II for PD activities.</p>	<p>Tech Integrators to develop strategies going forward and implement new training initiatives.</p>	<p>2010</p>
<p>Student achievement and use of Technology</p> <p>Provide research based PD opportunities to staff.</p>	<p>Explore data driven PD opportunities based on individual and department needs.</p> <p>Use student data to gear PD opportunities for staff</p> <p>Use CWT data to develop technology-related PD opportunities.</p> <p>Integrate local, state, and national ISTE and ILT standards into any technology-based PD.</p> <p>Continue using Tech Integrator model to deliver differentiated</p>	<p>High School TI to develop and implement training in these areas.</p>	<p>2010</p>

<u>Middle School and High School Objectives</u>	<u>Strategy</u>	<u>Accountability Measure</u>	<u>Timeline</u>
	<p>instruction to staff and students.</p> <p>Offer ample technology PD opportunities for teachers to meet State mandate.</p> <p>Create CIL position for ILT group. This person will provide a voice in curriculum development and structure to the group.</p>		

Goal 3: Ensure that K-12 educational institutions have the capacity, infrastructure, staffing and equipment to meet academic and business needs for effective and efficient operations.

Your plan must:

- describe how the LEA will ensure that all facilities meet minimum standards of technology infrastructure and provide connectivity to the Connecticut Education Network (CEN);
- describe how the LEA will ensure continued maintenance and support of existing infrastructure and end user technology; and
- describe the specific provisions the LEA intends to make for the interoperability of the technologies. (Interoperability is the capability of the technology to be acquired to function compatibly with technologies that exist or will be acquired in the near future at the local and state level.)

<u>Objective</u>	<u>Strategy</u>	<u>Accountability Measure</u>	<u>Timeline</u>
Maintenance and Support	Onsite support staff & outsourcing of experts, databases, and backups. Centralized management of all systems.	Project completed.	End of 2010 School Year
Technology Infrastructure	We meet or exceed CEN standards.	At or above Standard	4 Year Replacement Plan
Interoperability	All SIF compliant products or open databases and best of breed or industry standard technology implementations.	Capabilities exist for us to become interoperable with any future local or state expectations.	4 Year Replacement Plan

<u>Middle School and High School Objectives</u>	<u>Strategy</u>	<u>Accountability Measure</u>	<u>Timeline</u>
Maintain equipment and infrastructure in a timely fashion. Provide adequate technology support as the hardware and infrastructure capacity is increased.	Continue to use School Dude to report problems. Hire additional staff to support break/fix issues. Decrease turnaround time for repairs submitted through School Dude. Increase and update switch capacity and bandwidth to the desktops. Ensure that the Web filtering is working properly and that teachers' Web needs are addressed in a timely fashion to support the curriculum.	Tech committee review of process quarterly to confirm we are hitting targets.	2010

<u>Middle School and High School Objectives</u>	<u>Strategy</u>	<u>Accountability Measure</u>	<u>Timeline</u>
	<p>Consult teachers or end users prior to purchasing hardware or software.</p> <p>Communicate with end users the impact new equipment or software will have on student learning.</p> <p>Decrease amount of network downtime which impacts student learning.</p>		



Goal 4: Ensure that K-12 resources are available for all students, regardless of race, ethnicity, income, geographical location or disability, so they can become technologically literate by the end of eighth grade and achieve their academic potential.

Your plan must:

- *describe how the LEA will ensure that students with special needs will have those needs addressed through technology;*
- *describe how the LEA will encourage innovative practices to support equity and reduce performance gaps based on race, national origin, sex and physical or mental disability;*
- *describe how the LEA will ensure that all students will become technologically literate by the end of eighth grade and how the LEA will ensure that all students maintain or increase their technology literacy and improve their academic achievement; and*
- *describe how the LEA will ensure equal access to all students, teachers, staff and administrators.*

<u>Objective</u>	<u>Strategy</u>	<u>Accountability Measure</u>	<u>Timeline</u>
Special Needs	Standardizing platforms and moving to Virtual Desktops to make software available throughout the District and at home.	Can students access their data throughout the District and at Home	Start of 2011 School Year
Technology Literacy	Students begin computer classes/exposure from Kindergarten thru 8 th grade. Technology is imbedded throughout the curriculum k-12.	Working on Metrics and Evaluation procedure as part of the K-12 ITL curriculum project.	Start of 2011 School Year
Technology Access	Computer ratio of 2:1 students to computers.	Do we meet targets?	2010

Goal 5: Develop a continuous process of evaluation and accountability for the use of educational technology as a teaching and learning tool, a measurement and analysis tool for student achievement, and a fiscal management tool.

Your plan must:

- describe how the LEA will evaluate and make changes to this plan on a yearly basis;
- describe how the LEA will provide access for students to take on-line tests, when available;
- describe how the LEA will provide professional development to enable teachers and administrators to use data from the CMTs, CAPT and district- or classroom-based formative and summative assessments to improve instruction;
- describe how the LEA will create, maintain or improve electronic resources to ensure administrative needs are addressed and solutions developed; and
- describe how the LEA will implement technology initiatives to improve student achievement.

<u>Middle School & High School Objectives</u>	<u>Strategy</u>	<u>Accountability Measure</u>	<u>Timeline</u>
Teaching & learning tool	Smartboard roll-out plan for elementary schools over the next 3 years. All K-2 Classrooms in elementary school to have smartboards by end of 2009 school year. WIS to be completed by end of 2010 school year and Middle to be complete by end of 2011 school year.	Track the test scores of the 2008-2009 second graders as they move through elementary grades. Under the current Smartboard implementation plan, they will be the class that has consistent exposure to content delivered via interactive whiteboard technology	2009-2010 through 2011-2012
Measurement & Analysis of Student achievement	Power School to capture all testing in the student information for reporting purposes	Is data available and reporting being used.	End of 2010 School Year
Fiscal Management Tool	MUNIS	Installation completed	2010

Goal 6: Develop a schema of current and future financing requirements to support the LEA's Technology Plan.

Your plan must:

- *describe how the LEA will meet current and future funding requirements to support plan implementation;*
- *describe how the LEA will develop policies and procedures related to maintenance of hardware, software, infrastructure and security; and*
- *describe how the LEA will meet current and future funding requirements to keep the technology updated.*

<u>Objective</u>	<u>Strategy</u>	<u>Accountability Measure</u>	<u>Timeline</u>
Current & Future Funding	4 Year Replacement Leasing Plan	Did we replace ¼ our Technology Every four years	Start 2011 School Year
Policies	Defined Maintenance Routine & Software Purchase/Renewal Process, Network Security provided by Group Policies and outside vendor	Procedure Manual	Start of 2010 School Year
Current & Future Funding	4 Year Replacement Leasing Plan	Did we replace ¼ our Technology Every four years	Start 2011 School Year

Goal 7: Develop a telecommunications services plan that will support both instructional needs and administrative requirements.

If your entity does not receive any NCLB related funding (Title 1-5) and is only applying for E-Rate reimbursement, then you must include items B-F. Public schools and those entities that do receive NCLB related funding only need to include items A-C.

To qualify for participation in the E-Rate Program the plan must include:

A. Weston’s assessment of the telecommunications services that will be needed to improve education:

- Weston will need to continue to replace and upgrade aging switches, servers, wiring, drops and other network equipment and look at new technology that fits within its infrastructure.

B. Weston has clear goals and a realistic strategy for using telecommunications and information technology to improve education:

- See goals #1-5 in this plan.

C. Weston has a sufficient budget to acquire and support the non-discounted elements of the plan (e.g. the hardware, software, professional development and other services that will be needed to implement the strategy):

- See Goals #1, #3, #5 and #6 of the plan, as well as the section entitled "Technology Funding Sources and Costs"
- Look at more Virtualization, Microsoft Legacy Computing models and Thin Client Computing models.
- Look at Net-books and N-Computing lower cost computers.
- Look at outside hosting to keep overhead cost low.

Additionally, in broad terms, using the table below, describe where you are now, where you want to be in three years and how you expect to arrive at that point.

Objectives/Activities/Strategies	Monitoring and Evaluation Procedure
<u>2009-2010</u> Install 35 Smartboards Install Wireless Access in all schools for Campus WLAN Repair 5 Fiber legs between HS and MS to Town Hall Virtualizes 10 servers Move HS and MS to New Domain Investigate new Website Services Rollout New Student Data System Rollout New Staff Self Service Portal Rollout Testing of Sharepoint Services	Weekly Reviews with the Admin Council, Monthly Reviews with the Board of Education and Quarterly Reviews with Technology Committee and Sub-Committees and Yearly Reviews with the Town when we work thru the Budgeting process.
<u>2010-2011</u> Replace 325 Computers per Year to stay within 4 year replacement plan. Install 35 Smartboards so all core classrooms have smartboards K-12.	Weekly Reviews with the Admin Council, Monthly Reviews with the Board of Education and Quarterly Reviews with Technology Committee and Sub-Committees and Yearly Reviews with the

Objectives/Activities/Strategies	Monitoring and Evaluation Procedure
<p>Move WIS and HES to New Domain Rollout Website Service Campus completely Wireless by End of School Year All computers in District running windows XP and office 2003 or OS X 10.4.11 or higher. IF the computers do not support software revisions they will be replaced. Upgrade Internet Access to 1000MB with CEN</p>	<p>Town when we work thru the Budgeting process.</p>
<p><u>2011-2012</u></p> <p>Replace 325 Computers per Year to stay within 4 year replacement plan.</p> <p>Begin Smartboard Replacement Planning as Units are out of Warranty.</p> <p>Look at Switch and Fiber Replacement Plan to upgrade legs to 10GB between buildings.</p>	<p>Weekly Reviews with the Admin Council, Monthly Reviews with the Board of Education and Quarterly Reviews with Technology Committee and Sub-Committees and Yearly Reviews with the Town when we work thru the Budgeting process.</p>



Goal 8 : Additional LEA Goals (Optional)

Smart Boards for all core educational classrooms by the beginning of the 2011 school year.

