Appendix

Appendix

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Forming Your Technology Planning Committee

Expertise	Technology Planning Committee			
	Teachers	**Administrators**	**Parents**	**Others**
Curriculum Design				
Professional Development				
Technology Infrastructure				
Fiscal and Budgetary				
Policy				
Process Tasks (Writing, calling meetings, etc.)				

Technology Planning Timeline

Week 1	
Week 2	
Week 3	
Week 4	
Week 5	
Week 6	
Week 7	
Week 8	
Week 9	
Week 10	
Week 11	
Week 12	
Week 13	
Week 14	
Week 15	
Week 16	
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Week 18	

Technology Needs Survey

1. What types of activities do teachers use with educational technologies and how often do they use those activities?

2. Do teachers have access to a computer for their own use, or do they routinely use a personally owned computer to prepare materials for use in their classrooms?

3. What ideas does the staff have about what is needed to make technology more useful?

4. What student benefits has the staff observed in relation to the use of technology in the school/ classroom?

5. What new software or hardware do teachers frequently request for use in classrooms?

6. What are examples of special work or projects teachers and students have done with technology?

7. Which courses or subjects most often use technology?

Technology Inventory Worksheet (page 1 of 2)

Operating systems

Computers: include manufacturer, processor type and speed, capacity of ROM, capacity of RAM, CD drive, networked, standalone. See district property and inventory report for details.

Peripherals

Technology Inventory Worksheet (page 2 of 2)

Other

Networks: Local or Wide Area

Telephone access

Internet access

E-mail provider

Software applications

Core Values Worksheet

Instructions: Use the spaces below to list five reasons why technology is important to the students and teachers in your school. Start by thinking about how technology can impact and improve student learning.

Technology is important to students and teachers because:

1. _____

2. _____

3. _____

4. _____

5. _____

Action Plan Worksheet

Goal Group:								
Statement of Goal:								
Activities	Responsible person	Begins /ends	Hardware/ software required	Other resources required	Professional development required	Budget allowed for this activity		
								Evaluation

Available Technology Inventory Worksheet (page 1 of 3)

Remember that you might have access to technology that is not physically located in your classroom. Check with your librarian, school technology coordinator, and/or other teachers to find out if resources exist that you might borrow or share with other teachers.

Computers

- Computers for teacher use (where and how many?)

_____

_____

- Computers for student use (portables, AlphaSmarts, lab computers, classroom computers, etc.; where and how many?)

_____

_____

Presentation and output devices

- Projection devices (e.g., scan converter, LCD, video projector)

_____

_____

- Printers

_____

_____

Input Devices

- Scanners

_____

_____

- Digital cameras

_____

_____

- Digital video cameras

_____

_____

Available Technology Inventory Worksheet (page 2 of 3)

Internet

- Teacher access

_____

_____

_____

- Student access (Existence of Internet acceptable use policy)

_____

_____

_____

Software and applications (Note: identify what is available for teacher, students, or both)

Applications technology

- Basic productivity (word processor, spreadsheet, database)

_____

_____

_____

- Presentation manager (e.g., PowerPoint)

_____

_____

- Multimedia production (e.g., HyperStudio)

_____

_____

- Reference materials (e.g., multimedia encyclopedia such as Encarta)

_____

_____

Subject area—specific technology (Note that many applications are multidisciplinary.)

- Math software applications

_____

_____

Available Technology Inventory Worksheet (page 3 of 3)

- Science software applications

- Language arts software applications

- Social studies software applications

- Visual Arts (e.g., drawing) software applications

- Music software applications

Communications technology

- World Wide Web/Internet

- E-mail

- Internet-based videoconferencing

Classroom Activity Planning Template (page 1 of 3)

Description of the proposed classroom activity

Student learning objectives

What is the purpose of this activity? What sorts of student dispositions and/or attitudes will this activity support? How does this activity impact student interactions with others?

Specific curriculum objectives

How does this activity support particular curriculum objectives, framework elements, and so forth?

