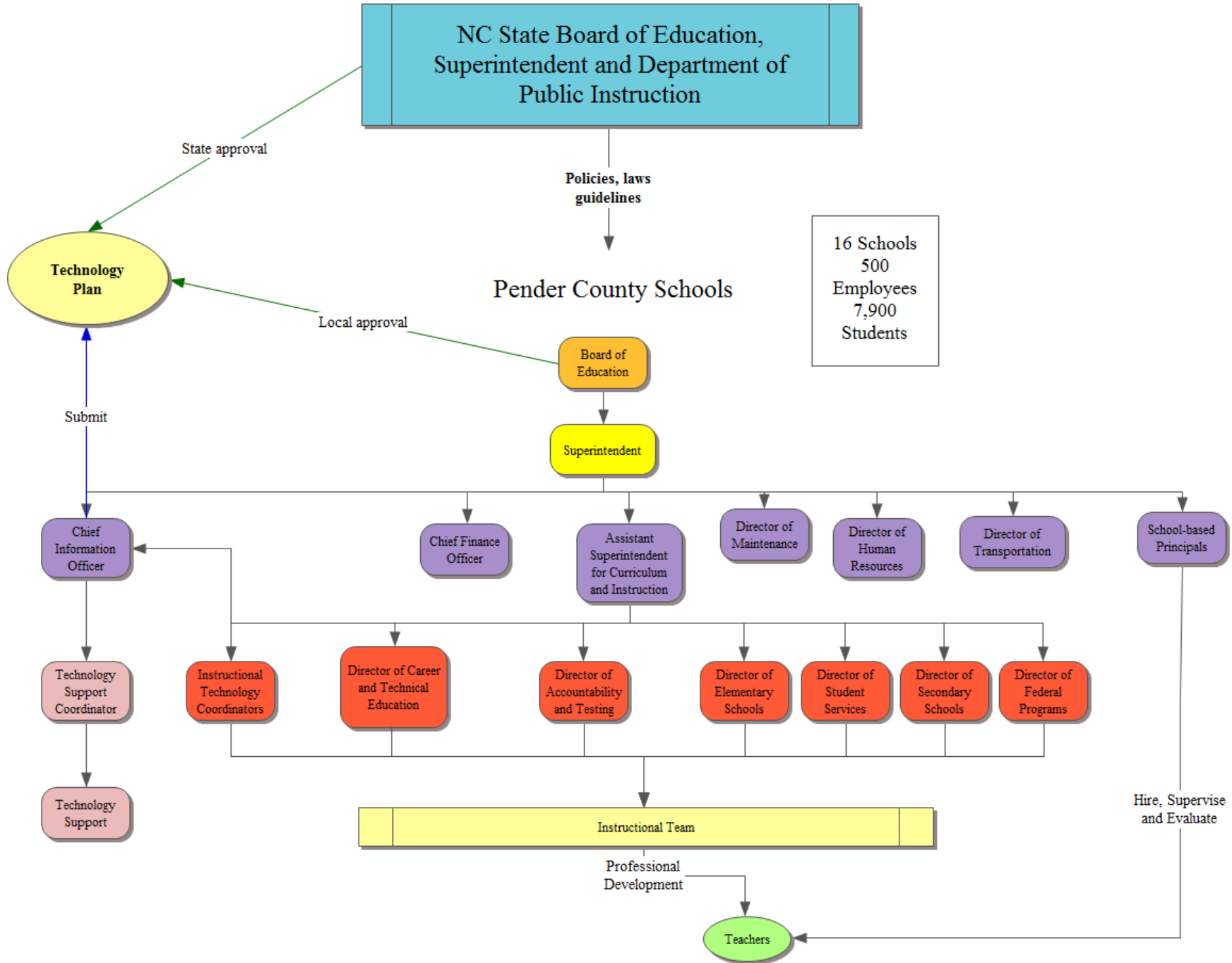


Needs Assessment Report : Appendix

Table of Contents

Appendix A – PCS System Map.....	2
Appendix B - Superintendent Interview Questions	3
Appendix C – Focus Group Agenda.....	4
Appendix D – Focus Group Analysis	6
Appendix E – Principal and Instructional Leader Interview	10
Appendix F – Survey	11
Appendix G – Survey Analysis.....	19
Appendix H – Gap Analysis	23
Appendix I – Project Timeline.....	28

Appendix A – PCS System Map



Appendix B - Superintendent Interview Questions

Question:

Goal two states:

" NC public schools will be led by 21st Century professionals."Strategic Technology Plan

Include at least one strategy or objective that addresses the following:

1. Teacher/staff skills assessment
2. Diverse training resources (local and online including DPI resources)
3. Follow-up support
4. Local certification and professional development requirements
5. Ethical and professional standards
6. Evaluation of training
7. Readiness of an educator to design, implement, and discuss assessment strategies ("assessment literacy.")
8. ***Global awareness training"

What we would like you to do is, within the context of that goal, identify one or two issues that we need to work on in Pender County schools over the next five years. This could simply be in the form of a statement of a problem, for example "The teachers in Pender County are not utilizing online staff development opportunities." It will be this statement that will drive our data collection and subsequently our strategic plans in our upcoming technology plan.

We really appreciate your time on this, as it helps us to have not only a solid project for our class, but one that can potentially bring about positive, long-term results as we chart a course for technology in Pender County Schools for the next five years.
-Lucas Gillispie

Answer:

I hope these work for you and Ian:

Teachers in Pender County have worked in traditionally isolated classroom settings. They do not know how to work in integrated professional learning communities.

The teachers do not know how to present the Standard Course of Study in real world, project/problem based learning environments. They are sometimes teaching strictly to the EOGs/EOCs.

Teachers tend to think of 21st century teaching and learning as being strictly technology based. Technology is a tool to help students connect with the world and between disciplines to solve real, outcomes based problems.

Thanks!

