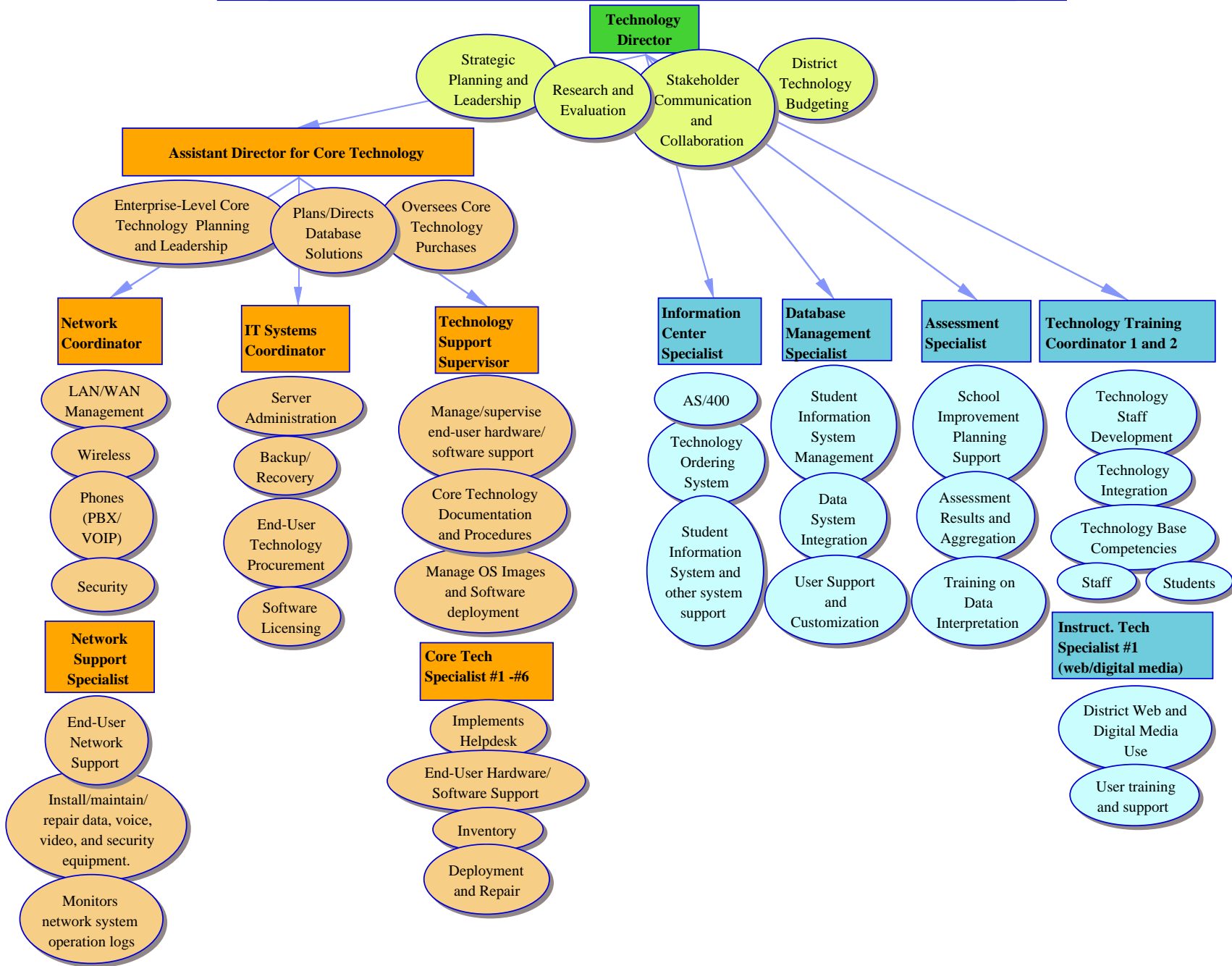


Technology Department (2007-2008) Continuous Improvement Presentation

Our vision encompasses students, parents, community and staff. Our philosophy is about getting our students where they need be while being fiscally responsible. Our job is to discern those technology resources that will result in the biggest return on investment in terms of student achievement from those that fall short. To achieve this we ask questions such as, “What technology resources will have the most significant impact on student learning?” and “What technology is needed for good teaching, learning, and decision making?” Although our primary vision relates to technology integration for the benefit of teaching and learning, we also strive to utilize technology as a tool to effectively manage the business of running an organization.