Classroom Activity Planning Template (page 2 of 3)

Assessment

How do you plan to assess student achievement of learning objectives? Rubrics, indicators, and so forth?

Technology to be used in this activity

State *why* this particular technology will be used.

Nontechnology resources or materials to be used in this activity

e.g., books, original sources, manipulatives, etc.

Time necessary to complete this activity

Class days required, start to finish

Classroom Activity Planning Template (page 3 of 3)

Activity timeline/procedure

As specifically as possible, please describe this activity on a day-by-day, step-by-step basis. Be sure to include student directions, expectations, and teacher instructions. Please use additional sheets as necessary.

Ideas for extended activities

How might this particular activity be extended to cover other curriculum units? If time were available, how might you expand this activity?

Assessment/evaluation

What are your criteria for success? How will you know that this unit has had the student impacts related to the identified learning objectives?

Classroom Observation Worksheet

School _____ **Teacher** _____

Grade Level _____ **Subject** _____

Describe the types of computer applications the students are using in the classroom (tutorials, applications, exploration, or communication).

_____

_____

_____

_____

_____

_____

_____

What is the instructional purpose of the activity?

_____

_____

_____

_____

_____

_____

_____

Describe how technology is contributing to learning.

_____

_____

_____

_____

_____

_____

_____

Technology Integration Progress Gauge (page 1 of 12)

State _____

School System _____

School _____

Completed By

(Circle all that apply)

a. District Staff School Staff

b. Administrator(s) Coordinator(s)
Teacher(s) Media Staff
Other: _____

c. Entire Faculty Tech Team
School Improvement Team
Other: _____

School Contact

Person: _____

Phone: _____

E-mail: _____

Reporting For (circle)

Fall 1999 Spring 2000

SEIR•TEC Coordinator

_____

Completion Date

_____

SEIR•TEC

Technology Integration Progress Gauge

Intensive Site Project—Site Profile

The intent of this instrument is to provide a simple tool to help school leaders (a) reflect on activities to date vis-à-vis effective practices in technology integration, (b) think about what needs to be done in order to impact teaching and learning through the use of technology resources, and (c) consider strategies for maximizing the impact of technology. The instrument is not to be used as an evaluation tool or an instrument to determine a grade. SEIR•TEC will not attempt to collapse individual intensive site profiles into a single figure, such as an average or grade. Similarly, there will be no attempt to rank intensive site schools according to the profile data. Instead this instrument is to be used as a tool to develop a school profile of technology integration and impact at periodic times during the intensive site project.

The instrument consists of the five domains presented in a table format. The domains (labeled I, II, etc.) are described by two or more indicators. Each indicator has four levels of implementation. The four levels are:

- **Minimal:** Little or no evidence of implementation.
- **Beginning:** Implementation is occurring and evidence exists of capacity-building strategies in place.
- **Intermediate:** Plans exist and activities have begun for scaling up to a higher or sustainable level.
- **Advanced:** Strategies and activities are institutionalized and evidence exists that changes made will be sustained.

Technology Integration Progress Gauge (page 2 of 12)

Instructions to SEIR◆TEC Intensive Site Coordinator and District and/or School Contacts

Preparation:

1. Discuss the purpose of the instrument with district and/or school contacts.
2. Determine which school team or school staff will complete this instrument. Those selected should have responsibility for technology integration at the school.
3. Provide the group an overview of the instrument and the instructions for completing the form. Emphasize that this is a tool for reflection and marking current status of technology integration.
4. Establish a process for completing the instrument (e.g., individually first, then as a group; as a total group; parts by individuals, then consensus by the group).
5. Retain one copy of the instrument for final reporting.