Allison

Appendix C – Focus Group Agenda

Focus Group Agenda

Pender County Schools

Instructional Technology Assistance Team

March 4, 2008

I. Welcome

II. Description of Project

III. Focus Group Questions (aligned with Goal 2 of the State Board of Education "Future-Ready Students for the 21st Century" mission)

- NC Public Schools will be led by 21st Century Professionals.
 - Every teacher will have the skills to deliver 21st Century content in a 21st Century context with 21st Century tools and technology that guarantees student learning.
 - All teachers will utilize relevant technology tools to deliver lessons that exemplify curricular integration.
 - *Focus group: In your school, in what ways do you see teachers delivering lessons? What tools do you observe them using?*
 - *Focus group: What tools would you like to see them use more often? Less often?*
 - All teachers will collaborate with colleagues district-wide in learning communities using communicative and collaborative tools including (but not limited to) online professional development, wiki technology and synchronous messaging.
 - *Focus group: How often do you feel teachers use technology to communicate with colleagues district-wide? What tools do you see them using? What tools do you feel they could use more often?*
 - *Focus group: In what ways do you feel teachers could benefit from a district-wide professional learning community? How do you think technology might facilitate this?*
 - All teachers will plan lessons that include the use of communicative and collaborative tools including (but not limited to) online professional development, wiki technology and synchronous messaging.
 - *Focus group: In what ways, have you observed, teachers utilizing communicative and/or collaborative technology with students? What technology have you seen them using? What technology would you like to see them use more frequently?*
 - *Focus group: What obstacles, do you feel, teachers encounter when using, or attempting, to use these tools? How, do you feel, can the district encourage the use of these tools in the classroom?*
 - Every teacher and administrator will use a 21st Century assessment system to inform instruction and measure 21st Century knowledge, skills, performance and dispositions.
 - All teachers will utilize technology to assess student performance.
 - *Focus group: In what ways have you observed teachers utilizing technological resources to assess the performance of their students? What tools have you seen them use? What tools would you like to see them use more often? What tools do you think they should stop using?*
 - All principals will utilize technology to assess teacher performance.
 - *Focus group: In assessing teacher performance, how does your administrative unit utilize technology? In what ways do you think technology could be used to facilitate teacher performance assessment?*
 - Teachers and administrators will continue to utilize the Pender County Schools Teacher Performance Appraisal Instrument Technology Addendum in order to assess teacher technology competency.
 - *Focus group: How does your administrative unit utilize the TPAI-Addendum (Technology) to inform decisions regarding teacher performance? How do you feel this*

information could be better used? What changes do you feel could be made to the TPAI-Addendum to ensure its effectiveness?

- Every education professional will receive preparation in the interconnectedness of the world with knowledge and skills, including language study.
 - All teachers will use technology to communicate with colleagues and professionals at the district, state, national and global level.
 - *Focus group: In what ways have you and your colleagues utilized technology to communicate at the:*
 - *District level?*
 - *State level?*
 - *National level?*
 - *Global level?*
 - All teachers will use technology to develop and maintain professional learning communities in order to facilitate active collaboration.
 - *Focus group (include definition of "professional learning community"): In what ways do you feel the development of professional learning communities could be developed and maintained using technology? How could the district facilitate an effort to ensure these learning communities are a successful endeavor?*
- Every education professional will have 21st Century preparation and access to ongoing, high quality professional development aligned with State Board of Education priorities.
 - All "21st Century" professional development programs will include the use of relevant, appropriate and innovative technologies.
 - *Focus group: What technologies do you feel are most relevant to teachers in their classrooms? What tools do you feel have been well-covered in previous staff development initiatives? What types of tools do you feel are most critical to prepare our students for learning in the 21st century?*
 - All technology professional development will be integrated into specific content areas in order to establish relevant and usable strategies for teachers in their classrooms.
 - *Focus group: The requirement that PCS teachers earn 3 CEU's of technology staff development has been eliminated this year. How do you feel this will affect the skills and knowledge of teachers in your school? How can the district better integrate technology professional development into curriculum-based professional development?*
 - *Focus group: What has been the best example of technology infused professional development you have attended with PCS or another school system? What elements do you feel made it effective?*
- Every educational professional uses data to inform decisions.
 - All teachers will utilize NCWise data reporting tools to collaborate with colleagues and administrators to determine instructional approaches in their classrooms and school buildings.
 - *Focus group: How have teachers in the past utilized technology to analyze data to assist them in making informed instructional decisions?*
 - *Focus group: PCS has migrated student data to the NCWise data management system this year. How do you feel this increased access to data and aggregation tools will affect the decisions made at the instructional level? How can PCS equip its teachers with knowledge and skills regarding the use of technology to inform instructional decisions? What tools do you feel will be a must for teachers to learn to make these data-based decisions?*

IV. Wrap-up

- *Focus group: Are there any issues regarding technology professional development that you feel have not been addressed in the previous discussion?*

V. Conclusion

Appendix D – Focus Group Analysis

Optimal: 1.1 All teachers will utilize relevant technology tools to deliver lessons that exemplify curricular integration.

Actuals: Data ranges from ‘Disappointment’ to ‘Almost all ‘ teachers use the technology tools available to them. Some concern was evident over the amount of hardware available, such as interactive whiteboards. If it isn’t mandated, the teachers aren’t motivated to learn and use on their own

Gaps: Resources – Not enough whiteboards.

Motivation: No mandates or incentives set by PCS to use.

Supporting Details: “No one uses lab, computers, just a few use it. They aren’t made to use it and aren’t integrating it.” “Almost all of our teachers use technology at some point to develop and supplement lessons. They often begin with a lesson in the classroom then continue in the computer lab or through the use of wireless laptops.”

Intervention Strategies: Concerning resources, one strategy would be to increase the resources available to teachers or to make more efficient use of those resources. Concerning motivation, mandates and / or incentives could be implemented.

Optimal: 1.2 All teachers will collaborate with colleagues district-wide in learning communities using communicative and collaborative tools.