Virtual learning classes being offered at the High School during the 2009 school year.

Television Broadcast Studio operation by start of 2011 school year.

Wireless campus by the start of the 2010 school year.

Sharepoint services available for all teachers and students by the beginning of the 2010 school year.

Remote access for all teachers by start of 2010 school year for documents and student information systems.

Unified data storage and LDAP integration of all schools by end of 2010 school year.

Standard computer builds. Windows XP and Office 2003 & Mac OS X 10.4.11 or higher by start of 2010 school year.

Move toward mobile computing initiatives by end of 2011 school year.

Technology Funding Sources and Costs

ANNUAL BUDGET SUMMARY

YEAR: 2009/2010

NOTE: DUPLICATE THIS PAGE FOR EACH YEAR AS NEEDED

- List the professional development and technologies to be acquired during each year of the agency's plan.
- Note: At least 25 percent of the funds allocated to an LEA through the *Title II-D ED Tech Program* must be allocated for professional development activities. (Assume that Title II D funding [or its replacement] will remain flat.)
- Estimate the cost of the professional development and technologies in the appropriate column(s) from which the agency intends to take the funds.
- Describe how your LEA coordinates or aligns the other federal, state, local funds with LEA consolidated plans and/or individual school's School Improvement Plans.

Acquired Technologies and Professional Development	Ed Tech Competitive/ Title II-D	Ed Tech Formula/ Title II-D	State Bond Funds	Capital	E-Rate	NCLB/other than Title II-D	Other (Specify)
<p>75 Computer Replacements per Technology Plan per year; and related Software & Peripherals. Includes payments of 3 year purchasing cycle funded monthly.</p> <p>The school district will spend 25% of any and all Ed Tech Formula/Title II-D funds received on Professional Development. Totals will be dependent on funds received.</p> <p>COST: \$100,000</p>	<p>We can apply but we are typically turned down due to the district's small number of children in poverty</p>	<p>Received \$145.</p>	<p>N/A</p>	<p>Have not Bonded for technology.</p>	<p>20%</p>	<p>N/A</p>	<p>The Technology Budget provides for 100% of leased Computer costs (and related software licensing) over a three year period. Funds for software and peripherals needed in curriculum areas come from District Technology Budget unless the schools are able to get small grants, Weston Education Foundation Grants, and PTO donations.</p>

Acquired Technologies and Professional Development	Ed Tech Competitive/ Title II-D	Ed Tech Formula/ Title II-D	State Bond Funds	Capital	E-Rate	NCLB/other than Title II-D	Other (Specify)
Network enhancements and Upgrades – Security, Filtering etc. Including purchase of Servers and annual cost of Internet Access. COST: \$100,000	N/A	N/A	N/A	Same as above	20%	N/A	Note: cost of filing for the E-Rate by a consultant is deducted from these funds – should there not be enough funding to cover this cost the answer would be “Same as Above.”
Training and Development COST: \$40,000	N/A	Apply for funding with the E2T2 Grant, turned down in 2008, but awarded in past years.	N/A	N/A	N/A	N/A	Town of Weston School Budget provides for 100% of these funds from PTO Budget unless we are able to get small grants and PTO or Parent donations.
Telephone Service COST: \$75,000	N/A	N/A	N/A	N/A	Some E-rateable	N/A	Note: cost of filing for the E-Rate by a consultant is deducted from these funds.
Staff Development COST \$70,000	N/A	N/A	N/A	N/A	N/A	N/A	Funds for curriculum areas of staff development come from Building Budgets and the district. Sometimes the schools are able to get small grants (state grants include Title IIA, IDEA Part B, and Title II – Eisenhower) and WEF, PTO or Parent donations.
TOTAL: \$385,000							Note: cost of filing for the E-Rate by a consultant is deducted from these funds.

****Pending Available Funding**

Technology Funding Sources and Costs

ANNUAL BUDGET SUMMARY

YEAR: 2010/2011

NOTE: DUPLICATE THIS PAGE FOR EACH YEAR AS NEEDED

- List the professional development and technologies to be acquired during each year of the agency's plan.
- Note: At least 25 percent of the funds allocated to an LEA through the *Title II-D ED Tech Program* must be allocated for professional development activities. (Assume that Title II D funding [or its replacement] will remain flat.)
- Estimate the cost of the professional development and technologies in the appropriate column(s) from which the agency intends to take the funds.
- Describe how your LEA coordinates or aligns the other federal, state, local funds with LEA consolidated plans and/or individual school's School Improvement Plans.

Acquired Technologies and Professional Development	Ed Tech Competitive/ Title II-D	Ed Tech Formula/ Title II-D	State Bond Funds	Capital	E-Rate	NCLB/other than Title II-D	Other (Specify)
<p>325 Computer Replacements per Technology Plan per year; and related Software & Peripherals. Includes payments of 3 year purchasing cycle funded monthly.</p> <p>The school district will spend 25% of any and all Ed Tech Formula/Title II-D funds received on Professional Development. Totals will be dependent on funds received.</p> <p>COST: \$335,000</p>	We can apply but we are typically turned down due to the district's small number of children in poverty	Received \$145.	N/A	Have not Bonded for technology.	20%	N/A	The Technology Budget provides for 100% of leased Computer costs (and related software licensing) over a three year period. Funds for software and peripherals needed in curriculum areas come from District Technology Budget unless the schools are able to get small grants, Weston Education Foundation Grants, and PTO donations.

Acquired Technologies and Professional Development	Ed Tech Competitive/ Title II-D	Ed Tech Formula/ Title II-D	State Bond Funds	Capital	E-Rate	NCLB/other than Title II-D	Other (Specify)
Network enhancements and Upgrades – Security, Filtering etc. Including purchase of Servers and annual cost of Internet Access. COST: \$110,000	N/A	N/A	N/A	Same as above	20%	N/A	Note: cost of filing for the E-Rate by a consultant is deducted from these funds – should there not be enough funding to cover this cost the answer would be “Same as Above.”
Training and Development COST: \$40,000	N/A	Apply for funding with the E2T2 Grant, turned down in 2008, but awarded in past years.	N/A	N/A	N/A	N/A	Town of Weston School Budget provides for 100% of these funds from PTO Budget unless we are able to get small grants and PTO or Parent donations.
Telephone Service COST: \$80,000	N/A	N/A	N/A	N/A	Some E-rateable	N/A	Note: cost of filing for the E-Rate by a consultant is deducted from these funds
Staff Development COST \$75,000	N/A	N/A	N/A	N/A	N/A	N/A	Funds for curriculum areas of staff development come from Building Budgets and the district. Sometimes the schools are able to get small grants (state grants include Title IIA, IDEA Part B, and Title II – Eisenhower) and WEF, PTO or Parent donations.
TOTAL: \$640,000							Note: cost of filing for the E-Rate by a consultant is deducted from these funds.

****Pending Available Funding**

Technology Funding Sources and Costs

ANNUAL BUDGET SUMMARY

YEAR: 2011/2012

NOTE: DUPLICATE THIS PAGE FOR EACH YEAR AS NEEDED

- List the professional development and technologies to be acquired during each year of the agency's plan.
- Note: At least 25 percent of the funds allocated to an LEA through the *Title II-D ED Tech Program* must be allocated for professional development activities. (Assume that Title II D funding [or its replacement] will remain flat.)
- Estimate the cost of the professional development and technologies in the appropriate column(s) from which the agency intends to take the funds.
- Describe how your LEA coordinates or aligns the other federal, state, local funds with LEA consolidated plans and/or individual school's School Improvement Plans.

Acquired Technologies and Professional Development	Ed Tech Competitive/ Title II-D	Ed Tech Formula/ Title II-D	State Bond Funds	Capital	E-Rate	NCLB/other than Title II-D	Other (Specify)
<p>325 Computer Replacements per Technology Plan per year; and related Software & Peripherals. Includes payments of 3 year purchasing cycle funded monthly.</p> <p>The school district will spend 25% of any and all Ed Tech Formula/Title II-D funds received on Professional Development. Totals will be dependent on funds received.</p> <p>COST: \$345,000</p>	We can apply but we are typically turned down due to the district's small number of children in poverty	Received \$145.	N/A	Have not Bonded for technology.	20%	N/A	The Technology Budget provides for 100% of leased Computer costs (and related software licensing) over a three year period. Funds for software and peripherals needed in curriculum areas come from District Technology Budget unless the schools are able to get small grants, Weston Education Foundation Grants, and PTO donations.

