

PLANNING FOR TECHNOLOGY IN SCHOOLS: HOW TO PLAN, IN SIX STEPS

As illustrated in Figure 1, the planning process is continuous and cyclical. The six steps involved in the process are sequential but interrelated.



FIGURE 1: THE PLANNING PROCESS

The steps of the planning process can be divided into two distinct categories:

- a) Planning.
- b) Implementation, Management and Review.

Planning

1. Develop a plan to create a plan.
2. Vision: What trends can be identified that will affect our school?

3. Where are we now? What is the status of our school's Information and Communication Technology (ICT) implementation?
4. What specific planning targets does our school need to identify to attain our vision?

Implementation, Management and Review

5. How will our school achieve its planning targets?
6. Renewal: How will we review, adjust, and renew the plan?

STEP 1: DEVELOP A PLAN TO CREATE A PLAN

Before engaging in any actual planning, planners need to pause and reflect and to respond to various items that facilitate planning. Planners should have a “front-end” understanding of the scope of the plan, the context, who will do the planning, who is the audience, the processes that will be used, the human and other resources required, the timetable for the process and the communication procedures required. Addressing these considerations at the outset saves time and energy later on. Developing a plan to create a plan is one of the keys to using available resources in the best possible way.

Scope

Scope: The range or extent of action, inquiry or activity.

In a planning context, these questions need to be answered:

- What is to be included in our planning?
- What is not going to be considered during current planning?

Within available resources, the planners need to strive to infuse technology planning into overall school planning. They also need to include follow-up—that is, implementation, management, review, and renewal. To ensure complete, high quality follow-up throughout the planning cycle, schools should take on “bite-sized chunks.”

The key areas of technology planning that need to be considered first are hardware, resources, infrastructure, technology support, professional development, and management/planning.¹

Context

The context can exert a strong influence on school programs and services. These are some examples of context:

- Parents and community members expect schools to provide superlative programs and services that meet the needs of students.
- Alberta Learning requires schools to respond to and fulfill provincial curricular expectations and other overarching government policies.
- Schools are required to comply with the policies and regulations of the school jurisdiction.
- Funding for the majority of resources comes from outside the school.

¹ For current definitions of these terms, see *Investigating the Total Cost of Technology in Schools* (Alberta Learning, June 2001), pp. 5–6. Available in paper form from Alberta Learning, or online at <http://www.learning.gov.ab.ca/technology/>.

- Parents, school councils, and interest groups may have an influence on school planning.

Several subtler but equally important contextual matters can also profoundly affect the value and effectiveness of planning at the school. For example:

- The assumptions and guiding principles that underlie the planning process may or may not be up to date. Are we planning for the right reasons and outcomes?
- There may be competition with other schools and/or online entities that offer educational services.
- Events and actions within and outside of the school affect a number of different “constituents.” For example, funding decisions made at any level affect learners, teachers, parents, the jurisdiction, and/or the province.

Who are the planners? Who are the audiences?

To do coordinated planning, the planners need to understand who will be involved in the planning and who will benefit from it (the audience). Therefore, the following questions need to be answered:

- Who has a stake in the planning? Students, staff, parents, the school jurisdiction and/or the community?
- Who are the planners? A designated planning committee? The entire staff? People from outside the school?
- Who will lead the planning initiative? Who is the most responsible person? Leadership, whether formal or informal, and whether provided by one person or a team of persons, should exist in an obvious form and be describable.
- Who will write the plan? Will the writer(s) be involved in all aspects of planning, from the beginning?
- Who is responsible for follow-up? Follow-up should be based on an accurate understanding of and commitment to the plan.
- What specific communications—to internal and/or external audiences—are required before, during and after planning is completed?

What processes will be used?

Choose a workable model to guide planning. This resource provides such a model.

What human and other resources are required in order to plan? What is needed to get the job done?

The planners need to:

- Identify the resources required for planning and for implementation, management and review.
- Confirm that the resources will be available and/or determine how these resources will be acquired.
- Assemble planning documents, web sites and other school, jurisdiction and provincial resources that facilitate planning.

What is the timetable for completion of planning and for subsequent activities?

How does the technology planning initiative fit into or alongside other planning at the school? When planning is completed, are subsequent activities also set into a timetable with target dates for closure?

What communication procedures are required?

Are approvals/authorizations required either to commence planning or during the planning process? What are the media considerations, if any?

STEP 2: VISION: WHAT TRENDS CAN BE IDENTIFIED THAT WILL AFFECT OUR SCHOOL?