Actuals: Question 1: Teachers “don’t see the need or are not aware of opportunities to communicate” and collaborate. Networks and hardware are handicapped by district. There is no District supported forum tool (sync or async) Question 2: A community would allow for sharing lesson plans and problem solving. And, would provide a supportive and constructive place for innovation.

Gaps: Motivation – aren’t aware of benefits, no personal incentives. Structure – IM is blocked and no supported alternative

Supporting Details: Question 1 “Teachers don’t see the need and are not aware of opportunities to communicate.” “Tech department discourages those activities like Skype or IM and block the technology” and “Need district-wide forums synchronously and asynchronously.”

Question 2: “Sharing lesson plans and solving problems that teachers encounter”” If you have something that works at your school there should be some way that teachers can share that with other schools in the county!”” It will give the ones who are eager to do new things a supportive environment

Intervention Strategies: Create a system wide and supported forum. Allow IM while maintaining security

Optimal: 1.3 All teachers will plan lessons that include the use of communicative and collaborative tools.

Actuals: Some Teachers are using collaborative tools like Blogs (including some closed-system school

specialized with security features) Question 2 (cause): Training (understanding and awareness) and lack of time hinder the wider use of new collaborative tools.

Gap: Learning – Teachers do not understand, nor are they aware of the applications and benefits of collaborative tools. Structure – Not enough time during the school year, must be learned in summer session

Supporting Details: Question 1 – “Some of our teachers have set up blogs to use with their students” “Yes, I’ve had a 3rd grade teacher incorporate blogging into her Science class.”

Question 2 – “TIME. Lack of knowledge of the tools available.” “During class time they don’t have time to learn the new techniques and implement it” “They are reluctant to do it when they don’t understand it”

Suggested Interventions: Concerning learning – Conduct system wide trainings as to the AWARENESS of collab. Tool benefits during the school year and extensive training in summer. Concerning time – Use virtual training session to cut out travel time. Create very short training sessions conducted asynchronously

Optimal: 2.1 All teachers will utilize technology to assess student performance.

Actuals: Microsoft tools are used for creating projects like brochures in Social Studies, ‘to use tech to show what they learned.’ Or use PowerPoint to present to the class. Handhelds for assessment are time consuming.

Gap: Learning – Don’t have knowledge of new assessment tools models or practices. Structure – handheld assessment program is too time consuming

Supporting Details: “Social Study teachers use brochures in publisher or word to report what they learned in research on a subject and trying to create a brochure to use tech to show what they learned” “Hand helds but it is so time consuming inputting the assessments so teachers are reluctant to spend the time prior to assessment” “write a myth and present it in PowerPoint to the class.”

Suggested Interventions: Concerning learning gap – conduct awareness sessions of new assessment tools and practices. Concerning structure – train teacher to use the handhelds more efficiently.

Optimal:2.2 All principals will utilize technology to assess teacher performance.

Actuals: Some schools are using handhelds to assess teachers, but others use no technology to expedite the process – using paper observation sheets.

Gap: Structure – No technology tools / resources in place to assess teachers

Supporting Details: “use observation sheets and all is done on paper” “are using palm devices to take quick 5-10 snapshots of classroom teaching”

Suggested Interventions: Purchase / implement a system wide tool to collect and administer teacher assessment

Optimal:2.3 Teachers and administrators will utilize the Pender County Schools Teacher Performance Appraisal Instrument Technology Addendum in order to assess teacher technology competency.

Actuals: No information was collected about this goal

Optimal:3.1 All teachers will use technology to communicate with colleagues and professionals at the district, state, national and global level.

Actuals: Trainers report that communication and collab happens at the school lvl and only on a limited basis outside of that. Some interactive field trips and a language learning course were examples of using technology to communicate with groups outside of school.

Gap: Motivation – lack of incentives to communicate and collaborate outside of school Learning – may not know the benefits of

Supporting Details: “Pretty much stuck at the in-school level” “Our teachers have done some interactive field trips - environmental science NC” “Pretty much stuck at the in-school level”

Suggested Interventions: Concerning motivation, encourage and give incentives / mandates to communicate with colleagues outside of school. Concerning learning – conduct small briefings or awareness activities for

Optimal:3.2 All teachers will use technology to participate in professional learning communities to facilitate active collaboration.

Actuals: Teachers use technology to connect with other professionals in the field, but not widespread because of no incentive or reason. Mostly passive collaboration (reading blogs – not making comments or having own blog)

Gap: Motivation – lack of incentives, mandates, or consequences. No ‘need’ precieved by teachers. Environment – not a part of teacher work flow

Supporting Details: “I read blogs by other people in the field and use the ideas,” “They need to have a reason! teachers might be willing to try ½ day professional development from a distance if schools would support it (suggest intervention)”

Suggested Interventions: Concerning Motivation, incentives and mandates (or some sort of feedback) for participation in PLCs (blogs, wikis, chats etc) Envrionment – establish a teacher work flow that includes PLCs (1/2 day prof. development from a distance

Optimal: 4.1 All "21st Century" professional development programs will include the use of relevant, appropriate and innovative technologies.

Actuals: The tech trainers see no ‘real’ staff development in web 2. 0 and blogging. Staff development has lagged behind innovative technologies. For instance, teacher still don’t use web pages to communicate with students.

Gap: Environment – Professional development in place isn't teaching the innovative tools and techniques

Supporting Details: "You need to have the technology in the schools to be able to have staff development for it. (seconded)" "No real staff development on blogging and teachers don't understand how they can use it" "We still have teachers who don't use their web pages."

Suggested Interventions: Change professional development program to USE and TEACH web 2.0 and collaborative mindset

Optimal:4.2 All technology professional development will be integrated into core (Language Arts, Math, Science, Social Studies) content areas in order to establish effective instructional strategies for teachers in their classrooms.

Actuals: no data collected

Optimal:5.1 All teachers will utilize NCWise data reporting tools to analyze data and make instructional decisions in their schools and classrooms.