Students at Bismarck Public Schools will experience an education in which technology is seamlessly integrated as a tool for instruction, learning, assessment, and communication.

Technology Department Organizational Chart



Core Technology:
Infrastructure, Network, Hardware, Software, Phones, Security

Instructional Technology:
Professional Practice, Curriculum Integration, Assessment, Instructional Management, Administrative Uses

Technology Strategy Map

The Strategy Map for the Technology Department provides a vision illustration of our strategic priorities as they relate to primary themes and functions of the district.

Bismarck Public Schools – Technology Department Strategy Map

<p>Serve the Stakeholders</p>	<p>Students will be engaged in an education where technology is seamlessly integrated as a tool for instruction, learning, assessment, and communication.</p>			
<p>Serve Students & Parents</p>	<p>Maximize learning for ALL students Create an inviting school culture Optimize Communication Internally – Externally Parents/Students/Patrons Engage students in school and community</p> <p>Curriculum connected technology resources 21st Century tools Technology solutions for efficient/effective communication 21st Century tools Authentic use of technology</p>			
<p>Manage Resources</p>	<p>Be Fiscally Responsible</p> <p>Organization Planning Standardization Centralization</p>			
<p>Use Technology</p>	<p>Teaching & Learning</p> <p>Student assessment is planned, implemented, and analyzed; resulting in improved teaching and learning.</p> <p>Technology integrations are aligned with standards and curriculum.</p> <p>Instructional strategies include teacher and student use of technology.</p>	<p>Relationship Management</p> <p>Support administrators, teachers, and staff efficiently and courteously.</p>	<p>Operational Excellence</p> <p>Provide network access that is robust, reliable, and secure.</p> <p>Provide storage/ backup to meet the administrative, instructional, & learning needs.</p> <p>Use technology tools to increase safety/security and preparedness for emergencies.</p> <p>Provide technology that is standardized and reliable.</p>	<p>Innovation</p> <p>Use data to determine and pilot technology interventions.</p> <p>Promote technology as a change agent not an enrichment.</p>
<p>Develop Employees</p>	<p>Identify, assess, and develop base technology competencies.</p> <p>Provide training and support for continuously more effective technology use.</p>			

Balanced Scorecard Overview

- **BSC Format Focus – Living Document!**
 - Identify major Department initiatives and then more specific deliverables that support achievement of the **district strategic objectives** and the **Superintendent priorities**.
 - Scaffold the BSC to the individual Technology Department Team member – **part of performance evaluations**.
 - **Creates “line of sight”**
 - **Creativity tends to flourish where employees are informed, inspired, and involved.**
 - Use both formatively and summatively.
 - Capture and recognize accomplishments.

