Chapter 6: Integrated Learning through Inquiry: A Guided Planning Model

CHAPTER 6: INTEGRATED LEARNING THROUGH INQUIRY: A GUIDED PLANNING MODEL

The Inquiry-Based Learning Community

Inquiry is the cornerstone of instruction in multilevel classrooms. In an inquiry-based classroom, learning grows out of students' natural inclination to question the world. Inquiries may be brief, resolved by referring to a book in the library or an Internet search, or they may lead students to an in-depth study that engages them for an entire year or more. Building classrooms around inquiry engages students, integrates process and content from all disciplines, and fosters self-directed learning.

The *inquiry process* provides

- a means of integrating curricula and leads to holistic, multidisciplinary learning
- a range of learning tasks appropriate for students at different developmental levels
- opportunities to embed instruction in authentic contexts
- an active role for students to share in the responsibility of planning
- support for developing independent learning skills
- a context for cooperation, collaboration, and community building

The basic inquiry process is similar for students of all ages. Students

- pose questions and explore ways to answer them
- locate and manage information from various sources
- process and synthesize their findings
- share their findings on an ongoing basis, supporting each other in their research
- reflect on and celebrate their inquiry findings with a community audience

Regardless of age, less-experienced students may need more support from the teacher in moving through the inquiry stages. More-experienced students, while working with the same thematic focus, usually pose questions of greater depth, explore a wider range of sources, create more complex products, and work with greater autonomy. This sort of differentiation can be managed by using the workshop format for instruction (see Chapter 4).

While the content of inquiry may come from the science, social studies, and health education curricula, student learning also involves mathematics, English language arts, and information and communication technologies. Harste suggests that curriculum be organized through inquiry.

Planning for Inquiry: A Shared Responsibility

Inquiry is fuelled by student curiosity and shaped by student planning. Teachers who come to the classroom with detailed plans for student inquiry are not only increasing their workload, but are also taking over a responsibility that has rich educational benefits when shared with students. In working through the planning process together with students, teachers instruct learners in developing

- a sense of ownership and responsibility for their own learning
- skills and strategies in making decisions and reaching consensus
- knowledge of information sources
- confidence in contacting individuals in the school or community
- criteria for assessing processes, performances, demonstrations, and products

While inquiry is often student-led, it is also teacher-facilitated. Teachers ensure that curricular outcomes are met, that the learning needs of individual students are identified and addressed, that adequate resources are available, and that students' learning processes and products meet criteria for quality work. Thus, the teacher plans what curricula to integrate, what learning outcomes to assess, and what possibilities the inquiry may include to facilitate instruction and learning.

The following table illustrates the shared responsibility between the teacher and students throughout the guided inquiry process in the multilevel classroom.

<table>
<tr><th colspan="3">Guided Inquiry</th></tr>
<tr><th>The Teacher As Reflective Practitioner and Keen Observer</th><th>Inquiry Process</th><th>The Student As Reflective and Active Learner</th></tr>
<tr><td rowspan="3">Formative Assessment
• Target learning outcomes.
• Focus observation.
• Develop criteria.
• Confer with students.
• Plan and revise instruction.
• Reflect.
• Celebrate learning.</td><td>Activating
• Choose a theme or topic.
• Identify and record prior knowledge.
• Ask initial questions.
• Explore and select primary and secondary sources.
• Plan for inquiry.</td><td rowspan="3">Formative Assessment
• Set learning goals.
• Focus observation.
• Develop criteria.
• Participate in conferences.
• Plan and revise instruction.
• Reflect.
• Celebrate learning.</td></tr>
<tr><td>Acquiring
• Gather, process, and record information.
• Focus the inquiry.</td></tr>
<tr><td>Applying
• Plan to express learning.
• Create performance(s)/ demonstration(s)/product(s).
• Celebrate and reflect.</td></tr>
</table>

Identifying *criteria for quality work* is an integral part of independent inquiry.

- Criteria building may be the subject of a mini-lesson.
- As students identify criteria, they may be posted on a wall chart.
- Criteria may be revisited, revised, and added to throughout the inquiry.

Establishing Criteria

At the onset of inquiry, the teacher's focus is to keep the end in mind, knowing that even in student-led inquiry, a final process, performance, demonstration, or product will be an integral component of summative assessment. As the inquiry proceeds, the teacher's and students' ongoing assessments determine opportunities for systematic instruction. Also, from the onset of the inquiry, the teacher and students begin to identify the characteristics of quality work (processes and products). As these characteristics become more sophisticated, the evolving criteria are applied to the processes used along the way and ultimately to the final process, performance, demonstration, or product. Thus, the teacher and students may discuss, for example, what a quality KWL chart, inquiry plan, or design project looks like. (For more information on building criteria, see BLM 2.)