Actuals: Some teachers do not trust NCWise and / or don't know how to use it. Others expressed concern over whether data reporting tools should drive instructional decisions.

Gap: Learning – uncertain about tools and ethics (?) of using this Environment – not in the teacher work flow

Supporting Details: "Still trying to figure out how to take attendance. Would probably use it more once you learn how" "Have to trust that the data is correct. Some at middle school are afraid to quarterly test; afraid that they get the wrong test, or it's invalid." "Should be using assessment data to drive instruction?"

Suggested Interventions: Trainings in how to use the tool and improved work flow

Appendix E – Principal and Instructional Leader Interview

Agenda

1. Introduction of Interviewer and Interviewees
2. Overview of the Project and Purposes
3. Explanation of How Project Relates to Technology Plan
4. Questions
5. Wrap-Up and Thank You's.

Questions:

Set one

1. What are the primary barriers that prevent teachers from integrating technology into their daily instruction?
2. How might you integrate technology into your assessment of teachers?
3. Are teachers collaborating effectively? Could technology help with this?

Set two

1. How do you think of each of these sub-goals relates to PCS? How can you make it more specific to teachers and principals in PCS?
2. What are 21st century content, context, and tools? What skills will teachers need in the future?
3. What are some assessment tools used today? Which would you like to see more of in the future?
4. How are teachers interfacing with the 'interconnectedness of the world' today in PCS? How might it change in the future?
5. How is teacher professional development handled today? Is it aligned with the State priorities?
6. How is data being used to inform decisions in PCS today

Appendix F – Survey

Data Collection Instrument

Demographic Information						
I teach grade level:	K-5	6-8	9-12			
I teach within the following department (6-12 only)	Art /Music Career/Technical Education Language/Arts Mathematics Physical Education/Health Science Social Studies Foreign Language This does not apply to me					
I am a technology leader for my school.	Yes	No				
I have been teaching for:	5 yrs or less	6-10 yrs	11-20 yrs	21+ yrs		
SA = strongly agree, A = agree, N = neither agree not disagree, D = disagree, SD = strongly disagree, DNK = do not know	SA	A	N	D	SD	DNK
“In my school...”						
Teachers are willing to share lessons, instructional ideas, tips and tricks with each other.						
Teachers work together as a team to meet the needs of students.						
Teachers use technology to collaborate with one another.						
Technology is in place for collaborating among professionals.						
The administration encourages collaboration among colleagues.						
Communication between the administration and the teachers is clear.						

Teachers work together on projects that carry instruction beyond the traditional classroom environment.						
I am aware of what my colleagues are teaching in their respective curricular areas.						
I collaborate within my grade level (grades K-5) or department (grades 6-12).						
“In my school system...”						
Teachers from different schools are willing to share lessons, instructional ideas, tips and tricks with each other.						
Teachers from different schools use technology to collaborate with one another.						
Technology is available for communication between teachers at different schools.						
Teachers from different schools work together on projects that carry instruction beyond the traditional classroom environment.						
I am aware of what teachers at other schools are teaching.						
There is effective communication between central office personnel and the classroom teacher.						
I am aware of what goes on at school board meetings.						
I am aware of decisions that are made at the district level.						
I am aware of the roles of individuals working at the district level.						
“As a professional...”						
I am a member of a professional teaching organization.						
I attend professional conferences in my subject area.						
I actively use technology that facilitates collaboration among professionals.						
I visit websites related to my content area of teaching.						
I am interested in networking with other teachers within my subject area.						

I am interested in networking with professionals outside the field of education.						
I am interested in working with teachers within my own school on an instructional project.						
I am interested in working with other teachers in my school system on an instructional project.						
I am interested in working with teachers from across the state, country, or from elsewhere in the world on an instructional project.						
I am aware of state and federal legislation that affects my profession.						

As a professional I use the following tools for instruction or collaboration with other professionals. Mark all that apply.

Tool	Direct Instruction	Student Collaboration	Assessment	Professional Collaboration	Professional Development	Instructional Decision-Making	Personal use
Computer lab							
Interactive Whiteboard write pad							
Data Projector (LCD projector)							
Document Camera							
Handheld Devices (Palm pilot, pocket PC)							

Classroom Response System (Quizdom, eInstruction)							
Power Point (other presentation software)							
Educational Software							
Digital Video (United Streaming, YouTube, TeacherTube , etc)							
Digital Audio (podcasts, mp3, etc)							
Instant Messaging							
Blogs							
Wikis							
Email							
Podcasts							
Teacher web page							
Other web- based tools							

(Google docs, twitter, voicethread, etc)							
NCWise							
Online Discussion Boards							
Online Learning Management Systems (Moodle)							

As a professional I would be interested in staff development on the use of the following technology-based tools to enhance my instruction and collaboration with other teachers. Mark all that apply.

	Yes	No
Computer lab/laptops		
Interactive whiteboard write pad		
Data projector (LCD projector)		
Document camera		
Handheld devices (palm pilot, pocket PC)		
Classroom response systems (Quizdom, eInstruction)		
PowerPoint (other presentation software)		
Educational software		
Digital video (United Streaming, YouTube, TeacherTube)		
Digital audio (Podcasts, mp3, etc)		
Video games		
Instant messaging		

Blogs		
Wikis		
Email		
Podcasts		
Teacher web page		
Other web-based tools (Google documents, Voicethread, etc)		
NCWise		

There is access to the following technology tools		
	Yes	No
Computer lab/laptops		
Interactive whiteboard write pad		
Data projector (LCD projector)		
Document camera		
Handheld devices (palm pilot, pocket PC)		
Classroom response systems (Quizdom, eInstruction)		
PowerPoint (other presentation software)		
Educational software		
Digital video (United Streaming, YouTube, TeacherTube)		
Digital audio (Podcasts, mp3, etc)		
Video games		
Instant messaging		
Blogs		
Wikis		
Email		
Podcasts		