Acquired Technologies and Professional Development	Ed Tech Competitive/ Title II-D	Ed Tech Formula/ Title II-D	State Bond Funds	Capital	E-Rate	NCLB/other than Title II-D	Other (Specify)
Network enhancements and Upgrades – Security, Filtering etc. Including purchase of Servers and annual cost of Internet Access. COST: \$120,000	N/A	N/A	N/A	Same as above	20%	N/A	Note: cost of filing for the E-Rate by a consultant is deducted from these funds – should there not be enough funding to cover this cost the answer would be “Same as Above.”
Training and Development COST: \$50,000	N/A	Apply for funding with the E2T2 Grant, turned down in 2008, but awarded in past years.	N/A	N/A	N/A	N/A	Town of Weston School Budget provides for 100% of these funds from PTO Budget unless we are able to get small grants and PTO or Parent donations.
Telephone Service COST: \$80,000	N/A	N/A	N/A	N/A	Some E-rateable	N/A	Note: cost of filing for the E-Rate by a consultant is deducted from these funds.
Staff Development COST \$75,000	N/A	N/A	N/A	N/A	N/A	N/A	Funds for curriculum areas of staff development come from Building Budgets and the district. Sometimes the schools are able to get small grants (state grants include Title IIA, IDEA Part B, and Title II – Eisenhower) and WEF, PTO or Parent donations.
TOTAL: \$670,000							Note: cost of filing for the E-Rate by a consultant is deducted from these funds.

**Pending Available Funding

CHILDREN’S INTERNET PROTECTION ACT (CIPA) CERTIFICATION

Schools and libraries that plan on receiving E-Rate discounts on Internet access and/or internal connection services after July 1, 2002, must be in compliance with the CIPA. CIPA compliance means that schools and libraries are filtering their Internet services and have implemented formal Internet safety policies (also frequently known as Acceptable Use Policies). Information on the CIPA requirements is located at http://E-Ratecentral.com/CIPA/cipa_policy_primer.pdf.

I, Jerome R. Belair, certify that one of the following conditions (as indicated below) exists in
Name of Superintendent/Director

Weston Public Schools, Weston, Connecticut
 LEA

- My LEA/agency is E-Rate compliant; or
 My LEA/agency is not E-Rate compliant. (Check one additional box below):

<input type="checkbox"/>	Every “applicable school*” has complied with the CIPA requirements in subpart 4 of Part D of Title II of the ESEA**.
<input type="checkbox"/>	Not all “applicable schools*” have yet complied with the requirements in subpart 4 of Part D of Title II of the ESEA**. However, the LEA has received a one-year waiver from the U.S. Secretary of Education under section 2441(b)(2)(C) of the ESEA for those applicable schools not yet in compliance.
<input type="checkbox"/>	The CIPA requirements in the ESEA do not apply because no funds made available under the program are being used to purchase computers to access the Internet, or to pay for direct costs associated with accessing the Internet, for elementary and secondary schools that do not receive E-Rate services under the Communications Act of 1934, as amended.

*An applicable school is an elementary or secondary school that does *not* receive E-Rate discounts and for which Ed Tech funds are used to purchase computers used to access the Internet, or to pay the direct costs associated with accessing the Internet.

** Codified at 20 U.S.C. § 6777. See also, <http://www.ed.gov/legislation/ESEA02/pg37.html>

 Signature of Superintendent/Director
Jerome R. Belair, Superintendent

 Date

APPENDIX A: Educational Technology Planning Toolkit

It is recommended that the following companion documents be utilized when developing local educational technology plans.

Educational Technology Planning	Site
CSDE Position Statement on Educational Technology	http://www.state.ct.us/sde/board/ed_technology.pdf
National Educational Technology Plan	http://www.nationaletechplan.org/default.asp
CT Educational Technology BLOG	http://cteducationaltechnology.blogspot.com/
CT Administrator Technology Standards	http://www.state.ct.us/sde/dtl/technology/CATSv2.pdf
CT Teacher Technology Competencies	http://www.state.ct.us/sde/dtl/technology/CTTCt.pdf
National Educational Technology Standards for Students	http://www.iste.org/Content/NavigationMenu/NETS/ForStudents/2007Standards/NETS_for_Students_2007.htm
CT Education Network (CEN)	http://www.ct.gov/cen/site/default.asp
CT Commission for Educational Technology (CET)	http://www.ct.gov/ctedtech/site/default.asp?cenPNavCtr=#30930
<i>SETDA Toolkits</i>	http://www.setda.org/web/guest/toolkits
CAPSS Position Statements on E-Learning and Educational Technology	http://www.capss.org/statements
Partnership for 21 st . Century Skills	http://www.21stcenturyskills.org/
A Guide For Assessing Technology <i>(published in 2002 but still relevant)</i>	http://nces.ed.gov/pubs2003/2003313.pdf
<i>ICT Literacy Skill maps</i>	http://www.21stcenturyskills.org/index.php?option=com_content&task=view&id=31&Itemid=33
Interactive School Technology and Readiness Assessment	http://www.iste.org/inhouse/starchart/index.cfm?Section=STaRChart&CFID=1752780&CFTOKEN=91033516
ISTE's Center for Applied Research in Educational Technology	http://caret.iste.org/

APPENDIX B: Technology Plan Review Guide

Technology Plan Review Guide

Reviewer _____ LEA _____

	<i>Complete? (Y/N)</i>	<i>additional information required/comments</i>
LEA Profile		
Technology Committee		
Needs Assessment		
Goal 1		
Goal 2		
Goal 3		
Goal 4		
Goal 5		
Goal 6		
Goal 7		
Goal 8		
Technology Funding Sources		

I _____ verify that Weston Public Schools has successfully completed all of the requirements as stated in the
 Signature of Reviewer Name of LEA

technology plan template.

APPENDIX C: This section is optional.

As a result of your district's 2006-09 technology plan, please describe, in no more than three pages, one or two initiatives that have added significant value to curriculum and/or instruction. If you are willing to share additional details of these initiatives with other districts (which may be made available on the web), please include the appropriate contact information.

CONTENT STANDARD 1: DEFINITION AND IDENTIFICATION OF INFORMATION NEEDS

What concerns should be addressed prior to gathering information?

Students will: *Define their information needs and identify effective courses of action to conduct research and solve problems.*

	GRADE 2 BENCHMARKS & GRADES K-2 INDICATORS	GRADE 5 BENCHMARKS & GRADES 3-5 INDICATORS	GRADE 8 BENCHMARKS & GRADES 5-8 INDICATORS	GRADE 12 BENCHMARKS & GRADES 9-12 INDICATORS
1.1 BENCHMARK	1.1 (2) Repeats purpose and criteria of task, including guiding questions/problems with assistance.	1.1 (5) Restate the guiding questions, scope and criteria for a given task, with assistance.	1.1 (8) Clearly restates guiding question or problem in their own words.	1.1 (12) Clearly state the guiding questions for a given task and demonstrate the ability to communicate them to others, independently.

	GRADE 2 BENCHMARKS & GRADES K-2 INDICATORS	GRADE 5 BENCHMARKS & GRADES 3-5 INDICATORS	GRADE 8 BENCHMARKS & GRADES 5-8 INDICATORS	GRADE 12 BENCHMARKS & GRADES 9-12 INDICATORS
1.1 INDICATORS	<p>1.1a (2) Repeat task.</p> <p>1.1b (2) Repeat guiding questions or problem with assistance.</p> <p>1.1c (2) Repeat criteria of task with assistance.</p>	<p>1.1a (5) Follow timeline for completion of task with minimal teacher support.</p> <p>1.1b (5) Repeat guiding questions or problem with assistance.</p> <p>1.1c (5) Explain criteria of task.</p> <p>1.1d (5) Identify how much information is needed with minimal teacher assistance.</p>	<p>1.1a (8) Construct timeline for completion of task.</p> <p>1.1b (8) Develop specific research questions or a thesis statement based on the nature, purpose, and scope of project with assistance.</p> <p>1.1c (8) Accurately rephrase criteria by which to assess the product and process.</p> <p>1.1d (8) Identify how much information is needed.</p> <p>1.1e (8) Select an appropriate format to meet final requirements of the project.</p>	<p>1.1a (12) Develop and refine timeline for completion of task.</p> <p>1.1b (12) Develop specific research questions or a thesis statement based on the nature, purpose, and scope of project.</p> <p>1.1c (12) Accurately rephrase criteria by which to assess the product and process.</p> <p>1.1d (12) Identify how much information is needed.</p> <p>1.1e (12) Select an appropriate format to meet final requirements of the project.</p>
1.2 BENCHMARK	<p>1.2 (2) Identify existing knowledge and areas where information is needed, with assistance.</p>	<p>1.2 (5) Identify existing knowledge and areas where information is needed.</p>	<p>1.2 (8) Identify existing knowledge and areas where information is needed.</p>	<p>1.2 (12) Identify and assess existing knowledge and areas where information is needed; and, articulate those needs to information providers or peers.</p>