Technology Department - Initiatives, Activities, Timelines, and Status

BSC Objectives/Technology Initiative	Technology Department - Activities	Responsibility	Timeline	Status
			2007-2008	Yellow=In Progress; Red=Not Started; Green=Achieved
1. All levels of the organization are accountable for continuous improvement in instruction and assessment leading to achievement for all students.				
<i>Data Warehouse (Superintendent Priority - Purchase and Implement Data Warehouse)</i>	Phase I: Load data uploaded to data warehouse.	Shawn	06/29/07	Yellow
	Phase II: Data uploaded to data warehouse.	Shawn	01/01/08	Red
	Validate Phase I warehouse data.	Shawn	08/03/07	Red
	Conduct part I training with critical district staff.	Shawn	08/03/07	Red
	Conduct part 2 scaffold training with building level leaders (plan, schedule, implementation).	Shawn	First Report Dec 2007	Red
	Research and propose a comprehensive digital student transcript.	Shawn	First Report Dec 2007	Yellow
	Accomplishments	Researched data warehouse systems to identify important criteria in the RFI selection process.		
	Documented and communicated important data warehouse specifications for the RFI.			
	Created data warehouse RFP using the ITD template and the specifications identified in the RFI process.			
	Evaluated the submitted proposals as part of the data warehouse selection process.			
	Evaluated proposer references as part of the data warehouse selection process.			
	Evaluated the proposal budgets as part of the data warehouse selection process.			
	Synthesized reviews and identify finalists.			
	Warehouse product reviews/demonstrations with top 4 proposers and "proof of concept" reviews.			
	Established a system for acquiring and storing data.			
	Gained School Board approval for purchase and implementation of the data warehouse at BPSD.			
<i>Staff Development on Assessment Results and Data Interpretation</i>				
	Prepare and disseminate new brochure of opportunities for training on the interpretation, use, and reporting of assessment results.	Jen	07/31/07	Yellow
	Redesign and develop the Data and Assessment website to include informational and instructional documents.	Junella	8/3/07 (contingent on extension)	Red
Accomplishments	Assisted in evaluating NWEA online training system and possible implementation process of the system in BPS.			
	Conducted the evaluation of "student response systems - clickers" and reported on recommendations regarding future purchases.			
	Centralized the collection, storage, and format of district assessment data.			
	Played a lead role in starting the ND Assessment Conference including organizing, presenting, and attendance.			

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BSC Objectives/Technology Initiative	Technology Department - Activities	Responsibility	Timeline	Status
			2007-2008	Yellow=In Progress; Red=Not Started; Green=Achieved
<i>Implement the Balanced Scorecard in each school building and department (Superintendent Priority - Monitor reporting process for building and department BSCs & Add new departments for BSCs)</i>				
	Supply district and building data that is relevant to the Continuous Improvement process for the district, buildings, and departments.	Junella	09/30/07	Yellow
	Research and pilot specialized data warehouse queries.	Junella	December 2007	Red
	Create Technology Department Balanced Scorecard for 2007-2008	Tanna	04/01/07	Green
Accomplishments	Created a draft for the district and building profiles.			
	Prepared "Second Report" for Board.			
	Developed a standard building assessment report format for the continuous improvement process.			
	Developed format and produced the individual building and dashboard "profiles."			
<i>Continued PowerSchool Development (reports, improvements, etc.)</i>				
	Create and disseminate a digital dashboard.	Shawn	08/03/07	Yellow
	Document and train on collection processes so schools can improve program reporting and analysis.	Shawn	12/31/07	Yellow
	Improve and document process to report data to ND DPI to gain efficiencies.	Shawn	08/03/08	Yellow
	Identify 3 priority data extracts/reports, analyze the needs, and develop templates or data extract processes that lead to improvements.	Shawn	05/01/08	Red
	Research and report on the possibility of web based PowerGrade.	Shawn	First Report December 2007	Yellow
	Document processes and develop secondary staff so that scheduling can be completed by the buildings.	Dave	05/01/08	Yellow
	Design and create a Powerschool webpage for updates, schedules, help documents, etc.	Sharon	08/03/07	Red
Accomplishments	Migrated PowerSchool from three servers to one.			
	Developed data cleansing practices to keep data clean.			
	Created and implemented a standardized HS course catalog schema.			
	Created and implemented a standardized credit type for recording grades.			
	Improved processes for special programs (Kidsclub, Levels of Service).			
	Migrated school programs to improved collection process.			
	Provided training to stakeholder to update and report information (summer school, scheduling).			
	Integrated data from IEP, School Lunch, and Student Directory to/from PowerSchool.			