Instructions to Intensive Site Staff

Completion:

1. Read the indicators for each domain and determine which of the four levels of implementation of each indicator **best describes** your school at this point in time.
2. **Circle the number** corresponding to that level of implementation. Do not circle more than one number or mark a halfway point. Select the level that **best represents your current level.** Interpret "few," "some," "many," and "most" as follows:
   a. few = less than 25% of the indicated group
   b. some = 25% to 75% of the indicated group
   c. many = more than 75% of the indicated group
   d. most = almost all of the indicated group
3. In the Comments/Supporting Information block, add information to describe the status of your project and list the sources for your decision. The responses in the Comments/Supporting Information block will be useful on subsequent completions of the Gauge in order to establish progress.
4. Use the three empty tables at the end of this instrument to add indicators that help describe other technology-related activities at your school. Completion of these empty tables is optional but may be necessary to provide a complete profile of technology integration and impact at your intensive site school.

Technology Integration Progress Gauge (page 3 of 12)

Instructions to Intensive Site Staff and SEIR◆TEC Coordinator

Reporting:

1. Prepare a final copy based on the decisions by the group.
2. Verify the contact and completion information at the top of page 1.
3. Make copies and distribute as follows:
   a. Original to SEIR◆TEC Director
   b. Copy to intensive site school contact and/or district contact
   c. Copy for SEIR◆TEC Intensive Site Partner
   d. Copy for SEIR◆TEC Intensive Site Coordinator

Glossary

Community—Group including school members as well as public and private individuals, businesses, and /or agencies in the area served by the school.

Higher-level learning—Student activities involving one or more of the following: peer collaboration, integration of higher-order thinking skills, self-directed tasks, multidisciplinary assignments, authentic learning opportunities (based on real-world events or tasks).

Technology Integration Progress Gauge (page 4 of 12)

Domains and Indicators

1 Level of Student Engagement

There is evidence that:

A. Students are involved in higher-order thinking skills activities supported by technology.

1	2	3	4
Few, if any, students are involved in learning activities requiring peer collaboration and interaction, technology applications, or higher-order thinking skills.	Some students are participating in technology-based learning activities requiring peer collaboration and interaction as well as higher-order thinking skills. A few students are sharing their technology skills in collaborative groups.	Many students are involved in authentic, technology-based learning activities requiring peer collaboration and interaction as well as higher-order thinking skills to solve real problems.	Most students are involved in self-directed, authentic, technology-based learning activities that are multidisciplinary and require peer collaboration and interaction as well as higher-order thinking skills to solve real problems. New products and understandings are evolving.
Comments/Supporting Information:			

B. Students are meeting the school's expectations for levels of technology use.

1	2	3	4
A few students are achieving levels of appropriate, initial technology use in learning activities, as defined by the school or school/district technology plan for their grade and the stage of implementation of the plan. Some students are exploring more advanced uses of technology.	Some students are engaged in activities to build the technology use skills expected for their grade and the stage of implementation of the school/district plan. Many students are achieving the expected levels and some students are developing skills in more advanced uses of technology.	Many students are applying the technology use skills and have documented mastery of the school expectations for their grade and the stage of implementation of the school/district plan. Many students are exploring more advanced uses of technology and some are demonstrating mastery.	Most students have met the school's expectations for technology use for their grade and for the stage of implementation of the school/district plan. Most are using regularly the skills mastered and are continuing to develop skills in more advanced uses of technology.
Comments/Supporting Information:			

Technology Integration Progress Gauge (page 5 of 12)

2 Environment for Teacher Engagement

There is evidence that:

A. Teachers design and implement technology-based learning experiences that promote higher-level learning for students and authentic assessment.