Which comes first in the planning cycle, developing a vision or assessing the current status of technology integration at the school? Since these two concerns are closely linked, some planners prefer to examine them simultaneously. However, this model places the vision first. When the planners have a vision statement, they can then determine where the school is in relation to a specified, preferred future.

Formulating a Vision

The vision, which is usually stated in one simple sentence, describes a desired state or condition, not yet attained. The formulation of a vision statement triggers orderly planning, as the vision provides a basis for all subsequent decision making.

A vision statement:

- Emphasizes the distinctive, singular focus of the school for the foreseeable future.
- Signals the commitment of resources to an agreed-on end.
- Should have a specified date (or regular intervals) for reviewing its validity as circumstances change.
- Should be practical, that is, a reflection of the real world of the school.

Sample vision statement: *“By June 2003, all teachers will possess the required skills and methodology to infuse ICT outcomes into curricula.”*

The vision statement for technology needs to be in complete harmony with the vision for the school as a whole.

The following questions can be used to promote discussion about and formulation of a technology vision statement for a school.

- What are the trends?
 - What’s important?
 - What’s possible?
- What are the key questions?
- What are the opportunities/resources?
- What are the challenges?
- What can we do?

- What should we not do?

To help in formulating a vision, the planning committee (or the entire staff) may wish to use the template, *Formulating a Vision for Technology in Schools*.

STEP 3: WHERE ARE WE NOW? WHAT IS THE STATUS OF OUR SCHOOL'S ICT IMPLEMENTATION?

A vision for technology cannot be adopted or pursued without a clear understanding of the current status of ICT implementation in the school. Areas that the planners should review at the outset include:

- Accomplishments.
- Leadership functions.
- The degree of curricular integration achieved.
- The technology integration preparedness of staff (what has been achieved and what is still needed).
- Overarching governance and administrative practice requirements.
- The levels and effectiveness of technical support.
- The condition of infrastructure and access opportunities for students and staff.
- Available resources.

Before setting planning targets, the planners need to answer the following questions:

- What are our capabilities?
- What are our strengths?
- What are our weaknesses?
- What are our assumptions?
- What are our beliefs?
- What do we value?

The planning committee (or the entire staff) may wish to use the template, *What Is the Status of Our School's ICT Implementation?*, to promote discussion about the school's current ICT implementation status.

STEP 4: WHAT SPECIFIC PLANNING TARGETS DOES OUR SCHOOL NEED TO IDENTIFY TO ATTAIN OUR VISION?

A planning target is a goal; it is something toward which effort is directed. Planning targets need to be crafted, that is, devised and written down. Each planning target is usually expressed as one short sentence.

Targets are the school's commitment to the achievement of specific and measurable end results. Collectively, all the targets that have been identified describe what the school must achieve in order to attain its vision. Targets have broad, school-wide implications and are genuine aspirations, not projections.

Another way of viewing written planning targets is that they transform a perceived problem into an identified improvement. Strategies and actions can spring from targets. Targets anchor the change process.

As much as possible, the achievement of planning targets needs to be measurable or demonstrable or observable in terms of funding, time, quality and/or quantity. One or two of these four measures must be present to validate a target.

When crafting targets, planners need to be sensitive to the costs that will arise from working toward and achieving the targets. These costs include:

- Funding to support actions.
- The time required to carry out actions.
- The quality and quantity of the actions involved in working to achieve targets.
- The costs that can be anticipated *following* achievement of current targets.

Planners should also identify a level of priority for each target to ensure that the ones they consider essential will be fulfilled. Finally, planning targets need to be manageable within the larger context of school endeavours—that is, they should be in harmony with school-wide goals.

Sample planning target: *“By June 2003, every teacher will be teaching to a minimum of 70% of ICT learner outcomes within the teaching assignment.”*

STEP 5: HOW WILL OUR SCHOOL ACHIEVE ITS PLANNING TARGETS?

Primary planning is completed when targets have been established or described. In order to achieve these targets, the planners need to identify strategies and actions, that is, ways to implement and manage the plan.

Strategies

Strategy: A skill of managing.

In answering the question, *“How are we going to manage the achievement of planning targets?”* planners need to:

- State ways of deploying resources.
- Articulate commitments.

Action Plans

Action plans, which are required for a strategy to be successful, are concrete statements about the jobs that have to be done to attain the planning targets. Action plans:

- Summarize the actions that collectively need to be carried out.
- Give life to the strategies.
- May include a cost cap.
- Facilitate job completions, which are used to measure results and to plan for renewal.