Teacher web page		
Other web-based tools (Google documents, Voicethread, etc)		
NCWise		

My skill level for the following technology is:

	None	Basic	Intermediate	Advanced
Computer lab/laptops				
Interactive whiteboard write pad				
Data projector (LCD projector)				
Document camera				
Handheld devices (palm pilot, pocket PC)				
Classroom response systems (Quizdom, eInstruction)				
PowerPoint (other presentation software)				
Educational software				
Digital video (United Streaming, YouTube, TeacherTube)				
Digital audio (Podcasts, mp3, etc)				
Video games				
Instant messaging				
Blogs				
Wikis				
Email				
Podcasts				
Teacher web page				
Other web-based tools (Google documents, Voicethread, etc)				

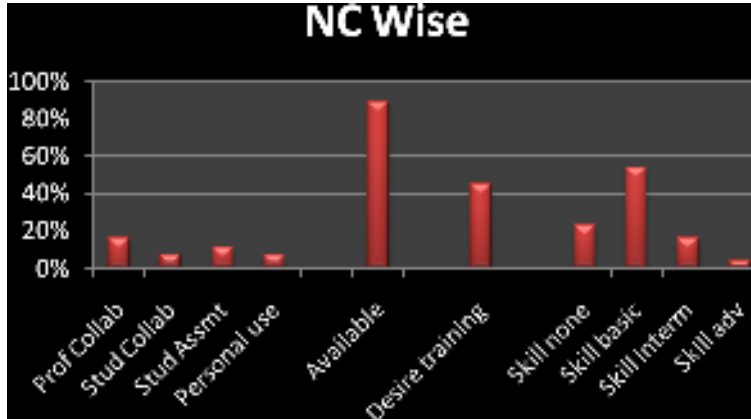
NCWise				
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Appendix G – Survey Analysis

Teachers Who Use ...	Use	Total	Percent of Total	Use For Professional Collaboration	Percent of Total	Use for Student Collaboration	Percent of Total	Use for Student Assessment	Percent of Total	Use for Personal Use	Percent of Total
...Computer Labs	164	273	60.07%	84	30.77%	133	48.72%	139	50.92%	83	30.40%
...Interactive White Board/Write Pad	51	273	18.68%	8	2.93%	36	13.19%	21	7.69%	1	0.37%
...Data Projector (LCD Projector)	186	273	68.13%	41	15.02%	107	39.19%	69	25.27%	12	4.40%
...Document Camera	40	273	14.65%	15	5.49%	37	13.55%	21	7.69%	9	3.30%
...Handheld Devices	14	273	5.13%	6	2.20%	13	4.76%	18	6.59%	16	5.86%
...Classroom Response System	20	273	7.33%	5	1.83%	12	4.40%	18	6.59%	0	0.00%
...PowerPoint	230	273	84.25%	79	28.94%	115	42.12%	84	30.77%	50	18.32%
...Educational Software	203	273	74.36%	36	13.19%	95	34.80%	115	42.12%	29	10.62%
...Digital Video	194	273	71.06%	26	9.52%	77	28.21%	34	12.45%	29	10.62%
...Digital Audio	61	273	22.34%	3	1.10%	21	7.69%	5	1.83%	35	12.82%
...Video Games	41	273	15.02%	2	0.73%	10	3.66%	9	3.30%	13	4.76%
...Instant Messaging	50	273	18.32%	14	5.13%	3	1.10%	2	0.73%	33	12.09%
...Blogs	41	273	15.02%	10	3.66%	14	5.13%	7	2.56%	19	6.96%
...Wikis	30	273	10.99%	14	5.13%	14	5.13%	2	0.73%	13	4.76%
... Email	243	273	89.01%	174	63.74%	51	18.68%	26	9.52%	135	49.45%
...Teacher Web Pages	175	273	64.10%	80	29.30%	69	25.27%	19	6.96%	41	15.02%
...Other Web-based Tools	87	273	31.87%	29	10.62%	27	9.89%	14	5.13%	49	17.95%
...NCWISE	119	273	43.59%	45	16.48%	18	6.59%	29	10.62%	18	6.59%
...Online Discussion Boards	59	273	21.61%	23	8.42%	13	4.76%	9	3.30%	22	8.06%
...Online Learning Management Sys	17	273	6.23%	7	2.56%	7	2.56%	6	2.20%	4	1.47%

Teachers Who Use ...	YES - Access To	Percent of Total	NO - Access To	Percent of Total	Want More Training	Percent of Total	Skill None	% None	Skill Basic	% Basic	Skill Inter.	% Inter.	Skill Adv.	% Adv.
...Computer Labs	267	97.80%	6	2.20%	95	34.80%	1	0.37%	50	18.32%	125	45.79%	97	35.53%
...Interactive White Board/Write Pad	122	44.69%	148	54.21%	194	71.06%	150	54.95%	85	31.14%	31	11.36%	7	2.56%
...Data Projector (LCD Projector)	247	90.48%	25	9.16%	87	31.87%	30	10.99%	78	28.57%	79	28.94%	86	31.50%
...Document Camera	145	53.11%	122	44.69%	124	45.42%	126	46.15%	70	25.64%	46	16.85%	28	10.26%
...Handheld Devices	54	19.78%	213	78.02%	144	52.75%	144	52.75%	78	28.57%	37	13.55%	12	4.40%
...Classroom Response System	97	35.53%	169	61.90%	166	60.81%	184	67.40%	59	21.61%	15	5.49%	8	2.93%
...PowerPoint	262	95.97%	10	3.66%	63	23.08%	6	2.20%	69	25.27%	90	32.97%	107	39.19%
...Educational Software	234	85.71%	34	12.45%	100	36.63%	23	8.42%	81	29.67%	118	43.22%	46	16.85%
...Digital Video	238	87.18%	33	12.09%	108	39.56%	49	17.95%	74	27.11%	94	34.43%	53	19.41%
...Digital Audio	88	32.23%	179	65.57%	124	45.42%	139	50.92%	63	23.08%	44	16.12%	16	5.86%
...Video Games	98	35.90%	167	61.17%	62	22.71%	91	33.33%	104	38.10%	53	19.41%	12	4.40%
...Instant Messaging	89	32.60%	175	64.10%	58	21.25%	81	29.67%	83	30.40%	63	23.08%	37	13.55%
...Blogs	140	51.28%	127	46.52%	87	31.87%	131	47.99%	71	26.01%	44	16.12%	18	6.59%
...Wikis	110	40.29%	149	54.58%	88	32.23%	186	68.13%	42	15.38%	22	8.06%	10	3.66%
... Email	263	96.34%	9	3.30%	38	13.92%	2	0.73%	28	10.26%	95	34.80%	145	53.11%
...Teacher Web Pages	254	93.04%	17	6.23%	120	43.96%	14	5.13%	115	42.12%	94	34.43%	45	16.48%
...Other Web-based Tools	133	48.72%	126	46.15%	97	35.53%	133	48.72%	61	22.34%	40	14.65%	25	9.16%
...NCWISE	242	88.64%	28	10.26%	124	45.42%	64	23.44%	148	54.21%	44	16.12%	11	4.03%
...Online Discussion Boards	148	54.21%	113	41.39%	104	38.10%	110	40.29%	76	27.84%	49	17.95%	28	10.26%
...Online Learning Management Sys	73	26.74%	184	67.40%		0.00%	203	74.36%	35	12.82%	17	6.23%	6	2.20%
					No Response = 12			4.40%						