1	2	3	4
Few or no teachers design and implement student activities that require peer collaboration or integration or use of higher-order thinking skills. They are using technology mainly for demonstrations with minimum adaptations and little integration into their ongoing program. Most teachers plan and teach in isolation.	Some teachers design and implement student learning activities requiring peer collaboration and interaction as well as use of higher-order thinking skills. Groups of teachers are collaborating on use of specific technologies and resources and some are implementing the ideas individually or as a team. Some teachers are using technology for assessment.	Many teachers design and implement authentic learning activities requiring peer collaboration and interaction as well as use of higher-order thinking skills to solve real problems. Many teachers are planning and teaching collaboratively, using specific technologies and resources. Some teachers are designing authentic assessment tools using technology resources.	Most teachers design and implement technology-based, self-directed, multidisciplinary, authentic learning opportunities requiring peer collaboration and interaction as well as use of higher-order thinking skills. Many use technology resources to plan and teach collaboratively and to design authentic assessment tools.
Comments/Supporting Information:			

B. Teachers demonstrate the expected level of technology use. (Levels from ACOT Study.)

Entry:	Teachers are inexperienced and, possibly, inefficient in the use of technology. Many have misgivings regarding technology innovation, and frustration is common.
Adoption:	Teachers begin to incorporate technology into existing teaching practice, primarily to teach about technology and as a means of delivering traditional instruction.
Adaptation:	Teachers are integrating technology into the traditional teaching day. Classroom practices are still primarily traditional, but use of the computer as a tool is pervasive. Productivity and increased performance on traditional measurements are used as indicators of success.
Appropriation:	Teachers use technology in everything they do, to the point that the use of the technology in the lives of teachers and students is almost transparent.

Technology Integration Progress Gauge (page 6 of 12)

Invention: Teachers are experimenting with new roles and new instructional strategies. The entire classroom is transformed and students are more engaged in learning and more self-directed.

1	2	3	4
Almost all of the teachers are engaged in activities typical of the entry stage. A few, if any, are beginning to model actions typical of the adoption stage.	A majority of the teachers has reached the adoption stage. Some teachers are beginning to discuss how to adapt the technology to teaching and learning with a few beginning to try customized versions of existing resources.	A majority of the teachers is engaged in the activities typical of the adaptation stage. Some of the teachers are beginning to combine technology resources and instructional strategies using technology in all learning activities.	A majority of the teachers is engaged in activities typical of the appropriation stage. A few teachers have begun exploring areas associated with the invention stage.
Comments/Supporting Information:			

C. Teachers integrate technology into all subject areas, using resources that map technology to curriculum.

1	2	3	4
Few teachers are aware of technology resources that support specific topics or lessons. There is no correlation or mapping of the existing resources to the curriculum. Few or no teachers are integrating technology into subject areas.	Teachers have access to a school inventory of available technology tools and resources. Mapping the technology resources to the curriculum has begun. Some teachers are piloting technology integration strategies and lessons.	Mapping the technology resources to the curriculum has been completed. Many teachers have been introduced to the guides that map technology to all subject areas. Some teachers have begun using them in their day-to-day instruction. Many teachers have begun limited technology integration lessons.	Most teachers are integrating technology into all subject areas, using the guides that map existing technology resources to the curriculum.
Comments/Supporting Information:			

Technology Integration Progress Gauge (page 7 of 12)

3 Availability and Accessibility of Appropriate Resources

There is evidence that:

A. Technology resources are available and are being used to support a variety of student and teacher experiences.

1	2	3	4
Few teachers and staff know what technology resources are available and how to operate them. Few technology resources exist. They have not been inventoried recently nor checked for operational status.	Some teachers and staff are learning to operate specific technology equipment. Some technology resources have been checked and inventoried by location and primary use.	Many teachers have received information on the technology resources available. Some teachers have used selected resources for instructional activities.	Most teachers are using a wide variety of the available technology resources.
Comments/Supporting Information:			

B. Technology has been allocated in such a way as to support its constructive use in the teaching and learning environment.