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			2007-2008	Yellow=In Progress; Red=Not Started; Green=Achieved
<i>Technology Resources Pilots</i>	Finalize plan for Reading Street technology resource implementation.	Tanna	03/01/08	Yellow
	Create step-by-step registration and account setup instructions and post to web.	Melissa	04/01/07	Green
	Evaluate AIMSweb, MAP Primary, and DIBELS to determine 2008-2009 assessment plan for primary grades.	Jen	03/01/08	Yellow
	Research and pilot videostreaming and podcasts.	Dave	First Report December 2007	Red
Accomplishments	Conducted Student Response System pilot study at Roosevelt.			
2. Examine/Recommend/Implement proven instructional delivery models.				
<i>New Technology Resources</i>	Research, document, and implement refined process for projector ordering and mounting.	Ward	10/31/07	Red
	Identify and disseminate best-practices (5 examples for a School Board presentation)	Dave/Jen	First Report - December 2007	Red
	Pilot "Administrator Rights" on teacher computers; teacher training	Alicia	08/31/07	Red
	Pilot "Administrator Rights" on teacher computers; Results Report	Alicia	First Report - December 2007	Red
Accomplishments	Documented ordering process, installation, and use of interactive boards and "clickers."			
<i>Classroom Computers Application and Implementation</i>	Conduct first round of applications, scoring and notification.	Dave	04/13/07	Green
	Awarded applicant consultations.	Dave	05/18/07	Red
	Confirm space, power, and network availability	Ward	05/18/07	Red
	Deploy computers for the classroom	Alicia	08/03/07	Red
Accomplishments	Created a classroom computer application process to redeploy old computers			
<i>Develop and pilot a standards-based report card for 1st Grade (Superintendent Priority - Pilot standards-based report card in Grade 1)</i>	Create report cards in PowerSchool.	Dave	01/01/08	Yellow
	Develop process to collect scores to generate a standards-based report card.	Dave	08/03/07	Yellow
Accomplishments	Created rubric and standards scales within PowerGrade.			
	Created district assignments that are pushed to end-user PowerGrades.			
	Created an assessment guide template for math to record standards.			

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			2007-2008	Yellow=In Progress; Red=Not Started; Green=Achieved
3. Be fiscally responsible				
<i>Organization and Planning</i>	Develop 2007-2008 TCO for Technology.	Tanna	01/31/07	Red
	Research and publish 2007-2011 District Technology Plan.	Tanna	04/13/07	Green
	Phase I: Redesign and implement storage area network.	Brent	08/03/07	Yellow
	Phase II: Redesign, consolidate, and upgrade server infrastructure.	Brent	06/15/08	Yellow
	Finalize 2006-2007 inventory	Alicia	06/01/07	Yellow
	Reconcile final inventory	Brent	06/15/07	Red
	Develop ordering system to make equipment accrual more efficient.	Casey	04/27/07	Yellow
	Document ordering system and ordering procedures	Brent	05/25/07	Yellow
	Train and transfer ordering responsibilities to Information Center Specialists	Brent	05/25/07	Yellow
	Create and maintain ordering procedures on website.	Sharon	08/03/07	Red
	Determine and document standards for ordering and order follow-up	Sharon	12/01/07	Red
	Calculate cost savings with IP Phones compared to PBX	Ward	05/01/08	Yellow
	Research cost savings options for network switches	Ward	First Report December 2007	Yellow
	Be more energy conscious by controlling sleep settings on district computers.	Casey	08/27/07	Yellow
	Review state reporting process, identify responsibilities among district personnel, train, and transfer responsibilities	Dave	06/01/08	Yellow
Accomplishments	Documented internal procedures to streamline Promethean ActivBoard ordering and installation (Technology, Facilities, and Connecting Point)			
	Reviewed technology department organizational chart and realigned with responsibilities.			
	Determined standard job description format and updated all job descriptions to eliminate redundancies and cover all responsibilities.			
	Created and implemented a Strategic Planning and Advisory Committee for Educational Technology (SPACET).			
	Developed and implemented the Technology Management System			
	Designed, developed and implemented a new technology inventory system.			
	Used ODBC module to make reporting more efficient.			
	Installed VOIP at Miller, Murphy, and BECEP.			
	Documented Helpdesk processes and scheduling.			
	Completed 2006-2007 TCO study.			