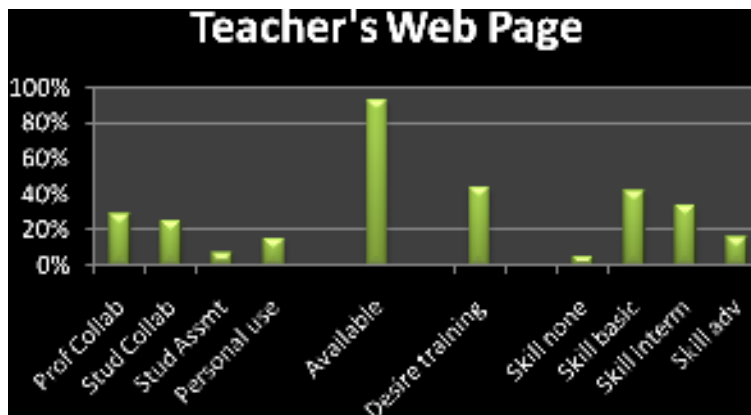
Significance:



It's available
Skill level is predominantly none/basic
It's not used very much
Almost half desire training

It's not used because they don't know how to use it

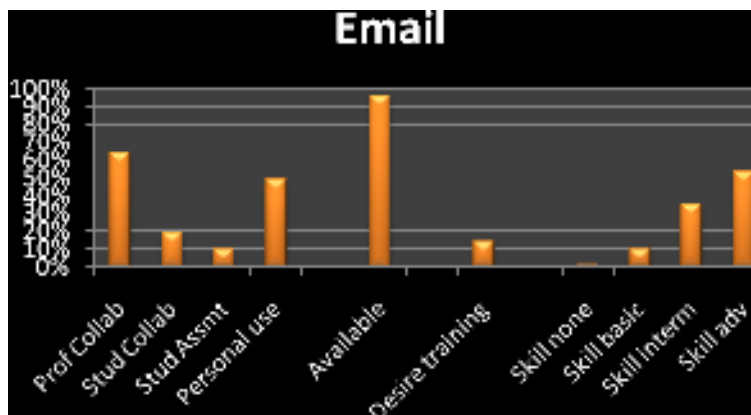
Significance:



It's available
Skill level is predominantly basic/intermediate
It's used about one third of the time
Almost half desire training

Skill level is moderate overall. Usage is minimal because of lack of knowledge/skills

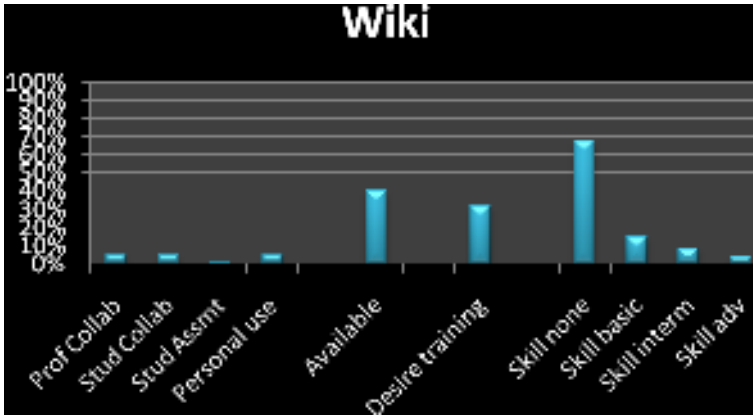
Significance:



It's available
Skill level is predominantly intermediate/advanced
It's used for professional collaboration and personal use
Very few desire training

No problems elicited with email

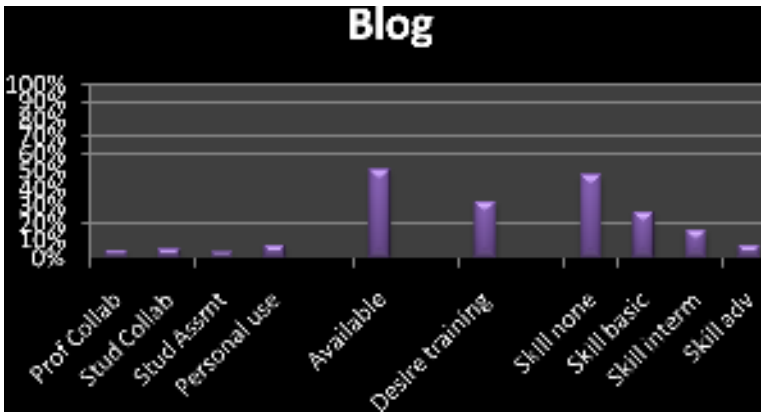
Significance:



It's available for less than half of those responding
Skill level is predominantly none
It's not used very much
One third desire training

It's not used because it's not available and they don't know how to use it

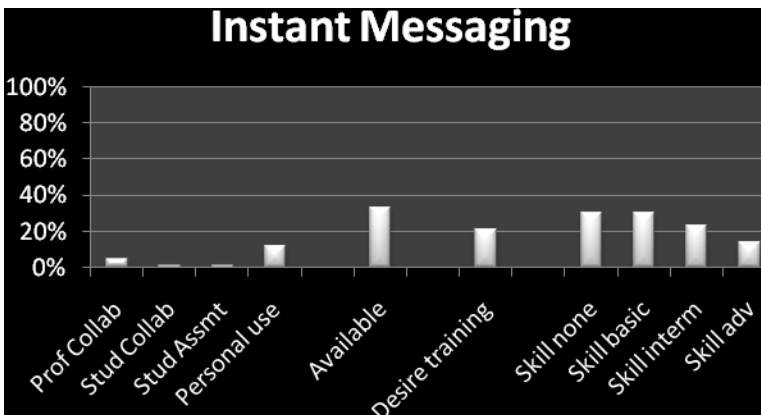
Significance:



It's available for half of those responding
Skill level is predominantly none/basic
It's not used very much
One third desire training

It's not used because it's not available and they don't know how to use it

Significance:



It's available for one third of those responding
Skill level is predominantly none/basic
It's not used very much but most often for personal use
Very few desire training

It's not used because it's not available and they don't know how to use it

Appendix H – Gap Analysis

Gap Analysis					
	Optimals	Actuals (Forum)	Actuals (Survey)	Gap/Causes	Recommendation
1.1	All teachers will utilize relevant technology tools to deliver lessons that exemplify curricular integration	<p>Computer lab not used by all teachers</p> <p>PowerPoint used by most</p> <p>Technology not always available to all teacher</p>	<p>Student Collaboration</p> <p>49% use computer lab</p> <p>39% use LCD</p> <p>42% use PowerPoint</p> <p>13% use Whiteboards</p> <p>5% use Handhelds</p> <p>5% use blogs</p> <p>5% use wiki</p>	<p>Technology not available</p> <p>More current technology not used (handhelds, blog, wiki, whiteboard)</p> <p>Lack of incentive/ motivation</p>	<p>Analyze computer lab usage and determine why the lack of use.</p> <p>Develop professional development courses defining pre-requisite skills to attract learners who are most likely to implement (i.e. PowerPoint → Instructional Web Pages or Making Digital Videos in the Classroom).</p>
1.2	All teachers will collaborate with colleagues district-wide in learning communities using communicative and collaborative tools.	<p>Networks and hardware are handicapped by the district.</p> <p>No forum tool supported by district</p> <p>Teachers not aware of communication opportunities</p> <p>Teachers don't see a need</p>	<p>Prof Collaboration</p> <p>64% use email</p> <p>29% use Teacher web pages</p> <p>5% use IM</p> <p>4% use blog</p> <p>5% use wiki</p> <p>11% use other web-based tools</p> <p>16% use NCWise</p>	<p>Lack of forum tool</p> <p>Lack of knowledge</p> <p>Lack of incentive/ motivation</p>	<p>Expand usage of Moodle to include Instructional Team (require a number of professional development courses that will include an online community). Begin to expand design and development training to teachers for their use in the classroom.</p> <p>Launch a district "Technology Conference" to promote the sharing of ideas – give them credit for attending and "21st Century" credit for presenting.</p>
1.3	All teachers will plan lessons that include the use of communicative and collaborative tools.	<p>Some teachers use blogs</p> <p>Lack of training hinders the use</p>	<p>Student Collaboration</p> <p>49% use computer</p>	<p>More current technology not being used</p> <p>Lack of skill</p>	<p>Identify a suite of approved and manageable, yet culturally relevant,</p>

		<p>of technology</p> <p>Not enough time for training</p>	<p>lab</p> <p>39% use LCD</p> <p>42% use PowerPoint</p> <p>13% use Whiteboards</p> <p>5% use Handhelds</p> <p>5% use blogs</p> <p>5% use wiki</p>	<p>with technology</p>	<p>tools such as wiki, blog, instant messaging, online white board and discussion boards that will facilitate teacher collaboration.</p> <p>Provide professional development three-fold:</p> <p>Using with online learning communities.</p> <p>Provide to ITAT and other identified innovators and early adopters.</p> <p>Encourage use by teachers in online professional development</p> <p>Examine network and administrative requirements and risks in opening these applications for use by teachers with students to develop a solution that is both safe and appropriate for students to use.</p>
2.1	All teachers will utilize technology to assess student performance.	<p>Teachers use PowerPoint and Publisher</p> <p>Handhelds are time consuming (lack of skill)</p>	<p>Student Assessment</p> <p>51% use computer lab</p> <p>25% use LCD</p> <p>7% use classroom response system</p> <p>31% use PowerPoint</p> <p>42% use educational software</p> <p>8% use Whiteboards</p>	<p>Lack of skill with technology</p> <p>Technology not available</p>	<p>Develop a list of characteristics that would describe a “21st Century” professional development example.</p> <p>Instructional team will collaboratively build two courses that would meet “21st Century” criteria.</p> <p>Build a “21st Century” professional development program to provide teachers with a clear model (a whole program of</p>