1	2	3	4
No plan exists to allocate technology resources to maximize the impact on teaching and learning. Location of existing technology resources is based on past use, initial program purchase, or personal request. Few, if any, teachers have expressed an interest in a change in the allocation of the technology resources.	Some discussions have occurred to design an allocation and replacement schedule to support constructive use of technology in the classroom, labs, and media center. For example, a school technology team is studying the current allocation of technology resources and the related allocation policies.	A plan is being implemented to allocate the existing technology resources for maximum use and impact on student learning. Work is in progress to design an allocation schedule for future purchases and routine upgrades. Individuals are identified to be responsible for maintaining this allocation process.	The technology resources in the school are available for just-in-time learning experiences, whether through a checkout standalone mode or by a networking environment. School staff has input on allocation of existing and new technology resources.
Comments/Supporting Information:			

Technology Integration Progress Gauge (page 8 of 12)

C. School individuals have equitable access to technology.

1	2	3	4
Limited access to the technology resources is available to the school staff during school hours and from school locations. Discussions may be occurring on extending access, from off-school sites and beyond the school day.	A group of school staff is testing access to school technology by checkout and by telecommunications after school hours and from homes. The school is developing policies on access to school technology by staff and students.	A policy exists for use of school technology by staff and students and has been shared. Guidelines on equitable use are being developed. As a result of the pilot testing, an expanded number of staff and students are now using school technology resources.	Technology resources are accessible to the school staff and students on an equitable basis and from off-site locations and beyond school hours. Access is based on policies in the school technology plan. Staff members are making routine use of the resources.
Comments/Supporting Information:			

Technology Integration Progress Gauge (page 9 of 12)

4 Organizational Support

There is evidence that:

A. Organizational structure exists for support of all aspects of technology integration.

1	2	3	4
Within the school and the district, there is little to no organizational structure to support technology use or set direction for technology integration.	The need for support of technology integration has been recognized and school staff members have been assigned to provide minimal support. A group has formed to identify what type of support is needed for technology integration.	Individuals are identified to provide hardware and instructional support to staff. The school is addressing reports on or requests for support needed for successful technology integration.	School and district leaders have designated personnel and approved a process for supporting technology integration via training, maintenance, technical assistance, purchasing consultation, and instructional modeling. Periodic input on the support needed is gathered.
Comments/Supporting Information:			

B. Organizational capacity fosters transformations in school leadership to support technology and the changes it brings to teaching roles and methodologies.

1	2	3	4
No policies exist at the school or district level that encourage school leaders to use technology. Few opportunities occur for school leaders to gain technology skills or to witness use of technology in the instructional program at model schools or conferences.	School leaders are beginning to use technology for work and to participate in meetings and sessions on technology use in changing teaching and learning in the classroom. Discussions have occurred about developing policies on the use of and support for technology by school leaders.	Many school leaders are using technology routinely for their work and are supporting requests from teachers to gain technology skills or participate in events focusing on technology integration. The school is developing policies that will foster use by and support from school leaders for technology and change.	Policies exist and opportunities occur regularly from the district and/or regional level that encourage school leaders to be users of technology and to support technology in the instructional program. As a result, most school leaders routinely use technology themselves, initiate reviews of technology use, and encourage use by staff.
Comments/Supporting Information:			

Technology Integration Progress Gauge (page 10 of 12)

C. Policies exist that support the equitable availability and use of technology.

1	2	3	4
Neither school nor district policies exist on equitable availability and use of technology.	School and/or district policies have been developed for equitable availability and use of existing technology. Random strategies are being implemented to ensure equity.	A school plan for implementing technology to ensure equitable availability and use for teaching and learning is in place. Successful strategies for equity are being identified.	Schools are following district policies on equitable availability and use of technology. Technology activities based on equitable availability and use are incorporated into school improvement plans and staff professional development plans.
Comments/Supporting Information:			

D. Effective and ongoing staff-development opportunities exist to support capacity building for using technology to improve teaching and learning.