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			2007-2008	Yellow=In Progress; Red=Not Started; Green=Achieved
Standardization	Determine a 4-year computer replacement and rotation schedule.	Brent	04/01/07	Green
	Determine and enforce retirement specifications for hardware.	Brent	08/03/07	Yellow
	Identify standard base software loads and create/validate images.	Alicia	08/03/07	Yellow
	Research, determine, and pilot a procedure for effectively managing department specific software (open it up for self-order and install, controlled approval process with tech install, etc.)	Alicia	First Report December 2007	Yellow
	Aggregate and report MAP by math standard by grade and year to determine low competency areas.	Junella	05/18/07	Yellow
	Identify and implement one cross-curricular and one math software intervention for deployment K-6.	Tanna	10/31/07	Yellow
	Develop standard list of suggested equipment for purchase by PTOs and others.	Brent	04/17/07	Green
	Develop standardized procedures for data acquisition, analysis, and reports.	Junella	Draft 1: 8/3/07	Yellow
Accomplishments	Planned and implemented Appleworks to MS Office standardization.			
	Retired of OS9.			
Centralization	Identify and document TMS improvements (list of needs for gained efficiency)	Alicia/Technicians	04/27/07	Green
	Implement TMS changes determined by the technicians prior to the start of the 2007-2008 school year.	Casey	08/03/07	Red
	Fully implement LANDESK/ARD	Brent/Casey	08/03/07	Yellow
	User-end installs and updates of LANDESK and ARD	Alicia/Technicians	06/01/07	Yellow
	Package common software for easy deployment (Smartboard, ActivStudio, etc.)	Brent	08/03/07	Yellow
	Research server/workstation/printer management utilities (Dell Open Manage)	Brent	First report December 2007	Red
	Feasibility research on printer/copier district lease program.	Brent	First report December 2007	Red
	Upgrade elementary wireless insuring compatibility with centralized management system.	Ward	08/03/07	Red
Accomplishments	Developed Technology Management System (TMS).			
	Implemented LANDESK.			
	Upgraded secondary wireless access.			
Fully implement and optimize Helpdesk and other end-user support.	Create survey and process to solicit feedback on service during 2007-2008.	Alicia	08/03/07	Yellow
	Reduce average time to complete tickets by 1/2 day.	Alicia	05/08/08	Yellow
	Plan and propose a process for central management of fixes associated with broken computer hardware.	Tanna	08/03/07	Yellow
	Obtain certification on Warranty Parts Direct.	3 Technicians	12/01/07	Red
	Create checklist to be used at the end of a "work order" to help ensure the computer is fully functioning.	Alicia	08/03/07	Red

