

Oregon School District

**Professional Development Plan
for
Information and Technology Literacy**

Presented to the Board of Education
February 25, 2008

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Information and Technology Literacy Professional Development Plan

Impetus for this plan

The District's 2007-2010 Information and Technology Literacy Plan includes seven goals:

1. Provide Robust Internet Access
2. Improve Communication with Stakeholders
3. Provide Professional Development to Support Effective Teaching and Learning
4. Develop a Comprehensive, Continuous Professional Development Program
5. Provide Flexible, Ubiquitous Access to Technology
6. Provide Integrated Technology and Information Literacy Instruction
7. Continue On-Going Collection Development of District Library Holdings

The strategies for accomplishing these goals are articulated in the plan, with the exception of Goal 4, "Develop a Comprehensive, Continuous Professional Development Program." This document is a result of an action item (see Appendix E) to create a professional development plan. This plan does not affect the other goals; they are to be implemented as described in the comprehensive Information and Technology Literacy Plan.

Historical background

With the advent of instructional technology in the district in the mid 1990s, the position of Technology Resource Teacher was created as a half time (0.5 FTE) position in each school. The original goal was to train teachers how to use technology hardware and software that was being deployed in every classroom. Over time, the role of each Technology Resource Teacher (TRT) evolved in each school.

In the spring of 2006, the Technology Director reviewed the Technology Resource Teacher job descriptions and discovered that not only did each TRT have a different job

description, but that the roles and responsibilities were drastically different. The Information and Technology Literacy Team (ITLT) began to revise and standardize the job descriptions to ensure that a common scope, list of responsibilities, and expectations was clearly communicated and achieved.

The work of revising the TRT job description was put on hold in order to develop the 2007-2010 District Information Technology Plan. This was done not only to allocate time to the most pressing need, but also to make sure that a plan was in place before determining job roles and responsibilities.

The focus of the 2007-2010 plan is to develop our students' information and technology literacy to prepare them for their future. To do that, **all teachers must be technologically proficient. This means more than being able to use equipment.** In the spring of 2007, the ITLT adopted the National Educational Technology Standards (NETS) as the goals for our professional staff. There are three versions of the NETS, each for a different population: NETS*S for students, NETS*T for teachers, and NETS*A for administrators.

The TRTs have played a crucial role in successfully achieving widespread staff proficiency in technology operations and concepts. **The role of the Technology Resource Teacher must now shift from “computer expert” to “professional developer.”**

A new TRT job description (Appendix C) was written in the fall of 2007, and was used as the basis for selecting a teacher to fill an interim opening in the TRT position at Rome Corners Intermediate School.

In July 2007, the ITLT drafted an assessment tool to determine the professional development needs of teachers. After much research and development, it was completed in December 2007. In January 2008, the assessment was implemented at Oregon High School, and 100% of the teaching staff participated, thanks to the relentless pursuit of Jill Zielinski and Pat Fenner. The survey data (Appendix G) provided insight into the current

status and needs of the staff, which will guide our professional development in the coming months.

Goals

- All teachers will meet the ISTE's National Educational Technology Standards for Teachers (NETS*T).
- All administrators will meet the ISTE's National Educational Technology Standards for Administrators (NETS*A).
- Technology will be used to create and support learning experiences for students that are relevant, engaging, and transferable to future learning and/or employment.
- Students will be equipped with "21st Century Skills" upon graduation.
- Students will meet ISTE's National Educational Technology Standards for Students (NETS*S).
- Students will meet DPI and NCLB requirements to be technologically literate by the end of eighth grade.

Current status

Our current professional development activities include the following:

1. General training on new hardware, software, and systems. This is ongoing as new systems are implemented.
2. Technology Integration Project: Occurs annually, includes a small group (10-20) of highly motivated teachers.
3. Summer series of classes: Various skills levels, but mainly focused on technical skills. Although professional development most effectively improves instruction when delivered during the school year so it can be implemented and reflected upon (Rodriguez and Knuth, 2000), these summer courses are valuable for rapid skill acquisition, intensive workshops, and curriculum development.
4. Technology resource teachers work with small groups (grade level teams or departments) of teachers to develop technology-integrated classroom activities. This is optional, and is generally available for only one half day, per teacher who

- chooses to participate, per year, due to limited Technology Resource Time and because it takes teachers out of classrooms.
5. Building-level training on data analysis tools such as PowerSchool, MAP, and Eclipse.
 6. Response to individual requests for help. These range from remedial help (e.g. “How do I copy and paste into Word?”) to exemplary use (e.g., Co-teaching units involving problem-based learning).

Gaps

When comparing our goals with our current status, we see that gaps exist.

- Information and Technology Literacy Professional Development is not systemically organized to support best practices of continuous, ongoing growth embedded into the school year.
- Most current ITL professional development is targeted at small groups of teachers at the very high or very low ends of proficiency.
- Teachers are able to self-select into and out of professional development.
- There is no requirement or formal expectation that all staff will grow in their proficiency in the use of technology to perform their job.
- There are few “Universal Options” for the vast majority of staff who are in the mainstream.

Guiding principles

This plan is guided by research into the best practices of technology integration, professional development, and adult learning. Below are some excerpts from research which summarize our guiding principles.

“Technology integration in classrooms is more about teaching and learning than it is about technology.” (Mills & Tincher, 2002)

“While many teachers agree with constructivist goals of active, mind engaging learning

and a deeper understanding, the path to becoming a constructivist teacher is not easy.” (Sparks & Hirsh, 1997)

“Schools cannot invest in technologies alone. They must also invest in ongoing professional development, training and support services.” (Jones, Valdez, Nowakowski, Rasmussen, 1995)

“Not only must principals provide real time collaboration for teachers in the area of technology integration, but also just in time professional development.” (McKenzie, 1999)

Effective professional development...

- is primarily school-based and built into the work of teachers.
- is organized around collaborative problem solving.
- is continuous and ongoing, involving follow-up and support for further learning.
- is connected to a comprehensive change process focused on improving student learning.

(Laitsch, 2003)

Adult learning theory (Cross, 1981; Knowles, 1984) indicates that:

- Adults learn best when they can apply their knowledge immediately to their job or personal life.
- Learning activities for adults should deliberately promote collaboration within small groups
- Learning activities need to provide support, feedback, and reflection from peers to promote integration, synthesis, and evaluation of new information.

Differentiation due to student needs

Grades K-4

Elementary classroom teachers are primarily concerned with teaching so-called “gateway skills” to their students, such as reading and math. Regardless of how a teacher uses technology as an instructional tool, **all teachers must be able to use technology to access, analyze, manipulate, and report student achievement data** to effectively tailor their instruction to student needs. Therefore, it is important that Technology Resource Teachers provide ongoing training to teachers in the use of relevant information technology tools. Classroom teachers and Technology Resource Teachers share the responsibility to instruct students in technology use to meet the Wisconsin Model Academic Standards and the NETS-S standards that are applicable to their grade level.