	GRADE 2 BENCHMARKS & GRADES K-2 INDICATORS	GRADE 5 BENCHMARKS & GRADES 3-5 INDICATORS	GRADE 8 BENCHMARKS & GRADES 5-8 INDICATORS	GRADE 12 BENCHMARKS & GRADES 9-12 INDICATORS
1.2 INDICATORS	<p>1.2a (2) States existing knowledge about a topic.</p> <p>1.2b (2) States areas of interest related to topic.</p> <p>1.2c (2) Selects areas of interest most relevant to task, with assistance.</p> <p>1.2d (2) Evaluates if more areas of interest need to be added based on the task, with assistance.</p>	<p>1.2a (5) States existing knowledge about topic.</p> <p>1.2b (5) Determines areas of interest related to topic.</p> <p>1.2c (5) Selects areas of interest most relevant to task with teacher assistance.</p> <p>1.2d (5) Using information gathered, determines what further information is needed.</p>	<p>1.2a (8) Assess prior knowledge and gather background information.</p> <p>1.2b (8) Establish purposes for reading.</p> <p>1.2c (8) Adjust purposes while reading.</p> <p>1.2d (8) Using information gathered, determine what further information is needed.</p>	<p>1.2a (12) Relate prior knowledge to the problem or question.</p> <p>1.2b (12) Conduct a preliminary search to determine if thesis statement can be supported.</p> <p>1.2c (12) Modify and adjust the thesis statement.</p>
1.3 BENCHMARK	<p>1.3 (2) Pose relevant questions related to completion of task, with assistance.</p>	<p>1.3 (5) Frame and pose relevant questions related to completion of the task.</p>	<p>1.3 (8) Develop focus questions using background information, and pose topical questions related to completion of the task.</p>	<p>1.3 (12) Develop essential questions related to a topic and formulate a research hypothesis related to the topic.</p>
1.3 INDICATORS	<p>1.3a (2) Generate relevant questions with assistance.</p> <p>1.3b (2) Organize generated questions to develop overarching questions, with assistance.</p> <p>1.3b (2) Use generated questions to identify subtopics, with assistance.</p>	<p>1.3a (5) Generate pertinent questions.</p> <p>1.3b (5) Organize pertinent questions.</p> <p>1.3c (5) Generate a list of subtopics based on questions.</p>	<p>1.3a (8) Generate defining questions.</p> <p>1.3b (8) Organize defining questions</p> <p>1.3c (8) Generate a list of subtopics.</p>	<p>1.3a (12) Generate defining questions.</p> <p>1.3b (12) Organize defining questions to develop a research hypothesis using clear and concise terms.</p>

	GRADE 2 BENCHMARKS & GRADES K-2 INDICATORS	GRADE 5 BENCHMARKS & GRADES 3-5 INDICATORS	GRADE 8 BENCHMARKS & GRADES 5-8 INDICATORS	GRADE 12 BENCHMARKS & GRADES 9-12 INDICATORS
1.4 BENCHMARK	1.4 (2) Discuss use of print, non-print and digital resources available to complete the task, with assistance.	1.4 (5) Discuss the use of print, non-print and digital resources available to complete the task.	1.4 (8) Identify an array of print, non-print and digital resources available to complete the task.	1.4 (12) Identify print, non-print, and digital resources within and outside the school, independently.

	GRADE 2 BENCHMARKS & GRADES K-2 INDICATORS	GRADE 5 BENCHMARKS & GRADES 3-5 INDICATORS	GRADE 8 BENCHMARKS & GRADES 5-8 INDICATORS	GRADE 12 BENCHMARKS & GRADES 9-12 INDICATORS
1.4 INDICATORS	<p>1.4a (2) Identify sources as print, non-print or digital.</p> <p>1.4b (2) Name various sources:</p> <ul style="list-style-type: none"> • Non-Fiction Books • Magazines • Atlas • Dictionary • Encyclopedia • Website <p>1.4c (2) State the type and amount of information sources may contain, readability and availability of source, with assistance.</p> <p>1.4d (2) Prioritize sources according to usefulness in completing task, with assistance.</p>	<p>1.4a (5) Identify need for multiple sources</p> <p>1.4b (5) Describe a variety of sources:</p> <ul style="list-style-type: none"> • Non-Fiction Books • Magazines • Almanac • Atlas • Dictionary • Encyclopedia • Databases • Websites • Graphic Representations • Observation • Audio • Video <p>1.4c (5) State the amount of information sources may contain, readability and currency of source/information and availability of source, with assistance.</p> <p>1.4d (5) Prioritize sources according to usefulness in completing task, with assistance.</p>	<p>1.4a (8) Identify need for multiple sources.</p> <p>1.4b (8) Describe a variety of sources:</p> <ul style="list-style-type: none"> • Non-Fiction Books • Magazines • Almanac • Atlas • Dictionary • Encyclopedia • Databases • Websites • Graphic Representations • Observation • Audio • Video <p>1.4c (8) State the amount of information sources may contain, readability and currency of source/information and availability of source.</p> <p>1.4d (8) Prioritize sources according to usefulness in completing task.</p>	<p>1.4a (12) Identify a full range of appropriate and available information from local, national, and global sources.</p>

	GRADE 2 BENCHMARKS & GRADES K-2 INDICATORS	GRADE 5 BENCHMARKS & GRADES 3-5 INDICATORS	GRADE 8 BENCHMARKS & GRADES 5-8 INDICATORS	GRADE 12 BENCHMARKS & GRADES 9-12 INDICATORS
1.5 BENCHMARK	1.5 (2) Discuss a designated plan for addressing the task, with assistance.	1.5 (5) Determine an appropriate plan for addressing the task, with minimal assistance.	1.5 (8) Determine an appropriate plan for addressing the task, with minimal assistance.	1.5 (12) Determine a course of action that demonstrates the selection of appropriate strategies and resources for accomplishing a task, independently.
1.5 INDICATORS	1.5a (2) Discuss a teacher directed plan for organizing instructional materials, with assistance. 1.5b (2) Identify keywords, with assistance, to search for sources and information. 1.5c (2) Repeat simple search strategies. 1.5d (2) State that research (information problem-solving process) is a process with steps that need to be completed.	1.5a (5) Develop a plan for organizing instructional materials 1.5b (5) Generate keywords to search for sources and information. 1.5c (5) Identify simple search strategies with minimal assistance 1.5d (2) State that research (information problem-solving process) is a process with steps that need to be completed.	1.5a (8) Develop a plan for organizing instructional materials. 1.5b (8) Generate keywords and related terms to search for sources and information. 1.5c (8) Identify advanced search strategies—keyword, Boolean, hierarchical, alphabetical, etc. 1.5d (8) Identify the steps in the research process.	1.5a (12) Organize instructional materials appropriate to the subject. 1.5b (12) Create keywords, concepts, and subject headings for sources of information. 1.5c (12) Identify and evaluate advanced search strategies—keyword, Boolean, hierarchical, alphabetical, etc. 1.5d (12) Identify the steps in the research process appropriate to the subject and purpose.

CONTENT STANDARD 2: INFORMATION STRATEGIES

What are the learning skills and strategies that students need to successfully find information?

Students will: *Understand and demonstrate information skills and strategies to locate and effectively use print and non-print resources to solve problems and conduct research.*

	GRADE 2 BENCHMARKS & GRADES K-2 INDICATORS	GRADE 5 BENCHMARKS & GRADES 3-5 INDICATORS	GRADE 8 BENCHMARKS & GRADES 5-8 INDICATORS	GRADE 12 BENCHMARKS & GRADES 9-12 INDICATORS
2.1 BENCHMARK	2.1 (2) Use organizing features of print, non-print and digital materials to locate sources and information, with assistance.	2.1 (5) Use organizing features of print, non-print and digital materials to locate sources and information, with assistance.	2.1 (8) Consistently use organizing features of print, non-print and digital materials to locate sources and information, with guidance.	2.1 (12) Apply organizational principals of digital and electronic resources to locate print and non print material independently

	GRADE 2 BENCHMARKS & GRADES K-2 INDICATORS	GRADE 5 BENCHMARKS & GRADES 3-5 INDICATORS	GRADE 8 BENCHMARKS & GRADES 5-8 INDICATORS	GRADE 12 BENCHMARKS & GRADES 9-12 INDICATORS
2.1 INDICATORS	<p>2.1a (2) Name and use organizational features of information sources</p> <ul style="list-style-type: none"> • Title Page • Table of contents • Index • Glossary • Headings • Captions • Guidewords <p>2.1b (2) Conduct simple searches in OPAC.</p> <p>2.1c (2) Navigate information sources, including OPAC, using organizational features with assistance.</p>	<p>2.1a (5) Analyze organizational structures in information sources</p> <ul style="list-style-type: none"> • Table of contents • Index • Glossary • Headings • Captions • Guidewords • Cross reference <p>2.1b (5) Locate resources in OPAC.</p> <ul style="list-style-type: none"> • Search catalog by author, title, subject and keyword • Use call numbers to locate resources in library <p>2.1c (5) Navigate websites using simple menus and links.</p>	<p>2.1a (8) Analyze organizational structures in information sources.</p> <ul style="list-style-type: none"> • Books • Graphic Organizers • Electronic sources • Spreadsheets • Graphs • Tables <p>2.1b (8) Locate resources in OPAC.</p> <ul style="list-style-type: none"> • Search catalog by author, title, subject and keyword • Use call numbers to locate resources in library <p>2.1c (8) Navigate websites using simple menus and links.</p>	<p>2.1a (12) Analyze organizational structures in information sources.</p> <ul style="list-style-type: none"> • Books • Graphic Organizers • Electronic sources • Spreadsheets • Graphs • Tables <p>2.1b (12) Locate resources in OPAC.</p> <ul style="list-style-type: none"> • Search catalog by author, title, subject and keyword • Store books in Book bag • Use and understand call numbers to locate and browse resources in Library/Media Center. <p>2.1c (12) Navigate websites using menus and links.</p>
2.2 BENCHMARK	<p>2.2 (2) Use information sources with assistance.</p>	<p>2.2 (5) Use information sources with assistance.</p>	<p>2.2 (8) Identify and use sources effectively to meet information needs.</p>	<p>2.2 (12) Identify and use information sources effectively and efficiently to meet the needs for research and communications.</p>