Technology Department - Initiatives, Activities, Timelines, and Status

BSC Objectives/Technology Initiative	Technology Department - Activities	Responsibility	Timeline	Status
			2007-2008	Yellow=In Progress; Red=Not Started; Green=Achieved
	Monitor, detect, and proactively fix known issues (2 bestpractices examples)	Alicia	05/01/08	
4. Optimize communication internally and externally with parents, students, and patrons.				
<i>Implement new content management system - district (website)</i>	Lead book study/discussion on another customer service principle.	Tanna	12/31/07	
	Finalize LDAP connections.	Brent	04/27/07	
	Determine, document and implement security permission structure for content management system (website).	Brent	06/15/07	
	Implement the content management system for district.	Melissa	08/03/07	
	Implement the content management system for buildings (work with approximately 5 buildings per quarter)	Melissa	07/31/08	
	Develop staff development on creation and maintenance of teacher web pages (including web documentation, atoms, and face-to-face)	Melissa	08/03/07	
	Research, implement and test additional internal information sharing and documentation systems (e.g. Sharepoint)	Brent	First report November 2007	
Accomplishments	Developed Content Management System specifications and contracted with vendor.			
	Received approval for the new district template and subpage template.			
	Completed book study/discussion on Customer Service using Raving Fans.			
<i>Communicate Technology Information.</i>				
	Design and produce a Technology Department Information Brochure.	Melissa	08/03/07	
	Design and Implement the new Technology Department website.	Melissa	08/03/07	
	Develop website release form for taking/using photos of staff/students	Melissa	04/30/07	
	Determine and arrange for photo shoot to capture kids, teachers, and technology.	Melissa	05/31/07	
5. Promote the wellness and safety of students and staff.				
<i>Emergency Planning for system, data, and phone services. (Superintendent Priority - Monitor implementation of Emergency Plan)</i>				
	Document and implement an emergency phone service process for phone forwarding, messages, and responding.	Ward	07/15/07	
	Install and test IP Celerate for Hughes intercom solution	Ward	12/01/07	
	Finalize, document, and implement data backup procedures.	Brent	11/01/07	
	Document procedures for recovering and investigating email and other server intrusions.	Brent	02/15/08	
<i>Data Security and Protection</i>	Produce and disseminate a document of best-practices regarding data protection and security.	Shawn	12/01/07	
Accomplishments	Researched and co-supervised installation of security cameras district-wide.			

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BSC Objectives/Technology Initiative	Technology Department - Activities	Responsibility	Timeline	Status
			2007-2008	Yellow=In Progress; Red=Not Started; Green=Achieved
6. Identify, implement, and track comprehensive staff development that aligns with strategic objectives.				
<i>Create specification and implement a new district online staff development tracking system. (Superintendent Priority - Create and monitor plan to scale back professional leave)</i>	Finalize group criteria in the employee directory (develop and document).	Casey	04/27/07	Green
	Implement new system for use in registering for August 2007 floating staff days.	Jen	05/15/07	Yellow
	Create and pilot base technology competency track.	Jen	First Report December 2007	Yellow
	Create training options to achieve base technology competencies	Jen	Phase I Competencies by December 2007	Red
Accomplishments	Designed the specifications for the system and communicated with stakeholders.			
Tech Talks	Implement at least 6 "tech talks" in at least two different formats.	Dave	05/16/08	Red
Accomplishments	Completed 2006-2007 Tech Talk implementations (6 total).			
	Created a public calendar to schedule Tech Talks.			
	Created and disseminated a Tech Talk as an atom.			
Aligned Professional Learning Model <i>(Superintendent Priority - Create and monitor plan to scale back professional leave)</i>	Coordinate with the Professional Development people and Continuous Improvement people to pilot pieces of the strategists/partners model for professional learning support.	Tanna	First Report December 2007	Yellow
Accomplishments	Drafted a support model.			

Strengths - **W**eaknesses - **O**pportunities - **T**hreats

- **Strengths**

- Dedicated technology staff
- Network and server infrastructure
- Student information system and assessment
- HelpDesk support
- Technology as a professional productivity and administrative tool

- **Weaknesses**

- Planned technology replacement and retirement
- High technician to computer/other technology ratio
- Limited meaningful integration of technology as a 21st Century learning tool

- **Opportunities**

- Funding for a planned computer replacement schedule for both teachers and an equitable student percent per building
- Technology competency expectations for teachers and students
- Customer service
- Instructional partners concept (job embedded learning with a holistic focus including data, standards/curriculum, and strategies)

- **Threats**

- Staff turnover
- Staff knowledge, skills, and abilities
- Becoming stagnant