Grades 5-8

Beginning in grade 5, a shift occurs. **Instead of learning to use technology, students use technology to learn.** Instead of learning technology skills, students need to learn information literacy skills, including how to effectively find, assess, analyze, compare, and synthesize information to solve problems. **Teachers, therefore, need to design learning environments and activities that give students instruction and practice performing these tasks.**

Students need to continue receiving instruction in keyboarding skills, Internet safety practices, and effective communication techniques in order to meet the 8th grade literacy requirements of NCLB and the Wisconsin Model Academic Standards.

Student disengagement becomes apparent in grade five. Introducing technology for students to use in relevant, engaging ways in grades 5-8 can re-engage them in school. Using information technology tools to solve real-world problems in the context of academic classes adds relevance to the subject matter.

The primary role of Technology Resource Teachers and Library Media Specialists at the intermediate and middle grades is to train, mentor, and support teachers in effective integration of technology and information literacy into their curriculum. This must encompass engaged learning activities, problem-based learning experiences, and cross-disciplinary curriculum units.

Grades 9-12

High school is characterized by separate, subject-area courses. Students are preparing for the world of work or post-secondary education. Technology use needs to mirror “real-world” use. Teachers need to design learning experiences in which students use information technology to construct knowledge, communicate effectively, organize their lives, and collaborate with others regardless of distance.

All this should be done within the context of the subject area classes. Teachers must be skilled in integrating technology as an instructional tool. They must also guide students in applying information literacy skills and technology skills to the subject area content in ways that are relevant to how the students will use them after graduation.

This may not come naturally to teachers accustomed to teaching a single content area in isolation. The Technology Resource Teachers and Library Media Specialists must coach and model the integration of 21st Century Skills and NETS into the curriculum.

Challenges

Disparate levels

Teachers and administrators are at many different levels of experience and skill in each of the six major areas of the NETS. We will provide professional development for people at each level. The following table represents the distribution of Information Literacy and Technology skills of the staff as standard deviations. It includes examples of the types of professional development activities that might be available to each group.

Standard Deviation	-2	-1	0	1	2
Staff description	Resistant	Reluctant	Mainstream	Positive	Innovators
Type of professional development	Targeted	Selected	Universal Options	Selected	Targeted
Example activity	Mail merge	Analyze MAP data	“cheat-proof your lessons”	Student-created media	TIP

Logistics

Technology Resource Teachers are .5 FTE in a building. This means they are not available to provide support for teachers half of the time, which may not coincide with the teacher's scheduled work days or planning times.

Perception of technology as an “add on”

K-4 students meet with a Technology Resource Teacher ten times each year as part of their specials rotation to receive technology skills and Internet safety instruction. Because this is taught outside the classroom by the Technology Resource Teacher, technology is sometimes perceived as not being relevant to the students or the teacher.

Lack of perceived need

Teachers need to have certain skills related to Information and Technology Literacy to effectively perform their duties. We learn what we perceive to be valuable to us. **Teachers who perceive a benefit to technology use and/or technology integration will utilize it more often and more effectively.** Teachers who perceive little or no benefit from technology will have lower proficiency.

Belief in myths and stereotypes

Anecdotal evidence suggests that some staff act as if they believe stereotypes and myths regarding technology. These include:

- “Men are better at technology than women”
- “I’m too old to learn technology”

- “You have to be ‘Gifted’ to use computers”
- “I only have 5 years until I retire; why should I learn something new?”
- “I didn’t learn this stuff growing up, and I did fine. Why should I teach it?”
- “I’m not smart enough to use technology”
- “Technology isn’t important”
- “I tried that already in the 60s/70s/80s/90s”

Unclear expectations

Staff do not have a common understanding of what they are expected to be able to do with technology, or how they are expected to use it to teach. District-wide expectations based on state and national standards have not been clearly communicated. Individual expectations are not communicated because professional development in the area of information and technology literacy is optional.

Unreliable technology

Information technology systems which do not work as expected cause frustration and disappointment. A teacher who is hesitant to use technology in the teaching environment can be easily convinced that his/her fears were correct if they try something and it does not work. This is especially true if they do not have support when trying something new, which often occurs when a TRT is not available at that time.

The number of systems that the technology department supports has increased significantly in recent years. (See [Appendix A](#)) This is due both to the intentional adoption of new technologies, and due to traditional items becoming technology-dependent. Purchases that in the past did not require technology (such as a textbook adoption) now place an additional burden on tech support. At the same time, the complexity of many systems has increased as well. As a result, some systems are not sufficiently reliable.

Strategies

In order to meet the goals of the 2007-2010 Information and Technology Literacy Plan, and to achieve our professional development goals as related to Information and Technology Literacy, we propose the following:

1. Clearly communicate the NETS for Teachers as a goal for all teachers
2. Require that all faculty have an annual professional development goal related to the NETS for Information and Technology Literacy
3. Set deadlines for when teachers must achieve certain basic skills
4. Model desired behavior by meeting the NETS for Administrators
5. Create a knowledgebase of documentation, best practices, and examples of instructional technology use to allow staff to become self-sufficient.
6. Formally adopt revised job descriptions of the Technology Resource Teachers to prioritize ongoing professional development for all teaching staff (Appendix C)
7. Reallocate EAs or other resources to perform tasks not in the Technology Resource Teacher job description (e.g. proctoring MAP tests, downloading digital pictures, preparing lab schedules, updating school web sites)
8. Embed ongoing professional development into the school year to allow practice, reflection, revision, and improvement. This may require changes to staffing models and the school year schedule.
9. Create a schedule for every teacher to receive ongoing, goal-directed, growth-oriented training from a tech resource teacher regularly throughout the year. (Appendix D shows a possible scenario)
10. Evaluate IT budget to insure sustainable and effective, curriculum-driven deployment of technology.
11. Evaluate IT support model to allow hiring and retention of highly-qualified technical staff.

Summary of Technology Resource Teacher (TRT) Professional Development activities by building level for Students, Teachers, and Administrators

The following table shows the general responsibilities of the Technology Resource Teachers at the elementary, middle, and secondary levels, as related to students, teachers, and administrators. It should be noted that these duties at the elementary level are in addition to the teaching duties (keyboarding, Internet safety, and general computer use).