Actions

Actions are the actual jobs that need to be done. Actions:

- Are always concrete and rooted in the real world of operations in the school.
- Include estimates of the time required for completion and target dates.
- Include names of individuals who are responsible for completing each task.

If the carrying out of planned actions prompts consideration of new actions, these potential new actions need to be screened for consistency with the overall plan and the availability of resources to support them.

The planning committee may wish to use the *Planning Targets: Samples and Templates* to facilitate the compilation of planning targets, strategies, action plans, and actions.

STEP 6: RENEWAL: HOW WILL WE REVIEW, ADJUST, AND RENEW THE PLAN?

The planning committee and the whole school staff must continually respond to changing circumstances and adjust their plans accordingly. This “renewal” process is integral to the success of the school.

Reviewing, adjusting and renewing are essential steps in—as well as outcomes of—the planning process.

Reviewing, adjusting and renewing

Reviewing: Examination with a view to correction or improvement.

Adjusting: Changing so as to fit, conform or make suitable.

Renewing: Making new again by replacing what is old, worn or exhausted.

In schools, there are typically five stages in a review of the results of planning:

- Grasping **what** is to be reviewed.
- Describing **how** implementation has progressed.
- Being able to describe **results**.
- Doing an **analysis** of results.
- Formulating **recommendations** for the future.

Each of these five review stages can easily be incorporated into the methodology presented in this resource. Recommendations that are formulated during the review (see examples following) support renewal of the continuous and cyclical planning process described in this resource.

Renewal can be initiated by:

- Taking spot checks at regular, short intervals to continually inform the implementation process, or
- Recommencing the planning steps every one, two or three years.

Implementation resulting from successful planning has no end.

WHAT is being reviewed?					
List all planning targets for the current planning period.	Rewrite each planning target as an object for the review (i.e., What is being reviewed?).	Indicate whether the target has been attained or partially attained.	Describe the circumstances for any target that has not been attained.	Make a judgment concerning value received for work done.	Make recommendations.
<i>Example:</i> By June 2003, every teacher will be teaching to a minimum of 70% of ICT learner outcomes within the teaching assignment.	<i>Example:</i> Is every teacher teaching a minimum of 70% of ICT learner outcomes within the teaching assignment?	<i>Example:</i> Fourteen of the 16 teachers have attained this goal. Nine are teaching in excess of 70%; two are teaching less.	<i>Example:</i> One teacher who did not attain the 70% was ill for an extended time; the other was not able to obtain the required professional development.	<i>Example:</i> Virtually all staff is staged to attain 100% by the conclusion of the next school year.	<i>Example:</i> In the next school year, repeat the strategies and actions used this year, as they have proven successful, but see also other recommendations below.

HOW implementation has progressed					
List all strategies for the current planning period.	Rewrite each strategy as a question that shows how targets were to be achieved.	Indicate whether the strategy has been completed or partially completed.	Describe the circumstances for any strategy that has not been attained.	Make a judgment concerning value received for work done.	Make recommendations.
<i>Example:</i> Each teacher devises and engages in an annual personal professional development program as required to personally attain the planning target.	<i>Example:</i> Has each teacher devised and engaged in a personal professional development program?	<i>Example:</i> All teachers devised a plan; two of 16 were unable to complete their plan.	<i>Example:</i> 1. Illness. 2. PD for higher order thinking skills located at too far a distance for the available budget.	<i>Example:</i> Good value was received, as most teachers completed their envisioned personal professional development program.	<i>Example:</i> As other teachers will require "higher order" PD next year, pool resources to obtain the needed in-service, perhaps by bringing the service to the school.

Results Achieved and Recommendations

Action Plan: The administration advises teachers of the resources available to facilitate personal professional development for technology, and each teacher will file her/his professional development program for the school year with administration.

With reference to the two previous tables, what specific results were achieved and are there any recommendations for the future?

List all actions for the current planning period.	Indicate whether each action has been completed, partially completed or not yet started.	Describe the circumstances for any action that has not been completed.	Describe the results that have been attained to date.	Make a judgment concerning value received for work done.	Recommendations
<i>Example: The administration advises teachers of available resources (both opportunities and funding).</i>	<i>Example: 1. All teachers received timely information about funding. 2. Teachers did not know about some PD opportunities until part-way through the school year.</i>	<i>Example: It is probably more effective to have all staff be on the alert for opportunities and to share these with colleagues.</i>	<i>Example: All but two of the teachers found satisfactory PD opportunities.</i>	<i>Example: Satisfactory value received, but see recommendation.</i>	<i>Example: Staff should share information concerning the availability of PD opportunities.</i>