Embedding Instruction in the Context of Inquiry

To address the learning outcomes of several curricula as well as the needs of a wide range of students, instruction needs to be intentional and focused on developing skills and strategies for independent inquiry. Instruction may take the form of mini-lessons for the whole class or for small instructional groups, shaped to address the needs of students as they conduct their inquiry. Embedding instruction in the context of ongoing inquiry helps students see the purpose of their learning and gives them the opportunity to apply it immediately in an authentic context.

The Guided Planning Model

The Guided Planning Model that follows outlines typical inquiry stages. Teachers will keep in mind, however, that inquiry is a dynamic process and that an authentic inquiry will forge its own course as students' understanding and interests develop and as new resources emerge or challenges are encountered. Teachers also recognize that formative assessment is ongoing throughout inquiry and determines what strategies they will teach and what criteria will be developed for summative assessment(s). Inquiry may be viewed as a cycle, with students re-entering the process at any stage as their initial questions are redefined and their plans revised.

The Guided Planning Model outlines the inquiry process within a frame that is closely aligned to the four-column format used in Manitoba's Foundation for Implementation documents. In this planning model, the four columns respectively represent the following instructional components:

- Column 1: Curricular Connections (subject area integration)
- Column 2: Curricular Outcomes
- Column 3: Instruction: Learning, Teaching, and Assessment Strategies (which includes the Inquiry Process or cycle)
- Column 4: Learning Resources/Sources

See BLM 9: The Four-Column Planner for a template. An example follows.

The Four-Column Planner (Example)

Integrated Theme/Topic Teacher choice, negotiated, or student choice **Duration** 4 to 8 weeks

Goals	• What do I want my students to *know and be able to do* to show and celebrate their learning? • What do I need to do to facilitate the success of my students' inquiry?
Performance(s)/ Demonstration(s)/Product(s)	• How will my students show what they *know and can do?*
Classroom Processes	• How will I design the learning-teaching context? (Choose one or two of: inquiry, workshop approach, multiple intelligences....)

Curricular Connections What subject areas do I want to integrate?	**Curricular Outcomes** What do I want students to know and/or be able to do?	**Instruction: Learning, Teaching, and Assessment Strategies*** How will I find out what students already know? / What will I see and hear? How will I facilitate student inquiry? / What learning will I see and hear? How will I/they know what they have learned? / What quality of learning will I/we see and hear?	**Learning Resources/ Sources** People, technology, print, multimedia.
☐ English Language Arts ☐ Mathematics ☐ Science ☐ Social Studies ☐ Physical Education/ Health Education ☐ Information and Communication Technologies ☐ The Arts	What general learning outcomes or strands will connect across the curricula? What specific learning outcomes will I assess? (Target a manageable number of learning outcomes for formative assessment. In addition to the targeted outcomes, other enabling outcomes may evolve throughout the inquiry. Students generate criteria for formative and summative assessment.) **Summative Assessment** (Using new learning in a process and/or to create a product.) • Criteria • Task: performance/ demonstration/product • Reflection	**Inquiry Process** **Activating** (Teacher-Led / Shared/ Negotiated / Student-Led) • Choosing a theme or topic. • Identifying and recording prior knowledge. • Asking initial questions. • Exploring and selecting primary and secondary sources. • Planning for inquiry. **Acquiring** • Gathering, processing, and recording information. • Focusing the inquiry. **Applying** • Planning to express learning. • Creating performance(s)/demonstration(s)/ product(s). • Celebrating and reflecting. **Optional** • Culminating Event	**Primary Sources** ☐ Field Trip ☐ Expert ☐ Artifacts **Secondary Sources (Text Set)** ☐ Multimedia ☐ Print ☐ Web

* See Appendix B: Planning Model (The Third Column) for possible learning contexts that may take place during inquiry.

The Guided Planning Model reflects the Model of Explicit Instruction (see Chapter 2). Students are actively engaged in planning the inquiry, with the teacher as model, guide, or facilitator, depending upon students' understanding of the inquiry process, their learning needs, and their level of independence. This model also allows teachers a variety of entry points, depending on their level of comfort with facilitating student ownership. (See Appendix B: Planning Model [The Third Column].)

The Inquiry Process

In the third column of The Four-Column Planner, the *inquiry process* is divided into three major stages: *activating*, *acquiring*, and *applying*. A discussion of the inquiry stages follows.

Instruction: Learning, Teaching, and Assessment Strategies • How will I find out what students already know? / What will I see and hear? • How will I facilitate student inquiry? / What learning will I see and hear? • How will I/they know what they have learned? / What quality of learning will I/we see and hear?			
Inquiry Process			
Activating	**Teacher-Led**	**Shared/ Negotiated**	**Student-Led**
• Choosing a theme or topic.			
• Identifying and recording prior knowledge.			
• Asking initial questions.			
• Exploring and selecting primary and secondary sources.			
• Planning for inquiry.			
Acquiring			
• Gathering, processing, and recording information.			
• Focusing the inquiry.			
Applying			
• Planning to express learning.			
• Creating performance(s)/ demonstration(s)/product(s).			
• Celebrating and reflecting.			
Optional			
• Culminating event.			