	Students	Building Teaching Staff	Administrators
K-4	Provide direct instruction to students according to NETS-S .	Provide quarterly small-group workshops with every teacher to meet individual goals based on NETS-T	Assist in meeting NETS-A
		Provide training in technology tools for assessment, analysis, and reporting	Assist in planning professional development
		Provide training in classroom technology tools	
5-8	Cooperatively teach students within classroom context	Provide quarterly small-group workshops with every teacher to meet individual goals based on NETS-T	Assist in meeting NETS-A
		Provide training in technology tools for assessment, analysis, and reporting	Assist in planning professional development
	Coordinate instruction to ensure NETS*T and NCLB achievement by 8 th grade	Provide training in classroom technology tools	
		Provide training in effective curriculum integration of 21st Century Skills	
9-12		Provide quarterly small-group workshops with every teacher to meet individual goals based on NETS-T	Assist in meeting NETS-A
		Provide training in technology tools for assessment, analysis, and reporting	Assist in planning professional development
		Provide training in classroom technology tools	
		Provide training in effective curriculum integration of 21st Century Skills	

Timeline

2007

- July
 - Information and Technology Literacy Team met with Jane Peschel to create a model for technology professional development.
- August
 - High school rolled out building goal for technology professional development for all teachers. Requested an assessment tool that teachers could use to guide their choices of professional development.
- September
 - ITLT began creating an assessment tool.
 - Began year two of the Technology Integration Program
- October
 - Incorporated Information Literacy and Pedagogy into the Technology Professional Development Matrix
 - Provided information and technology literacy topics for inservice
- November
 - Revised the Technology Resource Teacher job description. The revised job description includes the duties necessary to accomplish the Plan's goals.

2008

- January
 - Finalize the NETS*T assessment: "Teacher Technology Initiative Self Assessment"
 - Request proposals for summer class series
- February
 - Administer the Teacher Technology Initiative Self Assessment to all teaching staff.
 - Present Technology Professional Development Plan to Administrative Team.
 - Present Technology Professional Development Plan to Board as part of the plan to meet 21st Century Skills
 - Submit summer classes to Edgewood for approval
- March
 - Select NETS realm to target professional development, based on assessment results
 - Administer NETS*A assessment to administrators
 - Publicize summer series and open online enrollment
 - Analyze assessment data to determine NETS*T areas of focus

- April
 - Finalize summer series enrollment, send out confirmation, request payment
 - Administrators develop ITL professional development goals for themselves
- May
 - Technology Integration Project demonstration for public and Board
 - Accept applications for TIP 2008-2009
- June
 - Begin summer series classes, continuing through August
- July
 - Teachers workgroups are formed based on results and functional group
- August
 - New teacher training on Information Technology systems
 - Remedial technology concepts and operations training for returning staff
 - TRTs establish calendar of meetings with all staff in the building
- September
 - Each teacher establishes ITL goal with their principal for 08-09
 - Begin TIP 08-09 classes
- October, November, December
 - Q1 TRT-led small group workshops

2009

- January
 - Q2 TRT-led small group workshops
 - Request proposals for summer class series
- February
 - Submit summer classes to Edgewood for approval
- March
 - Q3 TRT-led small group workshops
- April
 - Finalize summer series enrollment, send out confirmation, request payment
- May
 - Q4 TRT-led small group workshops

- Principal evaluation of individual teacher progress toward goals
- Technology Integration Project demonstration for public and Board
- Accept applications for TIP 2009-2010
- June
 - Administer NETS*T assessment to measure growth
 - Assess the impact of the professional development plan and make improvements as needed
 - Administer NETS*A assessment to measure growth
 - Begin summer series classes, continuing through August
- July
 - “Retire” old training for technology operations and concepts (District will no longer provide staff training on topics that should have been achieved, such as using MS Office, PowerSchool, Internet Explorer.)
 - Identify training needs for new technology operations and concepts, based on systems to be implemented in fall.
 - Teachers workgroups are formed based on results and functional group
- August
 - New teacher training on Information Technology systems
 - TRTs establish workshop schedule with all staff in the building
- September
 - Each teacher establishes ITL goal with their principal for 2009-2010
 - Begin TIP 2009-2010 classes
 - Write District Information and Technology Literacy plan 2010-2013
- October-November
 - Q1 TRT-led small group workshops

2010

- January
 - Q2 TRT-led small group workshops
 - Request proposals for summer class series
- February
 - Submit summer classes to Edgewood for approval
- March
 - Q3 TRT-led small group workshops
- April
 - Finalize summer series enrollment, send out confirmation, request payment
- May

- Q4 TRT-led small group workshops
- Principal evaluation of individual teacher progress toward goals
- Technology Integration Project demonstration for public and Board
- Accept applications for TIP 2010-2011
- Submit 2010-2013 Information and Technology plan for board approval, to include a strategic professional development component
- June
 - Administer NETS*T assessment to measure growth
 - Assess the impact of the professional development plan and make improvements as needed
 - Administer NETS*A assessment to measure growth
 - Begin summer series classes, continuing through August
- July
 - Teachers workgroups are formed based on results and functional group
 - Identify training needs for new technology operations and concepts, based on systems to be implemented in fall.
 - Begin implementation of 2010-2013 plan

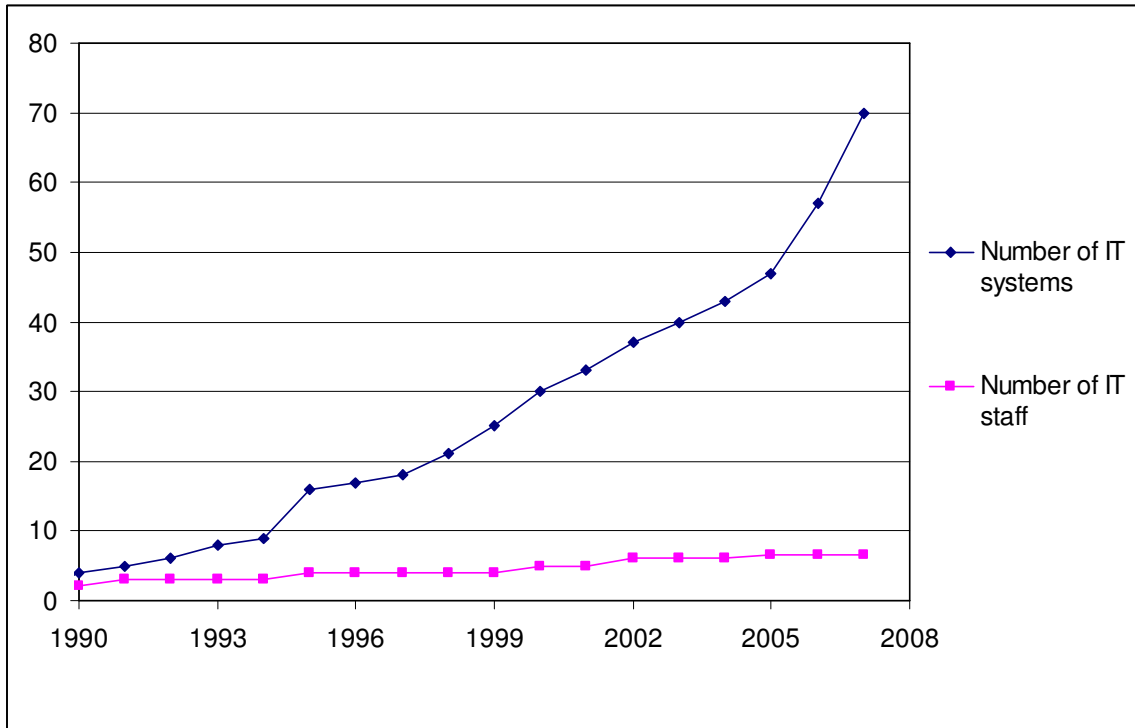
Conclusion

Successfully preparing our students for the future requires effective use of Information and Technology Literacy skills by teachers. The professional development activities of the Technology Resource Teachers and Library Media Specialists in the past decade have achieved widespread staff competence with technology.