	GRADE 2 BENCHMARKS & GRADES K-2 INDICATORS	GRADE 5 BENCHMARKS & GRADES 3-5 INDICATORS	GRADE 8 BENCHMARKS & GRADES 5-8 INDICATORS	GRADE 12 BENCHMARKS & GRADES 9-12 INDICATORS
2.2 INDICATORS	<p>2.2a (2) Use keywords, with assistance, to search for sources and information.</p> <p>2.2b (2) Identify various materials and where they are located in the LRC</p> <ul style="list-style-type: none"> • encyclopedias • almanacs • thesaurus • atlas • fiction • non-fiction books • OPAC <p>2.2c (2) State ways information is organized in various sources, with assistance.</p>	<p>2.2a (5) Use keywords, with assistance, to search for sources and information.</p> <p>2.2b(5) Identify various materials and where they are located in the LRC</p> <ul style="list-style-type: none"> • encyclopedias • almanacs • thesaurus • atlas • fiction • non-fiction books • OPAC <p>2.2c (5) Analyze and use organizational features of information sources.</p>	<p>2.2a (8) Use keywords to search for sources and information.</p> <p>2.2b (8) Competently use various sources</p> <ul style="list-style-type: none"> • encyclopedias • almanacs • thesaurus • atlas • fiction • non-fiction books • journals • OPAC <p>2.2c (8) Analyze and use organizational features of information sources.</p>	<p>2.2a (12) Use keywords to search for sources and information.</p> <p>2.2b (12) Select and use various sources</p> <ul style="list-style-type: none"> • encyclopedias • almanacs • thesaurus • atlas • fiction • non-fiction books • journals • OPAC <p>2.2c (12) Analyze and use organizational features of resources.</p>
2.3 BENCHMARK	<p>2.3 (2) Use information presented graphically (pictures, graphs, maps, diagrams, etc.), with assistance.</p>	<p>2.3 (5) Use information presented graphically (pictures, graphs, maps, diagrams, etc.)</p>	<p>2.3 (8) Interpret information presented graphically (pictures, graphs, maps, diagrams, etc.)</p>	<p>2.3 (12) Interpret information presented graphically (pictures, graphs, maps, diagrams, etc.)</p>
2.3 INDICATORS	<p>2.3a (2) Verbalize information presented graphically.</p> <p>2.3b (2) Name and use identifying features of graphics, with assistance.</p>	<p>2.3a (5) Understand information from pictures, graphs, etc. found in a non-fiction text.</p>	<p>2.3a (8) Analyze and infer information depicted in pictures, captions, graphs.</p>	<p>2.3a (12) Analyze, infer and evaluate information depicted in pictures, captions, graphs.</p>

	GRADE 2 BENCHMARKS & GRADES K-2 INDICATORS	GRADE 5 BENCHMARKS & GRADES 3-5 INDICATORS	GRADE 8 BENCHMARKS & GRADES 5-8 INDICATORS	GRADE 12 BENCHMARKS & GRADES 9-12 INDICATORS
2.4 BENCHMARK	2.4 (2) Follow modeled search strategies to use teacher selected digital resources.	2.4 (5) Use search strategies, with assistance, to locate and use digital sources.	2.4 (8) Use appropriate search strategies to find and use digital sources.	2.4 (12) Plan and design strategies to find and collect information for particular purposes and audiences, using advanced digital sources.
2.4 INDICATORS	2.4a (2) Use age-appropriate digital resources with assistance. 2.4b (2) Use simple search strategy provided by teacher. 2.4c (2) Use features of digital sources to locate information.	2.4a (5) Identify and use age-appropriate search engines and directories. 2.4b (5) Develop a keyword search strategy with assistance. 2.4c (5) Effectively use the features and menus of various digital information sources.	2.4a (8) Proficiently identify and use age-appropriate search engines and directories. 2.4b (8) Construct electronic and manual searches using keywords, phrases, Boolean logic and limiters with assistance. 2.4c (8) Effectively use the features and menus of various digital information sources.	2.4a (12) Compare, evaluate and select appropriate search engines and directories. 2.4b (12) Construct effective electronic and manual searches using keywords, phrases, Boolean logic and limiters. 2.4c (12) Effectively use the features and menus of digital information sources.

CONTENT STANDARD 3: INFORMATION PROCESSING

How is information evaluated?

Students will: *Apply information from a variety of sources and formats using evaluative criteria to interpret, analyze, organize and synthesize both print and non-print material*

	GRADE 2 BENCHMARKS & GRADES K-2 INDICATORS	GRADE 5 BENCHMARKS & GRADES 3-5 INDICATORS	GRADE 8 BENCHMARKS & GRADES 5-8 INDICATORS	GRADE 12 BENCHMARKS & GRADES 9-12 INDICATORS
3.1 BENCHMARK	3.1 (2) Discuss appropriateness of sources and information based on the task, with assistance.	3.1 (5) Evaluate appropriateness of sources and information based on need and presentation.	3.1 (8) Develop and apply criteria to assess appropriateness of sources and information based on need and presentation.	3.1 (12) Develop and use personal and established criteria for selecting sources and information of appropriate breadth and depth of detail, format, illustrations, special features, level, content, purpose and intended audience.
3.1 INDICATORS	3.1a (2) Choose appropriate reading level for understanding, with assistance. 3.1b (2) Discuss age, availability, and amount of information of sources in relation to completing task. 3.1c (2) Identify author and copyright date.	3.1a (5) Choose appropriate reading level for understanding. 3.1b (5) Identify age, availability, and amount of information of sources in relation to completing task. 3.1c (5) Identify author and copyright date.	3.1a (8) Choose appropriate reading level for understanding. 3.1b (8) Analyze age, availability, and amount of information of sources in relation to completing task. 3.1c (8) Identify author, copyright date, last update, publisher, sponsoring organization.	3.1a (12) Choose appropriate reading level for understanding. 3.1b (12) Evaluate authority, validity, accuracy, reliability and comprehensiveness of sources. 3.1c (12) Identify author, copyright date, last update, publisher, sponsoring organization. 3.1d (12) Select information in formats and genre most appropriate to content.

	GRADE 2 BENCHMARKS & GRADES K-2 INDICATORS	GRADE 5 BENCHMARKS & GRADES 3-5 INDICATORS	GRADE 8 BENCHMARKS & GRADES 5-8 INDICATORS	GRADE 12 BENCHMARKS & GRADES 9-12 INDICATORS
3.2 BENCHMARK	3.2(2) Discuss usefulness of information, with assistance.	3.2(5) Evaluate the quality of information.	3.2(8) Develop and apply evaluative criteria to assess the quality of information.	3.2(12) Demonstrate ability to identify and compare sources of information and apply multiple evaluative criteria.
3.2 INDICATORS	3.2a (2) Discuss relevance of information in relation to guiding questions with assistance. 3.2b (2) Discuss the difference between fiction and non-fiction.	3.2a (5) Discuss relevance of information in relation to guiding questions. 3.2b (5) Discuss fact, opinion, purpose, point of view and inference. 3.2c (5) Identify inconsistencies in information gathered.	3.2a (8) Analyze relevance of information in relation to guiding questions. 3.2b (8) Identify fact, opinion, purpose, point of view and inference. 3.2c (8) Identify stereotyping, prejudice, bias and misrepresentation in information. 3.2d (8) Analyze graphic images for misleading presentation and manipulated data. 3.2e (8) Identify strategies for resolving inconsistencies in information gathering.	3.2a (12) Evaluate relevance of information in relation to guiding questions. 3.2b (12) Distinguish among fact, opinion, purpose, point of view and inference. 3.2c (12) Evaluate information for stereotyping, prejudice, bias and misrepresentation. 3.2d (12) Evaluate graphic images for misleading presentation and manipulated data. 3.2e (12) Identify and use strategies for resolving inconsistencies in information gathering.