1	2	3	4
Although technology-based staff-development topics have been identified, only a few, unrelated technology-based staff-development activities have occurred.	Some technology-based staff-development sessions have occurred and initial activities resulting from the sessions have been tried in classrooms. Teachers have begun seeking ways to integrate technology.	A staff-development plan, including evaluation of student and staff needs, exists for using technology to improve teaching and learning. Some teachers are collaborating on best practices in using technology in teaching and learning. Teachers are being evaluated on their effective use of technology as a result of training sessions attended.	School and district administrators support continuous staff-development opportunities for improving teaching and learning, with seamless technology uses. A committee exists to provide long-range planning on technology-based staff development and sharing of best practices. Use of technology effectively is an integral part of the teacher evaluation process.
Comments/Supporting Information:			

Technology Integration Progress Gauge (page 11 of 12)

E. Teachers and administrators use technology as an information management tool.

1	2	3	4
Although teachers and administrators are aware of information management tools, few, if any, staff members are using such tools.	Some school staff members have access to and have received training to use information management tools.	Many school staff members use information management tools for daily classroom tasks and for submitting reports and documents. Some staff members are seeking new tools and additional uses for existing tools.	Most school staff members prepare and submit reports and documents using information management tools as required by administrators. Many school staff members provide regular input on new tools needed.
Comments/Supporting Information:			

Technology Integration Progress Gauge (page 12 of 12)

5 Community Involvement

There is evidence that:

A. Community supports the school's integration of technology in teaching and learning.

1	2	3	4
Plans may have been developed but not implemented to inform the community of the school's efforts to integrate technology.	Some segments of the community are knowledgeable of the school's efforts to integrate technology into teaching and learning.	Many community groups have plans in place and have begun activities to enhance the current technology integration activities of the school. Community members are meeting with school groups to plan technology integration activities.	Most community groups support technology integration into the school's teaching and learning environment by maintaining a consistent presence in school activities. Ongoing school committees are required to include community members.
Comments/Supporting Information:			

B. Community shares in the use of the school's technology.

1	2	3	4
Few or no plans exist for the community to use the school's technology.	Some school and community members are developing policies and strategies for community members to use the school's technology; e.g., for after-hours adult literacy training or e-mailing with teachers.	Several community groups are beginning to use the school's technology according to approved policies and guidelines.	The school and community members actively promote community groups' use of the school's technology.
Comments/Supporting Information:			

Professional Development Idea Worksheet (page 1 of 4)

Integration Idea

Impact

(It's not necessarily true that every idea will impact each of the following populations, but if your integration is truly systemic, there's a good chance that it will. In a sentence or two try to describe how your idea for technology implementation will impact each of the following.)

Impact on Teachers

Impact on Students

Impact on Administrators

Impact on Community and Others

Professional Development Idea Worksheet (page 2 of 4)

Hook to your District (or School) Technology Plan

(All aspects of technology integration should be reflected in the vision and goals of your strategic technology plan. Describe below how your idea for integration supports one or more goals in your technology plan.)

Who's Responsible?

(Who will take the lead responsibility on various aspects of your professional-development idea? Once again, not every idea will have all of these aspects, but most will.)

Professional Development

Technology Infrastructure (hardware, software, and network installation, maintenance, support, etc.)

Communication/Documentation of Success (Who's going to tell your community about the outcomes from implementing this idea?)

Other

Professional Development Idea Worksheet (page 3 of 4)

Timeline

Use this space (or another sheet) to create a step-by-step procedure for implementing your idea.

Who?	Does what?	When?

Professional Development Idea Worksheet (page 4 of 4)

Evaluation and Reflection

Nothing fancy here, but just take a moment to describe how you will know whether you were successful in the implementation of your idea. Will there be interim project benchmarks? Will there be something that you can qualitatively describe or quantitatively count as outcomes from your idea?

Community Resources Worksheet

Type and name of organization	Potential contribution or collaboration	Contact person	Who will contact them?
Colleges/ universities			
Libraries/ museums			
Business organizations			
Local businesses			
Religious organizations			
Community organizations			
Local media			
Telecommunications or technology organizations			

Software Selection Framework

Desired subject areas (e.g., mathematics, language arts, social studies, etc.)