We now transition from learning how to use technology, to using information technology to teach and learn. This plan insures sustained, systemic, ongoing, strategic, effective professional development to achieve the National Educational Technology Standards. The result will be effective, relevant learning experiences to prepare our students for their future.

Appendix A: Growth of responsibility

Comparative growth of supported IT systems versus IT staff over time



Appendix B: Wisconsin Schools and NCLB 8th Grade Requirements

Wisconsin Schools & NCLB 8th grade technological literacy requirement

NCLB goal: The portion of the No Child Left Behind (NCLB) Act known as 'Enhancing Education Through Technology Act of 2001' (Title II-D, also called E2T2) states this goal: *To assist every student in crossing the digital divide by ensuring that every student is technologically literate by the time the student finishes the eighth grade, regardless of the student's race, ethnicity, gender, family income, geographic location, or disability.*

DPI has defined the following as school district responsibilities:

- define technology literacy
- determine the criteria, standards, curriculum, instruction that prepares all students to be "technologically literate".
- assess and document the technology literacy proficiency level of all 8th grade students to meet NCLB requirements. Eighth grade assessment results must be reported on NCLB application forms.

Districts that are audited by DPI under Title II-D are asked to provide the following information:

- How does the district provide high quality professional development in the area of technology integration? What are some of the district offerings? What types of delivery methods are used (class, 1 to 1, coaching, online, small group)?
- Has the district completed a full integration (PK-12) of technology throughout the curriculum based on Wisconsin Model Academic Standards (WMAS)? Do you have curriculum maps and/or alignment sheets of your district curriculum aligned with the WMAS for Information and Technology Literacy?
- What is the district plan for the evaluation of students in order to demonstrate technological literacy by the end of eighth grade? What specific method of assessing or monitoring do you use? How data is stored and used to check for curriculum continuity?

Appendix C: Proposed Technology Resource Teacher Job Description

Duties

- Mentor teachers in technology integration
- Model teaching practices which provide relevant, student-centered, engaging learning environments for students
- Provide professional development for teachers in the areas of technology integration, authentic assessment, engaged learning, and 21st Century skills
- Work with Library Media Specialists to deliver Information and Technology Literacy curriculum
- Create documentation to train and support staff
- Evaluate new technologies for educational benefit
- Participate in the Information and Technology Literacy Team (ITLT)
- Develop professional development programs designed to help staff meet ISTE's National Educational Technology Standards (NETS)
- Develop content-area curriculum in cooperation with Subject Area Committees (SAC)

Characteristics

- Flexible
- Resilient
- Comfortable with change
- Creative
- Student-focused
- Good rapport with colleagues
- Collaborative
- Adaptable to new situations and new challenges
- Excellent verbal, written, and media communication skills
- Likes to explore new opportunities
- Self-directed

Qualifications

- DPI certified teacher
- Experience as a classroom teacher
- Experience teaching adults
- Experience using Engaged Learning, PBL, Thematic Instruction, or other student-centered teaching philosophies.
- Proficient in a wide variety of software applications
- Able to perform basic technology troubleshooting

Appendix D: Scenario for regular small-group training for teachers

Teachers develop individual ITL goals and agree on them with their principal. Principal and/or teacher shares goal with TRT.

Identify teachers who are not participating in the Technology Integration Program. (Those who are participating in TIP will receive ongoing professional development as part of that program.)

Based on assessment data, choose two of the six NETS*T realms which will provide the most benefit to the school.

Within the chosen realms, identify groups of teachers who are at a similar proficiency level and who share professional responsibilities (such as teaching the same grade level or content area).

These groups will collaborate on achieving their ITL professional development goals throughout the year.

TRT creates a schedule to meet with each group once each quarter to provide ongoing, embedded professional development. These could occur during in-service days or on regular school days by using subs with Title II funds. (This schedule formalizes the practice of “Tech days” and embeds it into the calendar to make it systemic.)

This results in each teacher receiving four half-days of guided professional development toward achieving their annual ITL goals.

Spreadsheet below is to assist with computing the resources needed.

Building	Teaching				TRT		TRT available	TRT day equivalent
	staff w/in 1 st dev	# half day sessions	avg size of groups	days needed	TRT FTE	other duties		
OHS	93	4	3	62	0.5	0	0.5	90
OMS	48	4	3	32	0.5	0	0.5	90
RCI	53	4	3	35.3333	0.5	0	0.5	90
NKE	50	4	3	33.3333	1	0.53	0.47	84.6
PVE	45	4	3	30	0.5	0.23	0.27	48.6
BKE	45	4	3	30	0.5	0.23	0.27	48.6

Appendix E: Action Plans from the 2007-2010 Information and Technology Plan

1. Action Plan: Provide Robust Internet Access

Need Statement	Bandwidth usage reports and user support tickets indicate that instructional resources (United Streaming, Google Earth, web resources), communication tools (district web site for parents, PowerSchool) and management systems (Finance, HR, and online IEPs) are frequently not available due to insufficient bandwidth.
Goal	Goal 1: IT will provide sufficient available bandwidth to accommodate the increased amount of traffic needed for online content delivery systems, web-based communication tools, and management systems.
Objective(s)	Objective A: Available bandwidth will reach 90% saturation less than 5% of regular school hours, as indicated by longitudinal bandwidth usage graphs.

Activities or Resources	Person /Team Responsible	Timeline Start --- Finish	Budget: Expenditure & Source	Success Indicators
1. A.1 Purchase 5Mbps additional bandwidth service on the district's existing DS3 circuit which is not being fully utilized.	IT Department	June 2007- August 2007	Increased bandwidth: \$250/month From Tech Access and TEACH funding (via DOA)	Bandwidth utilization and efficiency graphs and reports
1. A.2 Procure router hardware which is capable of aggregating two separate Internet connections.	Technology Director	June 2007-July 2007	Router: \$2500 IT hardware replacement budget	Implementation
1. A.3 Provide training to IT staff on the best use of Packeteer appliance.	Technology Director	June 2007- December 2007	\$1000 IT Training budget	Staff successfully completes training.
1. A.4 Implement web-caching proxy to reduce unnecessary Internet traffic	IT Department	Feb 2008- September 2008	Proxy server: \$2000 IT hardware acquisition budget	Logs show data transferred from cache instead of Internet.
1. A.5 Annually evaluate current bandwidth usage and projected future needs, resulting in purchase of additional bandwidth to meet the objectives.	Technology Director	June 2008-June 2010	Salaries	Annual report.