Activating Stage

Preparing for learning involves accessing, clarifying, and extending prior knowledge. The following strategies can be used in the activating stage of the inquiry process:

Instruction: Learning, Teaching, and Assessment Strategies • How will I find out what students already know? / What will I see and hear?			
Inquiry Process			
Activating	**Teacher-Led**	**Shared/ Negotiated**	**Student-Led**
• Choosing a theme or topic.			
• Identifying and recording prior knowledge.			
• Asking initial questions.			
• Exploring and selecting primary and secondary sources.			
• Planning for inquiry.			

- **Choosing a theme or topic:** The themes for inquiry grow out of curriculum content and/or student interests, and may be proposed by the teacher, negotiated with students, or suggested by students. When a theme or topic is student-led, the teacher puts it into a curricular context that reflects learning outcomes and learner needs or goals. Teachers and students may find it helpful to select a theme several months in advance of the inquiry in order to collect and organize texts and materials. In rural or isolated communities, materials, resources, and library books may need to be ordered from the school division/district office or a lending library (such as the Manitoba Education and Youth Library), or purchased from an urban centre. An overview of topics posted in the school and sent home with students enables the whole learning community to assist in providing resources for the inquiry.

Criteria to Consider

Criteria to consider for quality themes or topics:

- Allow students to explore significant concepts and achieve targeted learning outcomes in integrated curricula.
- Provide a range of learning opportunities for all the stages of cognitive and skill development in the multilevel classroom.
- Engage students in extending their present understanding of the world.
- Accommodate sufficient resources available to explore this topic: human, material, and informational.

- **Identifying and recording prior knowledge:** Students use strategies to activate their prior knowledge about the topic so that new learning will be linked to their existing knowledge. Activating prior knowledge also provides opportunities to assess the needs of each learner. For example, a KWL (Know, Want to know, Learned) chart or a Sort and Predict strategy (Brownlie and Close) might be initiated at the start of an inquiry to provide both learners and the teacher with information for instruction and for planning the inquiry.
- **Asking initial questions:** Many questions will emerge during this period of activation. These initial questions can be recorded, and later revisited and revised when students are at the point of formalizing the questions that will guide their research.

Guiding Students to Ask Questions

Guide students to ask questions that

- pertain to different subject areas: health, social studies, mathematics, science, music, language arts
- could be posed to different "experts" (human sources, such as nutritionists, farmers, store owners, chefs)
- are based on the five Ws/H: Who? What? Where? When? Why? How?

- **Exploring and selecting primary and secondary sources:** A period of preliminary exploration of the selected topic or theme is essential to a successful inquiry. This exploration
  - — builds new knowledge for students who are unfamiliar with the topic and establishes a shared knowledge base for class discussion
  - — stimulates curiosity and prompts the questions that will guide the inquiry
  - — creates excitement, motivation, and student ownership
  - — provides baseline information for assessment

  Using primary sources in the multilevel classroom is an ideal opportunity to meet a broad range of learners' needs. Vivid and engaging experiences such as a trip to a pond or a construction site, a visit from a guest "expert," or the reading of a journal or diary give students concrete sensory information on which to build their learning. (Always consider safety when planning for and when on field trips.) Secondary sources such as books, videos, and the Internet provide additional information sources for the inquiry.

Primary sources include

- experiences of the teacher and students
- observations from field studies
- explanations from field trip guides
- classroom guests
- original diaries and journals
- interviews with family members, community "experts," and Elders

Secondary sources include

- books: expository texts, literary texts
- videos and films
- museums and galleries
- newspapers
- brochures
- websites
- music, art, drama

- **Planning for inquiry:** In activating their prior knowledge early in the inquiry process, students will have listed initial questions, possibly in a KWL chart. Through their exploration of the inquiry topic, students need to add to, delete from, or revise the initial questions. Some students may have moved beyond those initial questions to guiding questions that will focus the inquiry.

Questions for Inquiry

In planning for inquiry, students will ask:

- What questions will we/I explore?
- What information sources do we/I need?
- Who will assume various responsibilities?
- How much time will we/I allow for the inquiry?
- How will we/I record our/my information?
- How will we/I share our/my information?
- Who will be the audience?
- What will the criteria be in assessing our/my work?

As the inquiry questions evolve and change, teachers and students begin to develop a sense of where their inquiry may lead them. They then draft a plan that will guide them through their inquiry. (For an example of planning for an independent inquiry project, see BLM 7: Our / My Learning Plan.)