Targeted grades

Intended use (What curriculum objectives will it serve? When during the year will it be used? How many students will use it?)

Type of software (i.e., tutorial, communications)

Teachers/departments using the software

Special student considerations (primary language, special needs, etc.)

Infrastructure considerations (hardware platform, network requirements, multimedia, special support, etc.)

Educational Software Evaluation (page 1 of 2)

Evaluator _____ Date Published _____

Today's Date _____ Age/Grade Range _____

Software Title _____ Platform _____

_____ _____

Cost _____ Network Version? _____

Publisher _____ System Requirements _____

Subject Area(s) _____ _____

---

1. What is the overall purpose or use of this software application?

   _____

   _____

   _____

2. How would you best classify the use of this software?

   a. Tutorial (including drill and practice)
   b. Exploration
   c. Application or productivity tool
   d. Reference
   e. Entertainment
   f. Other_____

3. Does the content appear educationally sound and well-researched, e.g., does it mesh with national standards and curriculum frameworks, is the information current and free of bias and stereotype?

   _____

   _____

   _____

   _____

4. Is the program sufficiently easy to maneuver through, e.g., does it allow you to save your work at any point, can you easily return to a main menu or orienting point, are the graphics and icons clear?)

   _____

   _____

   _____

Educational Software Evaluation (page 2 of 2)

5. Describe how you envision your students using this software, e.g., would they be working alone or in cooperative groups, in the classroom, laboratory, or library, as part of regular classroom work or as an add-on, reward?

6. What do you most like about this software?

7. What do you like least?

8. What are your impressions of the supporting documentation, e.g., installation and troubleshooting instructions, teacher's guide, lesson plans, extension activities?

9. Does the cost of the software seem appropriate? Is there enough flexibility to allow students to use the program multiple times, can the difficulty level grow with the student, are you paying a premium for fancy graphics that don't necessarily impact the learning experience?

10. Does the publisher offer technical and educational support for its products? How accessible is this support, how quickly do they respond, are they sensitive to the needs of teachers using the program in a classroom setting?

Evaluation Committee Composition Matrix

To create and conduct your technology evaluation, you need a committee composed of educational stakeholders *who will actively work* to help create the evaluation. Remember:

- You will need committee members who represent *all* aspects of your school community. This means teachers (from a variety of grades and/or subject areas), administrators, parents, community members (e.g., businesspeople), and perhaps students.
- Do not load your committee with figureheads who are not willing to actually work on the plan.
- The evaluation process contains many different tasks. You need writers, curriculum people, infrastructure people, people who are good with budgets, and policy people.
- The commitment to be a part of the technology-evaluation committee is not a short-term commitment. A formative evaluation by definition is ongoing and iterative. The committee members should be willing to assist in your school's technology-evaluation efforts long after the data are collected and reports are written.

	Teachers	Administrators	Parents	Others
Curriculum				
Professional Development				
Infrastructure				
Process Tasks (editing, calling meetings, etc.)				

Technology Evaluation Organizing Questions

When thinking about program evaluation, it is useful to consider some organizing questions. Working in groups, please answer the following questions. Be prepared to report out your answers at the conclusion of the group work.

1. This evaluation will evaluate various aspects of how well technology has been integrated in your schools and district. What does *integration* mean to you? Provide some examples.

   _____

   _____

   _____

2. All programs must have a driving purpose. What is the best reason your district has implemented and integrated technology as a part of its teaching and learning environment?

   _____

   _____

   _____

3. Evaluation is about measuring change. When evaluating how well your schools and district have integrated technology, what sort of changes do you expect to see as a result of this integration?

   _____

   _____

   Changes related to teachers?

   _____

   Changes related to students?

   _____

   Other changes?

   _____

4. Change produces results. Evaluation measures those results against expectations. Identify three aspects of technology integration that can be measured in order to evaluate the change that has occurred in your schools and district as a result of technology integration.

   a. _____

   b. _____

   c. _____

Developing Indicators Worksheet

Working with a small group of stakeholders, identify 3 (or more) indicators for each of the following categories.