Relevant Policies to Review that may have impact on Goals, Objectives, and/or Activities	None.
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2. Action Plan: Improve Communication with Stakeholders

Need Statement	The results of the enGauge survey as well as anecdotal evidence indicate that communication with students, parents, and the community needs to be improved. This is especially true regarding communication about the Information and Technology Literacy program.
Goal	Goal 2: Students, staff, parents, and the community will receive regular communication about the vision, mission, purpose, and activities of the Oregon School District’s Information and Technology Literacy program.
Objective(s)	Objective A: Parents will receive regular communication about the vision and mission of the Technology Literacy Program, and the related activities in which their child may be involved.

Activities or Resources	Person /Team Responsible	Timeline Start --- Finish	Budget: Expenditure & Source	Success Indicators
2. A.1 Publish the ITL vision and mission in each school’s regular newsletter.	Principals Tech Resource Teachers LMS Teachers	September 2007- June 2010	none	Inclusion in newsletter
2. A.2 Establish an informational web site geared toward parents with information specifically about the ITL program.	Technology Director	August 2007- September 2007	none	Presence on the web site
2. A.3 Provide informational seminars and workshops for parents on topics related to technology and children.	Technology Director LMS Teachers Tech Resource Teachers	November 2007- June 2010	\$1,000 annually. Teacher as Teacher pay; grants.	Completion of two parent workshops annually at each school.

Relevant Policies to Review that may have impact on Goals, Objectives, and/or Activities	None.
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Goal	Goal 2: Students, staff, parents, and the community will receive regular communication about the vision, mission, purpose, and activities of the Oregon School District’s Information and Technology Literacy program.
Objective(s)	Objective B: Parents will be able to communicate their needs to the school district regarding the Information and Technology Literacy program.

Activities or Resources	Person /Team Responsible	Timeline Start --- Finish	Budget: Expenditure & Source	Success Indicators
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2. B.1 Establish an electronic "comments box" to allow parents to submit questions to the ITL team.	Technology Director LMS Teachers	September 2007- October 2007	none	Comments being received from parents.
2. B.2 Hold interactive sessions where parents can ask questions of ITL team members.	ITLT	October 2007- June 2010	\$1,000 annually. Teacher as teacher pay.	Attendance at these meetings.

Relevant Policies to Review that may have impact on Goals, Objectives, and/or Activities	None.
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Goal	Goal 2: Students, staff, parents, and the community will receive regular communication about the vision, mission, purpose, and activities of the Oregon School District's Information and Technology Literacy program.
Objective(s)	Objective C: The public will be aware of the ITL vision and its relevance to the mission of the District.

Activities or Resources	Person /Team Responsible	Timeline Start --- Finish	Budget: Expenditure & Source	Success Indicators
2. C.1 Publish the ITL vision and mission in the local newspaper.	Technology Director Community Outreach Coordinator	September 2007, and annually thereafter	none	Inclusion in newspaper
2. C.2 Publish the District's vision and mission, and the ITL vision, mission, examples, and products on a professional-looking public website	Technology Director	June 2007- September 2007	\$2400 annually for web hosting and content management system (to be shared with other uses)	Anecdotal feedback from community members

Relevant Policies to Review that may have impact on Goals, Objectives, and/or Activities	Policy on publication of student work on a public web site. Web page design policy.
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Goal	Goal 2: Students, staff, parents, and the community will receive regular communication about the vision, mission, purpose, and activities of the Oregon School District's Information and Technology Literacy program.
Objective(s)	Objective D: Provide telephone and voicemail access to every staff member to enable timely communication with parents, other staff, and community members.

Activities or Resources	Person /Team Responsible	Timeline Start --- Finish	Budget: Expenditure &	Success Indicators
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			Source	
2. D.1 Replace the District's obsolete voicemail system	Technology Director	October 2009 – May 2010	\$20,000 Capital budget	Implementation
2. D.2 Upgrade existing PBX phone system to allow expansion	Technology Director	July 2008 – June 2009	\$40,000 Capital budget + \$15,000 annually Tech operations	Implementation
2. D.3 Implement E911 to provide crucial location information in case of emergency	Technology Director	July 2007 – February 2008	\$5,000 Operations budget	Calls to 911 show room # and relevant directions, as evaluated by fire and police.

Relevant Policies to Review that may have impact on Goals, Objectives, and/or Activities	None.
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3. Action Plan: Provide Professional Development to Support Effective Teaching and Learning

Need Statement	enGauge survey results, observations, teacher self-reports, and anecdotal information indicate that technology and information literacy skills are not effectively integrated into curricula or the instructional process, thus reducing the effectiveness of instruction in preparing students for an information-based society.
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Goal	Goal 3: Staff who are already proficient with technology use will be offered targeted professional development opportunities to increase their teaching effectiveness through the use of technology, thereby serving as a model for others.
Objective(s)	Objective A: The ITL team will provide inservice training to all staff regarding the use of technology tools in their professional environment.

Activities or Resources	Person /Team Responsible	Timeline Start --- Finish	Budget: Expenditure & Source	Success Indicators
3. A.1 Develop curricula related to available technologies	ITL Team	June 2007- August 2007	\$500, Curriculum Development	Curricula delivery
3. A.2 Schedule training sessions on inservice days and other available times	Tech Resource Teachers Curriculum Director	August 2007	None	Sessions are on calendar.
3. A.3 Deliver training to staff.	ITL Team	October 2007 – June 2008	None	Increase in the number of staff identified as “proficient” in technology.

Relevant Policies to Review that may have impact on Goals, Objectives, and/or Activities	None.
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Goal	Goal 3: Staff who are already proficient with technology use will be offered targeted professional development opportunities to increase their teaching effectiveness through the use of technology, thereby serving as a model for others.
Objective(s)	Objective B: Provide a graduate-level professional development course which focuses on providing “engaged learning” experiences using technology. Course will run over a semester to allow participants to apply what they learn in their classroom, reflect on their practice, collaborate with peers, and refine their methods.

Activities or Resources	Person /Team	Timeline	Budget:	Success
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	Responsible	Start --- Finish	Expenditure & Source	Indicators
3. B.1 Develop course curriculum.	Technology Director, Technology Resource Teachers	June 2007- July 2007	\$500, Title II grant	Curriculum is developed and published.
3. B. 2 Implement the course	Technology Director, Technology Resource Teachers ,Director of Instruction	August 2007- December 2007 (and repeating annually)	\$5,000, Title II grant \$15,000, Technology Capital Budget	Participants score higher on the NCREL Profile Tool assessment after taking course.