	GRADE 2 BENCHMARKS & GRADES K-2 INDICATORS	GRADE 5 BENCHMARKS & GRADES 3-5 INDICATORS	GRADE 8 BENCHMARKS & GRADES 5-8 INDICATORS	GRADE 12 BENCHMARKS & GRADES 9-12 INDICATORS
3.3 BENCHMARK	3.3(2) Demonstrate ability to select and record information with assistance.	3.3(5) Demonstrate ability to select and record information from a range of sources.	3.3(8) Demonstrate ability to record selected information from a wide range of sources.	3.3(12) Demonstrate ability to record selected information from a wide range of sources.
3.3 INDICATORS	3.3a (2) Identify information that answers posed questions. 3.3b (2) Compile a citation list in a format stipulated by teacher. 3.3c (2) Restate information in a condensed format. 3.3d (2) Record information in a bulleted note format.	3.3a (5) Identify main idea and supporting details that answer posed questions with assistance. 3.3b (5) Compile a citation list in a format stipulated by teacher. 3.3c (5) Paraphrase and summarize information using strategies to avoid plagiarism. 3.3d (5) Record information in bulleted, note form.	3.3a (8) Identify main idea and supporting details that answer posed questions. 3.3b (8) Compile a citation list in MLA format. 3.3c (8) Paraphrase and summarize using strategies to avoid plagiarism and properly quote information. 3.3d (8) Record information in note card form or other teacher stipulated format.	3.3a (12) Select relevant information that clearly relates to problem or question. 3.3b (12) Compile a citation list in a format stipulated by teacher. 3.3c (12) Use data gathering strategies including summarizing, paraphrasing, comparing and quoting. 3.3d (12) Record information in teacher stipulated form.

	GRADE 2 BENCHMARKS & GRADES K-2 INDICATORS	GRADE 5 BENCHMARKS & GRADES 3-5 INDICATORS	GRADE 8 BENCHMARKS & GRADES 5-8 INDICATORS	GRADE 12 BENCHMARKS & GRADES 9-12 INDICATORS
3.4 BENCHMARK	3.4 (2) Organize and synthesize information, with assistance, to demonstrate new learning.	3.4 (5) Organize, analyze and synthesize information to draw meaningful conclusions, with teacher assistance.	3.4 (8) Organize, analyze and synthesize information to draw meaningful conclusions and support them with evidence.	3.4 (12) Organize, analyze and synthesize information to create new knowledge.
3.4 INDICATORS	3.4a (2) Organize information into related categories according to guiding questions or subtopics. 3.4b (2) Use graphic organizers and graphs to solve problems. 3.4c (2) Examine organized information to gain an understanding. 3.4d (2) With assistance combine collected information to demonstrate new learning.	3.4a (5) Organize information into related categories according to guiding questions or subtopics. 3.4b (5) Use technology tools to organize and manipulate data to solve problems: <ul style="list-style-type: none"> • Tables • Spreadsheets • Graphic organizers • Graphs • Charts 3.4c (5) Examine organized information to gain an understanding. 3.4d (5) Combine collected information to demonstrate new learning.	3.4a (8) Organize information according to guiding questions or subtopics. 3.4b (8) Use technology tools to organize and manipulate data to solve problems: <ul style="list-style-type: none"> • Tables • Spreadsheets • Graphic organizers • Graphs • Charts 3.4c (8) Examine organized information to gain an understanding. 3.4d (8) Synthesize collected information to demonstrate new learning.	3.4a (12) Organize information in a systematic manner for unity coherence, clarity and emphasis. 3.4b (12) Analyze, relate and interpret information using a variety of relational techniques: <ul style="list-style-type: none"> • Graphic organizers • Database reports • Spreadsheet reports • Graphs 3.4c (12) Examine organized information to gain an understanding. 3.4d (12) Synthesize collected information to demonstrate new knowledge.

CONTENT STANDARD 4: APPLICATION
How do students use information and technology?

Students will: Operate and use computers and other technologies as tools for communication, productivity, problem solving and learning across the content areas.

	GRADE 2 BENCHMARKS & GRADES K-2 INDICATORS	GRADE 5 BENCHMARKS & GRADES 3-5 INDICATORS	GRADE 8 BENCHMARKS & GRADES 5-8 INDICATORS	GRADE 12 BENCHMARKS & GRADES 9-12 INDICATORS
4.1 BENCHMARK	4.1 (2) Use technology to produce finished products, with assistance.	4.1 (5) Identify and use technology to produce finished products, with assistance.	4.1 (8) Select and use technology to produce finished products.	4.1 (12) Apply appropriate technology(s) and format(s) to clearly present knowledge.
4.1 INDICATORS	4.1a (2) List different technology products. 4.1b (2) State audience for communicating information.	4.1a (5) Identify word processing software versus presentation software. 4.1b (5) Identify audience for communicating information.	4.1a (8) Select communication software and presentation methods. 4.1b (8) Identify audience and purpose for communicating information.	4.1a (12) Compare strengths and weaknesses of possible presentation methods and products. 4.1b (12) Determine audience and purpose for communicating information. 4.1c (12) Select the most appropriate format for the product or presentation.
4.2 BENCHMARK	4.2 (2) Use basic operational features of student hardware and demonstrate the ability to use the school network to access and utilize school software, with assistance.	4.2 (5) Use basic operational features of student hardware and demonstrate the ability to use the school network to access and utilize school software with minimal assistance.	4.2 (8) Operate school hardware and demonstrate the ability to use the school network to access and utilize school software.	4.2 (12) Operate school hardware and demonstrate the ability to use the school network to access and utilize school software.
4.2 INDICATORS	4.2a (2) Access student software programs. 4.2b (2) Open files and teacher selected websites from a designated location.	4.2a (5) Access student software programs and save files to designated location. 4.2b (5) Access school based subscription databases/ services locally and remotely	4.2a (8) Access student software programs and save files to designated location. 4.2b (8) Access school based subscription	4.2a (12) Access student software programs and save files to designated location. 4.2b (12) Access

	GRADE 2 BENCHMARKS & GRADES K-2 INDICATORS	GRADE 5 BENCHMARKS & GRADES 3-5 INDICATORS	GRADE 8 BENCHMARKS & GRADES 5-8 INDICATORS	GRADE 12 BENCHMARKS & GRADES 9-12 INDICATORS
		with assistance. 4.2c (5) Sign on and off of school network using user account and password.	databases/ services locally and remotely. 4.2c (8) Sign on and off of school network using user account and password.	school based subscription databases/ services locally and remotely. 4.2c (12) Sign on and off school network using assigned user account and password.
4.3 BENCHMARK	4.3 (2) Apply various technologies and formats to communicate the results of research and inquiry, with assistance.	4.3 (5) Apply various technologies and formats to communicate information and conclusions reached through research and inquiry.	4.3 (5) Apply various technologies and formats to communicate information and conclusions reached through research and inquiry.	4.3 (12) Apply the most appropriate technologies and formats to communicate information and conclusions reached through research and inquiry.
4.3 INDICATORS	4.3a (2) Use basic features of word processing software to convey ideas/information. 4.3b (2) Add graphics to documents with direction. 4.3c (2) Use basic features of presentation software with assistance. 4.3d (2) Create original, computer-generated artwork with assistance. 4.3e (2) Access and navigate online curriculum-related activities according to teacher direction	4.3a (5) Use basic features of word processing software to convey ideas/information. 4.3b (5) Use graphics and digital images to convey ideas/information and enhance presentations. 4.3c (5) Use presentation software to communicate ideas/information. 4.3d (5) Create original computer-generated artwork to enhance presentations. 4.3e (5) Use digital technologies to facilitate collaboration.	4.3a (8) Use features of word processing software to convey ideas/information. 4.3b (8) Use graphic design, digital images, sounds and art to convey ideas/information and enhance presentations. 4.3c (8) Use presentation software to communicate ideas/information. 4.3d (8) Create original computer-generated artwork to enhance presentations. 4.3e (8) Use digital technologies to facilitate collaboration.	4.3a (12) Develop products and presentations that fully utilize the strengths of the medium and support the conclusions drawn in the research or inquiry process.

	GRADE 2 BENCHMARKS & GRADES K-2 INDICATORS	GRADE 5 BENCHMARKS & GRADES 3-5 INDICATORS	GRADE 8 BENCHMARKS & GRADES 5-8 INDICATORS	GRADE 12 BENCHMARKS & GRADES 9-12 INDICATORS
		4.3f (2) Access and navigate online curriculum-related activities according to teacher direction.	4.3f (2) Access and navigate online curriculum-related activities according to teacher direction.	
4.4 BENCHMARK	4.4 (2) Use input devices and features of technology tools with assistance.	4.4 (5) Use input devices and features of selected technology tools.	4.4 (8) Use input devices and features of technology tools.	4.4 (12) Use input devices and features of selected technology tools.
4.4 INDICATORS	4.4a (2) Use various computer peripherals with assistance. 4.4b (2) Use selected features of various software with assistance. 4.4c (2) Use toolbars and menus with assistance.	4.4a (5) Use various computer peripherals. 4.4b (5) Use selected features of various software. 4.4c (5) Use toolbars, menus and “help” features of various software programs with assistance.	4.4a (8) Use various computer peripherals. 4.4b (8) Use selected features of various software. 4.4c (8) Use toolbars, menus and “help” features of various software programs.	4.4a (12) Evaluate, select, and use appropriate computer peripherals. 4.4b (12) Determine and select features of various software. 4.4c (12) Use toolbars, menus and “help” features of various software programs.