An indicator is a simple statement of *what you would expect to find or see* that demonstrates a particular attribute. For example, one indicator of the season known as summer might be: "Warm temperatures inspire people to wear lighter clothing." Inversely, if we see people wearing light clothing, one possible conclusion (applying our indicator) is that the season is summer.

Effective Use of Technology

1. _____

   _____

2. _____

   _____

3. _____

   _____

Technology's Impact on Students

1. _____

   _____

2. _____

   _____

3. _____

   _____

Technology's Impact on Teachers

1. _____

   _____

2. _____

   _____

3. _____

   _____

Classroom Observation Template

School	
Teacher	**Grade/Subject**
Class Size (est.)	
Observer	**Date**

Teaching—Learning Methods (e.g., direct instruction, project-based learning)
Brief Description of Classroom Activity/Lesson
Student Groupings (single, small, large, etc.) and Interactions
Technology (hardware and software) and/or Instructional Materials In Use
Number of Computers in this Classroom
Other Notes

Sample Teacher Focus Group Questions (page 1 of 5)

Student Access and Use Questions

1. Describe how your students typically use lab or classroom computers.

2. What kind of software is available for student use in the classroom or lab?

3. How do students typically use the computers…and why? (i.e., probe for the reasons why they favor a particular pattern of use…e.g., "You can't do anything with one computer; each student needs to work individually;" class management issues; etc.)

4. Could you give me an estimate of the percentage of students who have access to a computer at home?

Sample Teacher Focus Group Questions (page 2 of 5)

5. We're interested in your impressions of how the information technology you have just described has impacted your students' learning. Overall, how have students been impacted by the use of technology in your school? (probe for examples, evidence)
   Special or specific assessments?
   Nothing in addition to nontechnology-specific assessments.
   Other?

6. How do you evaluate your students in terms of their technology use?

7. What does technology allow your students to do now—either physically or intellectually—that would have been impossible (or at least more difficult) before technology was widely available in your school? (allow for the fact that they may not think that technology is *currently* widely available)

8. What changes could be made to technology in your school that would allow *your students* to benefit more from technology?

Sample Teacher Focus Group Questions (page 3 of 5)

Teacher Fluency Questions

9. Please describe how you *most frequently* make use of school computers. We don't want to know all of what you do…just what you most often do. (probe for uses directly related to instruction, administrative uses/record keeping, personal productivity, etc.)

10. OK, that's what you most frequently do. Now tell us some of the other things…regardless of how often you might do them.

11. If not on your desk or in your classroom, where do you use computers most often?

12. Do you have access to a computer at home? (yes or no answer)

13. How accessible are the classroom or lab computers to teachers throughout the day?

Sample Teacher Focus Group Questions (page 4 of 5)

14. What, if any, impact has the use of information technology had on your teaching? (probe for the following list without reading it)

15. In what ways has your professional practice (i.e., teaching) improved through the use of technology? (designed to be pretty open-ended. Allow for the fact that the improvement may have been mostly negative)

16. What barriers have you encountered in trying to use technology in the classroom?

Teacher Vision/Strategy Questions

17. How do you get your ideas for integrating technology in the classroom?

Sample Teacher Focus Group Questions (page 5 of 5)

18. What is the most interesting or intriguing use of technology in education that you have ever heard about? It doesn't matter to us whether you can actually DO this yet…we just want to know what you find interesting.

Teacher Access and Professional Development Questions

19. What changes would you like to see made in your school with regard to how technology is allocated or structured? (note that they may comment on both physical infrastructure as well as support issues)

20. How often is technology staff development offered at your school and/or in the district…and who is responsible for conducting this training?

21. What barriers have you encountered in terms of getting the technology training you want and/or need?

22. What has been the most useful use technology workshop you have attended, and why?

23. Is there anything else you would like to share with us?

Thank You for Your Time!!