Relevant Policies to Review that may have impact on Goals, Objectives, and/or Activities	None.
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4. Action Plan: Develop a Comprehensive, Continuous Professional Development Program

Need Statement	There does not exist a mandatory, comprehensive, coordinated professional development plan for educators to improve their Information and Technology Literacy knowledge and skills.
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Goal	Goal 4: Curricula and instructional plans will contain information and technology literacy components as an integral part of student learning.
Objective(s)	Objective A: The District will develop a professional development program which insures that all staff continuously improve their Information and Technology Literacy knowledge and skills.

Activities or Resources	Person /Team Responsible	Timeline Start --- Finish	Budget: Expenditure & Source	Success Indicators
4. A.1. Develop a model of technology use and instructional integration which identifies desired competencies	ITLT	September 2007- June 2008	None	Approval of model by administrative team
4. A. 2. Include technology professional development in the District's strategic professional development plan	ITLT, Director of Instruction	September 2007- June 2008	None	District's strategic professional development plan includes required technology component.
4. A.3 Define a continuum of technology use. Develop a way for staff to identify where they are on the continuum.	ITLT	September 2008- January 2009	None	Publication of continuum and assessment tool.
4. A. 4. Develop catalog of regular, ongoing, coordinated professional development experiences.	ITLT, Director of Instruction	January 2008 – December 2008	None	Publication of catalog of experiences.
4. A. 5. Revise job description of Technology Resource Teachers to reflect the priority of providing professional development.	ITLT, Principals	January 2008- May 2008	None	Approval of revised job descriptions.
4. A. 6. Provide professional development experiences.	ITLT	August 2009- May 2010	Professional development budget; IT budget	Attendance at events.

4. A. 7. Every educator has a mandatory Information and Technology Literacy professional development goal.	Principals	January 2009 – May 2009	None	Inclusion of goal in annual review.
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Relevant Policies to Review that may have impact on Goals, Objectives, and/or Activities	Teacher observation policies. Collective bargaining agreements.
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5. Action Plan: Provide Flexible, Ubiquitous Access to Technology

Need Statement	Teachers report that limited access to technology inhibits their ability to use it in their instructional environment.
Goal	Goal 5: IT will provide technology in environments that are easily accessible, configurable, and flexible, to meet a variety of instructional needs.
Objective(s)	Objective A: IT will provide wireless LANs to allow flexible deployment of technology, resulting in timely, ubiquitous access in dynamic learning environments.

Activities or Resources	Person /Team Responsible	Timeline Start --- Finish	Budget: Expenditure & Source	Success Indicators
5. A.1. Purchase Wireless Access Points to provide optimal wireless performance.	IT Department	August 2008- August 2009	\$8,000 Technology Capital Expenditure	80% building coverage, or 100% targeted area coverage
5. A. 2. Purchase Wireless Access Point Controller to manage phase 2 wireless implementations	IT Department	January 2009	\$15,000 Technology Capital Expenditure	Zero incidents of WAP interference
5. A. 3. Replace edge network switches reaching their end of life in a phased replacement plan	IT Department	July 2007 - August 2009	\$100,000 total, Technology cyclical hardware replacement budget	All network components are supported by manufacturer

Relevant Policies to Review that may have impact on Goals, Objectives, and/or Activities	Policy on Use of Electronic Devices in Schools.
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Goal	Goal 5: IT will provide technology in environments that are easily accessible, configurable, and flexible, to meet a variety of instructional needs.
Objective(s)	Objective B: IT will implement a regular equipment maintenance and replacement cycle to insure that all information technology systems are capable of support administrative and instructional needs of the District.

Activities or Resources	Person /Team Responsible	Timeline Start --- Finish	Budget: Expenditure & Source	Success Indicators
5. B.1. Replace one-fifth of computers annually	IT Department	Summer of each year	\$180,000, Technology hardware replacement	Instructional computers are no more than five years old
5. B. 2. Replace servers and network devices according to need	IT Department	Annually	\$32,000 - \$56,000, Technology hardware replacement	Server and/or network performance are not found to

				be causes of poor performance
5. B. 3 Upgrade operating systems and productivity software	IT Department	June 2008-August 2008	\$125,000, Technology software budget	Windows XP has been replaced on 40% of total computers by August 2008.

Relevant Policies to Review that may have impact on Goals, Objectives, and/or Activities	Policy on Use of Electronic Devices in Schools.
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6. Action Plan: Provide Integrated Technology and Information Literacy Instruction

Need Statement	enGauge survey results, observations, teacher self-reports, and anecdotal information indicate that technology and information literacy skills are not effectively integrated into curricula or the instructional process, thus reducing the effectiveness of instruction in preparing students for an information-based society.
Goal	Goal 6: Library Media Specialists will teach information and technology literacy within the context of the classroom. Students will demonstrate high levels of information and technology literacy as a result of curricula.
Objective(s)	Objective A: Library Media Specialists and Technology Resource Teachers will participate in curriculum and instructional process development.

Activities or Resources	Person /Team Responsible	Timeline Start --- Finish	Budget: Expenditure & Source	Success Indicators
6. A.1 Include Library Media Specialist and Technology Resource Teachers on Subject Area Committees	Director of Instruction	July 2007- June 2010	\$1000 annually, Curriculum Development	Presence of integrated ITL outcomes
6. A. 2 Create a curriculum development procedure which requires incorporation of ITL standards by a Library Media Specialist and/or Technology Resource teacher	Director of Instruction, CCC	September 2007- August 2008	Salaries	Identifiable ITL standards in grade-level and subject-area curriculum proposals submitted to CCC
6. A. 3 Adopt standard, district-wide curricula for information literacy, which includes reading, writing, research, and communication.	Director of Instruction	July 2007 – June 2010	\$1000 Curriculum Development	Students learn a standard method of writing, research, and information literacy.

Relevant Policies to Review that may have impact on Goals, Objectives, and/or Activities	Curriculum adoption process
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Goal	Goal 6: Library Media Specialists will teach information and technology literacy within the context of the classroom. Students will demonstrate high levels of information and technology literacy as a result of curricula.
Objective(s)	Objective B: Library Media Specialists will teach information and technology literacy concepts and skills in cooperation with the classroom or subject area teacher, in the context of subject area learning. LMS Teachers and Technology Resource Teachers will

	team-teach ITL skills “just in time” to meet relevant needs.
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Activities or Resources	Person /Team Responsible	Timeline Start --- Finish	Budget: Expenditure & Source	Success Indicators
6. B.1 Revise the job description of the Library Media Specialist to reflect the priority of contextual Information and Technology Literacy instruction.	ITLT, Director of Instruction	September 2007- June 2008	None	Approval of revised job descriptions
6. B. 2 Perform a functional analysis of Library Media Services and Educational Assistants.	Director of Instruction, Technology Director, ITLT	September 2008- June 2009	None	Functional analysis is published
6. B. 3 Adjust schedules and current resource allocation to maximize the time Library Media Specialists spend co-teaching Information Literacy Skills in a classroom context.	Directory of Instruction, Administrative Team, ITLT	September 2009- June 2010	To be determined by functional analysis.	Librarians teach ITIL average of 3 or more classes daily.