	GRADE 2 BENCHMARKS & GRADES K-2 INDICATORS	GRADE 5 BENCHMARKS & GRADES 3-5 INDICATORS	GRADE 8 BENCHMARKS & GRADES 5-8 INDICATORS	GRADE 12 BENCHMARKS & GRADES 9-12 INDICATORS
4.5 BENCHMARK	4.5 (2) List ways we use technology to live, work and learn independently and cooperatively.	4.5 (5) Describe ways technologies affect how we live, work and learn independently and cooperatively.	4.5 (8) Describe the educational, social and ethical issues related to reliance technologies.	4.5 (12) Analyze the educational, social and ethical issues related to reliance on computers and other technologies.
4.5 INDICATORS	4.5a (2) State how a specific technology tool helps us in our lives.	4.5a (5) Discuss how technology affects the way we communicate. 4.5b (5) Discuss how technology affects the way we access information. 4.5c (5) Discuss how technology affects the way we organize and manage information.	4.5a (8) Discuss how technology affects the way we communicate. 4.5b (8) Discuss how technology affects the way we access information. 4.5c (8) Discuss how technology affects the way we organize and manage information. 4.5d (8) Discuss how different technologies affect our lifestyles. 4.5e (8) Describe and evaluate the influence of technologies on society and culture.	4.5a (8) Describe how technology affects the way we communicate. 4.5b (8) Describe how technology affects the way we access information. 4.5c (8) Describe how technology affects the way we organize and manage information. 4.5d (8) Describe how different technologies affect our lifestyles. 4.5e (12) Describe and evaluate the influence of technologies on society and culture.
4.6 BENCH-	4.6 (2) Recognize when a computer problem requires adult intervention.	4.6 (5) Identify common hardware and software problems and seek assistance to solve them.	4.6 (8) Identify basic hardware and software problems and apply strategies to solve them.	4.6 (12) Identify hardware and software problems and apply strategies to solve them.
4.6 INDICATORS	4.6a (2) Seek adult assistance when required.	4.6a (5) Use basic troubleshooting strategies to resolve computer issues. 4.6b (5) Seek adult assistance when	4.6a (8) Use basic troubleshooting strategies to resolve computer issues. 4.6b (8) Seek adult assistance when	4.6a (12) Use troubleshooting strategies to resolve computer issues. 4.6b (12) Collaborate with peers or online

	GRADE 2 BENCHMARKS & GRADES K-2 INDICATORS	GRADE 5 BENCHMARKS & GRADES 3-5 INDICATORS	GRADE 8 BENCHMARKS & GRADES 5-8 INDICATORS	GRADE 12 BENCHMARKS & GRADES 9-12 INDICATORS
		required.	required.	support to resolve computer issues. 4.6c (12) Seek adult assistance when required.
4.7 BENCHMARK	4.7 (2) Recognize that technology tools are constantly changing.	4.7 (5) Recognize the dynamic nature of technology and information.	4.7 (8) Identify new and emerging technologies and their potential for use.	4.7 (12) Recognize the dynamic nature of technology and information.
4.7 INDICATORS	4.7a (2) Compare/Contrast hand-writing/hand drawing processes to word-processing and computer-assisted artwork. 4.7b (2) Discuss possible technological advances.	4.7a (5) Compare and contrast past and present technologies. 4.7b (5) Demonstrate awareness of potential technological advances.	4.7a (8) Compare and contrast past and present technologies. 4.7b (8) Demonstrate awareness of potential technological advances.	4.7a (12) Develop new skills to use emerging technologies.
4.8 BENCHMARK	4.8 (2) List different types of technology tools and their uses.	4.8 (5) Describe different technologies and their uses.	4.8 (8) Compare different technologies and their uses.	4.8 (12) Evaluate different technologies and their uses.
4.8 INDICATORS	4.8a (2) Identify and describe use of: <ul style="list-style-type: none"> • Calculator • Camera • Computer • Printer • Television • VCR/DVD 	4.8a (5) Identify and describe use of: <ul style="list-style-type: none"> • Calculator • Camera • Computer • Printer • Television • VCR/DVD 	4.8a (8) Identify, describe and compare use of: <ul style="list-style-type: none"> • Calculator • Camera • Computer • Printer • Television • VCR/DVD • Communication devices 	4.8a (12) Evaluate appropriateness and effectiveness of the media and technology used.

CONTENT STANDARD 5: RESPONSIBLE USE**What are student responsibilities regarding the use of information and technology?****Students will:** *Demonstrate the responsible, legal and ethical use of information resources, computer and other technologies.*

	GRADE 2 BENCHMARKS & GRADES K-2 INDICATORS	GRADE 5 BENCHMARKS & GRADES 3-5 INDICATORS	GRADE 8 BENCHMARKS & GRADES 5-8 INDICATORS	GRADE 12 BENCHMARKS & GRADES 9-12 INDICATORS
5.1 BENCHMARK	5.1 (2) Responsibly use and care for print, non-print and digital information resources, computers, other technologies and networks.	5.1 (5) Responsibly use and care for print, non-print and digital information resources, computers, other technologies and networks.	5.1 (8) Responsibly use and care for print, non-print and digital information resources, computers, other technologies and networks.	5.1 (12) Observe local, state and national laws and policies and procedures regarding the use of print and non-print information resources, computers, other technologies and networks.

	GRADE 2 BENCHMARKS & GRADES K-2 INDICATORS	GRADE 5 BENCHMARKS & GRADES 3-5 INDICATORS	GRADE 8 BENCHMARKS & GRADES 5-8 INDICATORS	GRADE 12 BENCHMARKS & GRADES 9-12 INDICATORS
5.1 INDICATORS	<p>5.1a (2) Recognize the importance of returning all borrowed materials on time.</p> <p>5.1b (2) List ways to care for print resources</p> <p>5.1c (2) List ways to care for technology tools</p>	<p>5.1a (5) Return all borrowed materials on time.</p> <p>5.1b (5) Handle property with respect.</p> <p>5.1c (5) Follow classroom guidelines regarding the appropriate use of technology.</p>	<p>5.1a (8) Return all borrowed materials on time.</p> <p>5.1b (8) Handle property with respect and take responsibility for any damage that occurs.</p> <p>5.1c (8) Follow classroom guidelines regarding the appropriate use of technology.</p>	<p>5.1a (12) Return all borrowed materials on time.</p> <p>5.1b (12) Recognize the need for privacy and protection of personal property.</p> <p>5.1c (12) Follow “Code Of Conduct: Rules and Expectations” as stated in “Student Handbook.”</p>
5.2 BENCHMARK	5.2(2) Cite original sources, with assistance.	5.2(5) Cite original sources.	5.2(8) Cite original sources.	5.2(12) Apply established citation standards for a wide range of information sources and formats.

	GRADE 2 BENCHMARKS & GRADES K-2 INDICATORS	GRADE 5 BENCHMARKS & GRADES 3-5 INDICATORS	GRADE 8 BENCHMARKS & GRADES 5-8 INDICATORS	GRADE 12 BENCHMARKS & GRADES 9-12 INDICATORS
5.2 INDICATORS	<p>5.2a (2) Locate author name, title and copyright date on title page.</p> <p>5.2b(2) List the author last name (comma) author first name (period) title (underlined, period) and copyright date (period) of book sources. (Modified MLA format).</p> <p>5.2c (2) Locate web address on webpage or printout.</p> <p>5.2d (2) Identify extension in web address (gov, com, edu, net).</p> <p>5.2e (2) List title of webpage or picture from website (in quotation marks) and webpage address to extension (period) with assistance. (Modified MLA format)</p>	<p>5.2a (5) Create Works Cited documents according to MLA standards with teacher assistance.</p>	<p>5.2a (8) Create a Works Cited document according to MLA standards.</p>	<p>5.2a (12) Create a Works Cited/References document according to MLA/APA standards and apply appropriate parenthetical references for all sources used.</p>

	GRADE 2 BENCHMARKS & GRADES K-2 INDICATORS	GRADE 5 BENCHMARKS & GRADES 3-5 INDICATORS	GRADE 8 BENCHMARKS & GRADES 5-8 INDICATORS	GRADE 12 BENCHMARKS & GRADES 9-12 INDICATORS
5.3 BENCHMARK	5.3(2) Discuss the ownership of information and the need to cite sources.	5.3(5) Discuss the ownership of information, plagiarism, and the responsibility to cite resources.	5.3(8) Differentiate among various definitions of ownership and protection of intellectual property.	5.3(12) Demonstrate an understanding of the process for copywriting/protecting their own original work.