			7% use Handhelds 11% use NCWise		courses that demonstrate the strategies, techniques and tools involved in a 21 st Century classroom.
2.2	All principals will utilize technology to assess student performance.	Some schools use handhelds Most use paper-based observation sheets	n/a	Technology tools/resources not in place Lack of skill with technology	Define appropriate uses of technology for administrative assessment of teacher performance using reflective time, seminars, “best practice” presentations and other activities after monthly meetings (2 hr maximum) to promote principal professional development. Focus on assessment techniques and tools.
2.3	Teachers and administrators will utilize the PCS Teacher performance Appraisal Instrument Technology Addendum in order to assess teacher technology competency.	Data not collected on this topic	Data not collected on this topic		Re-evaluate the TPAI-Addendum to determine updated goals, accountability and format.
3.1	All teachers will use technology to communicate with colleagues and professionals at the district, state, national and global level.	There is some collaboration at the school level Almost no collaboration outside the individual school	Prof Collaboration 64% use email 29% use Teacher web pages 5% use IM 4% use blog 5% use wiki 11% use other web-based tools 16% use NCWise	Lack of incentive/motivation Lack of skill with technology	Promote teacher activity in professional organizations, online professional development, conferences and other activities in which they will be introduced to new tools. Launch a campaign to make them aware of these activities.
3.2	All teachers will use technology to participate in professional learning communities to facilitate	Mostly passive collaboration No incentive or	Prof Collaboration 64% use email 29% use Teacher	Lack of incentives/motivation/	identified in strategy 1.2

	active collaboration.	reason to collaborate Not a part of teacher work flow	web pages 5% use IM 4% use blog 5% use wiki 11% use other web-based tools 16% use NCWise	mandates	
4.1	All “21 st Century” professional development programs will include the use of relevant, appropriate and innovative technologies.	<p>No staff development in web 2.0 or blogging</p> <p>Staff development lags behind innovative technologies</p> <p>Teachers don’t use teacher web pages to communicate with students</p>	<p>Request training</p> <p>35% Computer labs</p> <p>71% whiteboards</p> <p>32% LCD</p> <p>45% doc camera</p> <p>53% handhelds</p> <p>61% classroom response systems</p> <p>23% PowerPoint</p> <p>37% educational software</p> <p>40% digital video</p> <p>45% digital audio</p> <p>22% video games</p> <p>21% IM</p> <p>32% blog</p> <p>32% wiki</p> <p>14% email</p> <p>44% teacher web pages</p> <p>36% other web based tools</p> <p>45% NCWise</p> <p>38% online discussion boards</p>	<p>Lack of skill with newer technology</p> <p>Lack of incentive/ motivation per tech trainers</p>	Intervention identified in strategy 1.2

4.2	All technology professional development will be integrated into core (Language Arts, Math, Science, Social Studies) content areas in order to establish effective instructional strategies for teachers in their classrooms.	No data collected on this topic	No data collected on this topic		Intervention identified in 1.2
5.1	All teachers will utilize NCWise data reporting tools to analyze data and make instructional decisions in their schools and classrooms.	<p>Teachers do not trust the data</p> <p>Teachers don't know how to use it</p>	<p>NCWise usage</p> <p>44% total usage</p> <p>16% professional collaboration</p> <p>11% student assessment</p> <p>7% personal use</p> <p>10% don't have access</p> <p>45% request additional training</p>	Lack of skill with technology	<p>Continue with NCWise implementation and support use.</p> <p>Design a professional development program that techniques for analysis of student data and using it for decision-making.</p>

Appendix I – Timeline

Stage/Task	Begin Date	End Date
Needs Assessment Collection	2/7/2008	3/15/2008
Stage I - Extant Data Analysis	2/7/2008	2/14/2008
District Profile Analysis	2/7/2008	2/14/2008
Previous Technology Plan Analysis	2/7/2008	2/14/2008
State Biennial Report Analysis	2/7/2008	2/14/2008
Stage II - Extant Data Analysis	2/26/2008	2/27/2008
Professional Development Actuals	2/26/2008	2/27/2008
Draft Needs Assessment Plan	2/11/2008	2/14/2008
Submit Needs Assessment Plan	2/14/2008	2/15/2008
Stage III - Needs Assessment - District Administrative Unit	2/19/2008	3/14/2008
Interview with Superintendent	2/19/2008	2/23/2008
Develop Agenda	2/19/2008	2/20/2008
Conduct Interview	2/19/2008	2/20/2008
Report Findings	2/21/2008	2/23/2008
Interview with Assistant Superintendent	2/19/2008	2/23/2008
Develop Agenda	2/19/2008	2/23/2008
Conduct Interview	2/19/2008	2/20/2008
Report Findings	2/21/2008	2/23/2008
District Technology Assistance Team Focus Group	2/28/2008	3/6/2008
Develop Agenda	2/29/2008	2/29/2008
Invite to Virtual Meeting	2/28/2008	2/29/2008
Conduct Focus Group Meeting	3/4/2008	3/5/2008
Report Focus Group Findings	3/5/2008	3/6/2008
Focus Group – District Instructional Team	3/12/2008	3/14/2008
Develop Focus Group Agenda	3/12/2008	3/14/2008
Conduct Focus Group	3/12/2008	3/13/2008

Report Findings	3/13/2008	3/14/2008
Stage IV – Subject Matter Analysis - Instructional Technology Coordinator/Regional Consultant	2/28/2008	2/29/2008
Stage V - Needs Assessment - School-based	2/18/2008	3/15/2008
Teacher Survey	2/18/2008	3/15/2008
Develop Teacher Survey	2/29/2008	3/5/2008
Enter Teacher Survey into Surveymonkey Delivery System	3/6/2008	3/6/2008
Distribute Teacher Survey	3/6/2008	3/6/2008
Collect Teacher Survey Data	3/10/2008	3/11/2008
Analyze Teacher Survey Data	3/12/2008	3/15/2008
Stage VI - Interviews - Principals	2/27/2008	3/12/2008
Develop Agenda	3/5/2008	3/12/2008
Conduct Interviews	3/6/2008	3/12/2008
Report Findings	3/12/2008	3/14/2008
Needs Assessment Report	3/17/2008	4/3/2008