Relevant Policies to Review that may have impact on Goals, Objectives, and/or Activities	Job descriptions for Library Media Specialists and Educational Assistants; evaluation procedures.
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7. Action Plan: Continue On-Going Collection Development of District Library Holdings

Need Statement	Ongoing collection development is vital to the success and viability of the library media program in any school. Students and staff need current and appropriate materials related to learning and achievement in order to meet local, state, and national standards.
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Goal	Goal 7: Library Media Specialists will participate in ongoing collection development by analyzing their collections, choosing appropriate and current resources that meet student and staff needs, and aligning resources with content area subjects and standards.
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Objective(s)	Objective A: Each LMS will determine areas for focusing their collection development efforts. They will examine their current holdings and resources and determine what needs to be replaced, added, or enhanced to meet the needs of their library's patrons.
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Activities or Resources	Person/Team Responsible	Timeline Start --- Finish	Budget: Expenditure & Source	Success Indicators
7.A.1 Analyze current collections in each district library to determine holdings age and breadth of content.	District LMSs	June 2007-October 2007	None	Collection analysis reports
7.A.2 Determine areas of need in each collection based on building, grade level, course, and content area curricular outcomes, goals, and standards.	District LMSs	October 2007-June 2008 (and into subsequent years of this plan)	None	List of areas to focus collection development on for each year of this plan.
7.A.3 Purchase/acquire materials that meet the needs of each building library as determined by the building LMS using the district policies and procedures and in conjunction with professional standards for collection development and material selection.	District LMSs	October 2007-June 2008 (and into subsequent years of this plan)	\$114,479 total District Library budgets \$108,503 Common School Funds, remainder from District/ Building allocated funds	Decrease in the age of each library collection. Increase in numbers of materials meeting patron needs.

Relevant Policies to Review that may have impact on Goals, Objectives, and/or Activities	District Policies: 1.07 Purposes of an Educational Materials Selection Policy, 342 Inter Library Loan Policy
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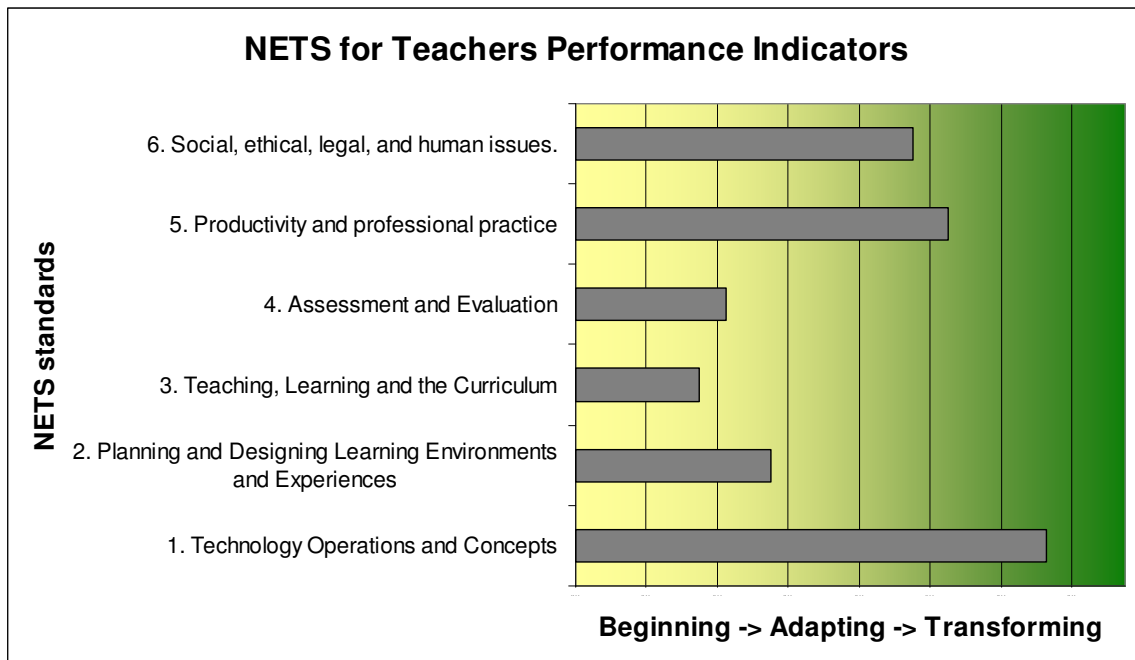
Appendix F: Teacher Technology Initiative Self-Assessment Survey Tool

The Teacher Technology Initiative Self-Assessment tool is a survey based on the six areas of the National Educational Technology Standards for Teachers (NETS-T). For each statement given, the teachers select how comfortable they are from a drop-down menu. The four choices are

1. Not at all
2. Minimally
3. Confidently
4. Able to teach others

When done, teachers click on a link at the bottom to see a graph of their score. The graph is used by teachers to identify which areas they need to develop. Numerical scores are collected by the TRTs for data analysis purposes.

A sample graph is pictured below.



Below are the statements in the survey, grouped according to the six areas of the NETS*T.

I can...

1. Technology Operations and Concepts
Create a newsletter with graphics and text in columns using a word processor
Create charts and graphs of numerical data using a spreadsheet.
Calculate students' grades using a spreadsheet
Search the web for information to choose hardware and software that is instructionally sound to use in the classroom.
Create my own World Wide Web pages to be accessed by my students as part of a lesson.
Use presentation software such as PowerPoint, MovieMaker, Photostory, or iMovie, to create a multimedia presentation.
Capture images using a digital camera or scanner and transfer them to a computer.
Apply basic troubleshooting strategies with a computer that is not working properly.
Save and access files on my school's network from your classroom.
2. Planning and Designing Learning Environments and Experiences
Design a lesson in which students search electronic information sources (CDs, the Web, or online databases) for information in content areas.
Design an assignment in which students evaluate the accuracy, relevance, appropriateness, and bias of electronic information sources.
Design a lesson in which students use presentation or desktop publishing software to share knowledge, expertise, and artifacts with classmates.
Design a lesson in which students create Web pages, podcasts, or videos to share their reports or writings outside the classroom.
Use technology to adapt a lesson for students with special needs.
3. Teaching, Learning and the Curriculum
Teach a lesson addressing district and state standards as well as the ISTE National Education Technology Standards for Students.
Teach students to create digital portfolios of their learning using media such as web pages, MovieMaker, Photostory, blogs, or podcasts.
Teach lessons in which students take responsibility for their own learning in online environments.
Teach a lesson in which students use electronic images or sound to communicate ideas, personal experiences, and stories.
Adapt to teaching environments that range from one-computer classrooms to networked computer labs.
4. Assessment and Evaluation
Evaluate artifacts created by your students using electronic media (digital portfolios, writing, video, artwork, online tests, etc.)
Use students' test results from computer-based assessments to evaluate student learning from software.
Use technology to communicate evidence of student learning (projects, data, etc.) to students, parents, and the community.
Guide students in applying rubrics to assess the products and reports they create with technology.
5. Productivity and professional practice
Communicate with other teachers using email, discussion lists, blogs, forums, or IM to improve your understanding of technology and teaching.
Learn to use software applications on your own from online help and web-based tutorials.
Evaluate and select educational software to help students meet content standards.
Access the web, email, and online resources (blogs, podcasts, forums, databases, etc.) from your home.
6. Social, ethical, legal, and human issues.
Use resources on the web to integrate multicultural and gender issues in the curriculum.
Teach students legal and ethical aspects of copyright issues regarding digital media and software.
Explain your school's policies on Internet use to students and their parents.
Develop lessons and procedures to ensure equitable access to computers for all students.
Protect privacy and security when publishing students' writing or images on the web.