	GRADE 2 BENCHMARKS & GRADES K-2 INDICATORS	GRADE 5 BENCHMARKS & GRADES 3-5 INDICATORS	GRADE 8 BENCHMARKS & GRADES 5-8 INDICATORS	GRADE 12 BENCHMARKS & GRADES 9-12 INDICATORS
5.3 INDICATORS	5.3a (2) State that it is important to cite sources to show where information was obtained and to give credit to original author.	5.3a (5) Define plagiarism. 5.3b (5) Engage in initial discussion of plagiarism, copyright, and responsible use.	5.3a (8) Engage in class discussions of plagiarism, copyright, and responsible use in relation to legal and ethical issues. 5.3b (8) Recognize that the copying of commercial or licensed media is a violation of the copyright law and is a crime for which there are serious consequences. 5.3c (8) Explain why the use of all or parts of another persons work requires prior permission or citation. 5.3d (8) Recognize that their written documents must be in their own words. 5.3e (8) Describe how copyright protects the rights of an author or producer and their original works.	5.3a(12) Explain the concept of intellectual property rights 5.3b (12) Recognize that the copying of commercial or licensed media is a violation of the copyright law and is a crime for which there are serious consequences. 5.3c (12) Explain why the use of all or parts of another persons work requires prior permission or citation. 5.3d (12) Recognize that their written documents must be in their own words. 5.3e (12) Describe how copyright protects the rights of an author or producer and their original works.

	GRADE 2 BENCHMARKS & GRADES K-2 INDICATORS	GRADE 5 BENCHMARKS & GRADES 3-5 INDICATORS	GRADE 8 BENCHMARKS & GRADES 5-8 INDICATORS	GRADE 12 BENCHMARKS & GRADES 9-12 INDICATORS
5.4 BENCH-MARK	5.4(2) Follow District’s Acceptable Use Policy.	5.4(5) Follow District’s Acceptable Use Policy.	5.4(8) Adhere to District’s Acceptable Use Policy and adhere to local, state and national legislation.	5.4(12) Adhere to District’s Acceptable Use Policy as well as local, state and national laws and policies.
5.4 INDICATORS	5.4a (2) State the requirement from the District AUP that students cannot use the internet without an adult present. 5.4b (2) State the requirement from the district AUP that students will not give out personal information about themselves or anyone else.	5.4a (5) Participate in teacher led discussion of the District AUP. 5.4b (5) Sign the AUP document.	5.4a (8) Participate in teacher led discussion of the District AUP and sign the AUP. 5.4b (8) Recognize that using media or technology to defame, libel, or misrepresent another person or group constitutes unacceptable behavior. 5.4c (8) Discuss the legal and ethical implications of online communication. 5.4d (8) Identify and define consequences of violations to the school’s policies on media and technology use.	5.4a (12) Explain the use of the Internet and other resources according to the guidelines of the District AUP Policy. 5.4b (12) Recognize that using media or technology to defame, libel, or misrepresent another person or group constitutes unacceptable behavior. 5.4c (12) Discuss the legal and ethical implications of online communication. 5.4d (12) Identify and define consequences of violations to the school’s policies on media and technology use.
5.5 BENCHMARK	5.5(2) Demonstrate responsible behavior and safe practices when using technology to ensure personal safety.	5.5(5) Demonstrate responsible behavior and safe practices when using technology to ensure personal safety.	5.5(8) Demonstrate responsible behavior and safe practices when using technology to ensure personal safety.	5.5(12) Demonstrate responsible behavior and safe practices when using technology to ensure personal safety.

	GRADE 2 BENCHMARKS & GRADES K-2 INDICATORS	GRADE 5 BENCHMARKS & GRADES 3-5 INDICATORS	GRADE 8 BENCHMARKS & GRADES 5-8 INDICATORS	GRADE 12 BENCHMARKS & GRADES 9-12 INDICATORS
5.5 INDICATORS	5.5a(2) List unsafe internet behavior (i.e. giving personal information, sharing passwords, sending pictures to strangers)	5.5a (5) Students access only own accounts. 5.5b (5) Students do not reveal personal information on networks.	5.5a (8) Students access only own accounts. 5.5b (8) Students do not reveal personal information on networks.	5.5a (12) Students access only own accounts. 5.5b(12) Students do not reveal personal information on networks 5.5c (12) Students explain the importance of reporting any unsafe practices while using technology.

CONTENT STANDARD 6: ASSESSMENT

How effectively was information and technology used?

Students will: *assess the effectiveness of their information and technology choices for problem-solving and communication.*

	GRADE 2 BENCHMARKS & GRADES K-2 INDICATORS	GRADE 5 BENCHMARKS & GRADES 3-5 INDICATORS	GRADE 8 BENCHMARKS & GRADES 5-8 INDICATORS	GRADE 12 BENCHMARKS & GRADES 9-12 INDICATORS
6.1 BENCHMARK	6.1(2) Restate the steps of the information problem solving process, with assistance.	6.1(5) Identify the steps of the information problem solving process, with assistance.	6.1 (8) Demonstrate and articulate knowledge of the information problem solving process.	6.1(12) Assess, independently, whether they met established standards for process.
6.1 INDICATORS	6.1a (2) Restate the BIG6 steps (information solving process) with assistance. 6.1b (2) Order the steps of the BIG6 process.	6.1a (5) List steps of BIG6. 6.1b (5) Compare scientific method and BIG6.	6.1a (8) Align the BIG6 steps to completed project or information problem.	6.1a (12) Critique the process and identify steps which need further study, improvement, or practice.

	GRADE 2 BENCHMARKS & GRADES K-2 INDICATORS	GRADE 5 BENCHMARKS & GRADES 3-5 INDICATORS	GRADE 8 BENCHMARKS & GRADES 5-8 INDICATORS	GRADE 12 BENCHMARKS & GRADES 9-12 INDICATORS
6.2 BENCHMARK	6.2(2) Discuss whether the process and information gathered was both relevant and complete in relation to the assigned task with direction.	6.2(5) Assess whether the process and information gathered was both relevant and complete in relation to the assigned task, with guidance.	6.2(8) Assess whether the process and the information gathered were relevant, complete and accurate in relation to the assigned task.	6.2(12) Assess, independently and continuously, the relevance, completeness and accuracy of gathered information and the efficiency of the research process.
6.2 INDICATORS	6.2a (2) Completes BIG6 steps as directed by teacher. 6.2b (2) With assistance, evaluate information found to assess if questions were answered sufficiently to complete task. 6.2c (2) Discuss importance of each BIG6 step in order to complete task.	6.2a (5) Describe how the BIG6 was used to guide the task. 6.2b (5) Use a teacher-created rubric to self-assess the BIG6 process to identify strengths and weaknesses.	6.2a (8) Evaluate the progress of work in terms of the BIG6 process. 6.2b (8) Use a teacher-created rubric to self-assess the BIG6 process to identify strengths and weaknesses.	6.2a (12) Assess how well the research conclusion and product satisfy the defined information need.
6.3 BENCHMARK	6.3(2) Assess products to see if they meet criteria.	6.3(5) Use assessments to determine whether the product meets established standards.	6.3(8) Use assessments to critically evaluate how the product meets established standards.	6.3(12) Use assessments to critically evaluate how the product meets established standards.
6.3 INDICATORS	6.3a(2) Use a teacher created rubric to self-assess product 6.3b(2) Describe quality of product based on assessment 6.3c (2) Identify areas for improvement of product.	6.3a (5) Use a teacher-created rubric to self-assess. 6.3b (5) Identify areas for improvement of product. 6.3c (5) Create rubrics for self-assessment with assistance.	6.3a (8) Create and accurately complete rubrics for self-assessment. 6.3b (8) Truthfully compares and contrasts work to exemplars. 6.3c (8) Identify areas for improvement of product.	6.3a (12) Establish the criteria to be used in judging the product (presentation). 6.3b (12) Truthfully compares and contrasts work to exemplars. 6.3c (12) Evaluate how the research question or problem, search strategy,

	GRADE 2 BENCHMARKS & GRADES K-2 INDICATORS	GRADE 5 BENCHMARKS & GRADES 3-5 INDICATORS	GRADE 8 BENCHMARKS & GRADES 5-8 INDICATORS	GRADE 12 BENCHMARKS & GRADES 9-12 INDICATORS
				resources, and understanding could have been expanded or modified.
6.4 BENCH-MARK	6.4(2) Discuss adjustments made during the information solving process.	6.4(5) Make adjustments to information solving process to improve present work/future tasks, with teacher input.	6.4 (8) Make adjustments to information solving process to improve present work and future tasks.	6.4 (12) Make adjustments to information solving process to improve present work and future tasks.
6.4 INDICATORS	6.4a (2) Discuss adjustments made to a product based on assessment 6.4b (2) Identify personal strengths and/or weakness in completing the process. 6.4c (2) Discuss changes made or that could be made with assistance.	6.4a (5) Create and revise (edit) drafts. 6.4b (5) Articulate strengths and areas for improvement in use of problem-solving model. 6.4c (5) Adjust work-in process (documents, presentations, etc.) in response to this self-reflection. 6.4d (5) Develop strategies to apply to future similar tasks with assistance.	6.4a (8) Analyze how the research question or problem, search strategy, resources, and interpretation could have been expanded or modified. 6.4b (8) Articulate strengths and areas for improvement in use of problem-solving model. 6.4c (8) Adjust work-in process (documents, presentations, etc.) in response to this self-reflection. 6.4d (8) Develop strategies to apply to future similar tasks.	6.4a (12) Evaluate how the research question or problem, search strategy, resources, and interpretation could have been expanded or modified. 6.4b (12) Critique the process and identify steps which need further study, skill development, or practice. 6.4c (12) Adjust work-in process (documents, presentations, etc.) in response to this self-reflection. 6.4d (12) Develop strategies to apply to future similar tasks.