Appendix G: Summary assessment data from OHS

OHS 100% teaching staff
January, 2008

	n=93	Average	Std Dev	"-1SD"	"+1SD"	Beginning	Adapting	Transformi
Technology Operations and Concepts	Q1	2.677419	0.957366	1.720053	3.634785			
	Q2	2.473118	0.939373	1.533745	3.412491			
	Q3	2.44086	0.949398	1.491463	3.390258			
	Q4	2.795699	0.774023	2.021676	3.569722			
	Q5	2.182796	0.90825	1.274546	3.091046			
	Q6	2.494624	0.939746	1.554877	3.43437			
	Q7	2.795699	0.927352	1.868347	3.723051			
	Q8	2.462366	0.71565	1.746715	3.178016			
	Q9	3.182796	0.736417	2.446379	3.919212			
	avg	2.611708	0.642815	1.968894	3.254523	3%	84%	13%
Planning and Designing Learning Environments and Experiences	Q10	2.88172	0.845055	2.036665	3.726776			
	Q11	2.55914	0.890315	1.668825	3.449454			
	Q12	2.591398	0.935258	1.65614	3.526656			
	Q13	1.946237	0.825749	1.120488	2.771985			
	Q14	2.365591	0.869594	1.495997	3.235186			
	avg	2.468817	0.704331	1.764486	3.173148	13%	81%	6%
Teaching, Learning and the Curriculum	Q15	2.204301	0.915556	1.288745	3.119857			
	Q16	1.741935	0.806269	0.935666	2.548205			
	Q17	2.268817	0.835877	1.43294	3.104695			
	Q18	2.333333	0.947919	1.385414	3.281252			
	Q19	2.569892	0.889527	1.680366	3.459419			
	avg	2.223656	0.705167	1.518489	2.928823	17%	81%	2%
Assessment and Evaluation	Q20	2.419355	0.863796	1.555559	3.283151			
	Q21	2.204301	0.841313	1.362988	3.045614			
	Q22	2.645161	0.76108	1.884081	3.406241			
	Q23	2.677419	0.782433	1.894986	3.459853			
	avg	2.486559	0.688971	1.797588	3.17553	11%	84%	5%
Productivity and professional practice	Q24	2.924731	0.710734	2.213997	3.635465			
	Q25	2.677419	0.739584	1.937835	3.417003			
	Q26	2.483871	0.746192	1.737679	3.230063			
	Q27	3.010753	0.78705	2.223702	3.797803			
	avg	2.774194	0.59785	2.176344	3.372044	2%	90%	8%
Social, ethical, legal, and human issues.	Q28	2.591398	0.85002	1.741378	3.441418			
	Q29	2.462366	0.854135	1.608231	3.316501			
	Q30	2.634409	0.639037	1.995372	3.273446			
	Q31	2.537634	0.635185	1.90245	3.172819			
	Q32	2.27957	0.7713	1.50827	3.05087			
	avg	2.501075	0.582815	1.918261	3.08389	6%	90%	3%

Appendix H: Information and Technology Literacy Matrix, August 2007

	Technology Literacy Uses	Adapting Uses	Transforming Uses
Technology use	<p>Technology Focus- Acquiring/Practicing Technology Skills</p> <p>“Just-in-case” technology skills are acquired for possible future needs</p> <ul style="list-style-type: none"> • Literacy classes • Learning hardware and software • Students’ projects are technology focused rather than expecting standards to intentionally drive the use of technology for learning • Curriculum provides “topics” for technology uses 	<p>Technology Focus- Optional/Adaptive Learning Tasks</p> <p>Integrating is translated into “use it for something, anything...just use it”</p> <ul style="list-style-type: none"> • Drill and Practice with content software • Instructional games • Productivity tools used to adapt assignments/tasks given in the past without technology • Curriculum provides “topics” for technology uses 	<p>Technology focus- Essential Learning Tasks</p> <p>Integrating is “just-in-time” technology skills as needed for learning content standards/projects</p> <ul style="list-style-type: none"> • Complex learning and thinking tools • Community learning tools • Assessment tools • Productivity tools used to construct meaning and product information useful to others <p>Students effectively gather, analyze, evaluate and use information from multiple sources. Students construct their own knowledge and create their own solutions to real-world problems. Students effectively communicate their knowledge to others using a variety of media.</p> <p>ISTE NETS standards Engaged learning Technology is applied in the context of different literacies</p>
Information literacy	<p>Teacher is the source of information. Give students assignments and projects</p>	<p>Analyzing, evaluating, synthesizing information using products X, Y, or Z.</p> <p>Teacher-directed assignments but gathering information from various sources.</p> <p>Activity: Google search “Civil War” to see what students will quickly access. Show how to evaluate the information found.</p>	
Pedagogy	<p>Technology-centered pedagogy</p> <p>Teacher talk is “technology talk” rather than “learning talk.”</p>	<p>Analyzing, evaluating, synthesizing information using products X, Y, or Z.</p> <p>Instructional focus Teacher-centered, Direct Instruction Pedagogy</p> <ul style="list-style-type: none"> • Teacher walk is “same stories with new tools” – there is confusion that new tools make new instructional stories 	
Staff professional development focus	<p>Designated “experts” tend to be self-initiating in learning on their own. Other interested staff mostly lean on their own time and own dime.</p>	<p>Participation and support, while encouraged, is still optional as well as unfocused. Staff development funding is inadequate- less than 30% of total technology budget supports staff development.</p>	<p>Essential skills and practices are articulated, expected, supported, and measured for <u>all</u> teachers. Adequate funding of at least 30% of technology budget is in place.</p>

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