Students constantly revise their plans as their learning deepens and as groups or individuals form more specific goals for the inquiry. Planning is shaped by student needs, skills, learning styles, and the multiple intelligences. Not all students will follow the same plan.

The teacher will observe and act as a facilitator throughout the planning process. As students formulate their plans, the teacher may guide their discussion and assess students' levels of independence to determine groupings for guided or independent inquiry. Students may work individually or with partners of their own choosing for inquiry. Alternatively, teachers may determine flexible or cooperative groups. (See Chapter 4 for more information about groupings.)

As the inquiry proceeds, students may continue to add to their KWL charts using a different colour of marker each day. They may add new knowledge and revise, add, or delete questions. Students may also record daily reflections under the "L" in their KWL charts as Exit Slips and to monitor learning.

Assessment during inquiry generally focuses on two of three processes:
- inquiry skills
- performances/ demonstrations/ products
- group participation

During the activation stage of inquiry, teachers gain a sense of what assessment criteria need to be developed for the inquiry. Students usually generate two sets of criteria throughout an inquiry process. One set of criteria focuses on a specific aspect of inquiry such as using a variety of sources, recording information, or creating a quality action plan. The other set of criteria is intended for a performance, demonstration, or product. Occasionally, social skills may be assessed as well.

Developing criteria for one of the features of inquiry often starts during activation and continues throughout the acquiring stage during a daily reflection time. (For more information on establishing criteria, see BLM 2.)

Acquiring Stage

In the inquiry process, integrating and processing learning involves the following acquiring strategies:

Instruction: Learning, Teaching, and Assessment Strategies • How will I facilitate student inquiry? / What learning will I see and hear?			
Inquiry Process			
Acquiring	**Teacher-Led**	**Shared/ Negotiated**	**Student-Led**
• Gathering, processing, and recording information.			
• Focusing the inquiry.			

- **Gathering, processing, and recording information:** Students will gather information from a range of primary and secondary sources to elaborate upon their prior knowledge and answer some of their questions.

  When processing information, teachers use whole-class discussions for sharing and reflecting. These discussions offer important opportunities to teach students to think critically about their prior knowledge and the information they have gathered. The teacher's role is to ask questions that will help students

  — identify inconsistencies

  — decide how to resolve the inconsistencies

  — identify gaps in information

  — decide how to fill in the gaps

— expand or revise the information

— revise inquiry plans to take account of new information

The teacher's ongoing observations and the developmental levels of the students will determine which students may need to be taught strategies for recording information. Students can record information in various ways:

— Write in an inquiry log.

— Use a T-chart, recording information in the left column, and reflections in the right column. Reflections will include preliminary interpretations and further questions.

— Make notes.

Finally, students may return to their initial sources and/or explore new ones. They can also revisit their inquiry plans and reflect on what they have learned. This will allow them to focus their inquiry and move from their initial questions to their guiding questions.

- **Focusing the inquiry:** Depending on students' degree of independence, teachers will guide them in developing an action plan to express their learning. This action plan will assist students in creating a final performance, demonstration, or product. Considerations for an action plan may include a timeline, audience, purpose, form, personal interests, learning goals, the multiple intelligences, assessment criteria, and available resources.

  Students will use their guiding questions and choose the best sources available to find their answers. They will also consider how they are going to share their learning, whether it be formally or informally. Simultaneously, the teacher reflects upon targeted learning outcomes and takes advantage of teachable moments for extending learning. The ongoing development of student-generated criteria often brings the daily inquiry workshop to closure.

  The inquiry process is seldom linear. Students often share their action plans with peers or with the teacher, and may revise them. Inquiry, learning, and assessment are ongoing as students uncover their need for more information.

Applying Stage

Consolidating learning includes formulating and extending knowledge. At the application stage of the inquiry process, consolidating learning involves the following strategies:

Instruction: Learning, Teaching, and Assessment Strategies • How will I/they know what they have learned? / What quality of learning will I/we see and hear?			
Inquiry Process			
Applying	**Teacher-Led**	**Shared/ Negotiated**	**Student-Led**
• Planning to express learning.			
• Creating performance(s)/ demonstration(s)/product(s).			
• Celebrating and reflecting.			

- **Planning to express learning:** Students will revisit their action plans to think about how and with whom they might share their learning. Once again, audience, purpose, and the multiple intelligences are some important considerations. Students and teachers will discuss individuals' strengths and goals to determine an appropriate form in which to express learning. When inquiry is a new process for a class, the teacher may guide the development of an action plan to serve as a model for subsequent inquiry. Performances, demonstrations, and products are often individualized to meet the diverse needs of the learners, whether they are working on group projects, on individual projects with guidance, or on independent projects.

  Depending on the audience, students may express their learning in written, oral, or visual texts in various forms (e.g., stories, dramatic performances, dioramas). This will help them to

  — synthesize information

  — consolidate their learning

  — express their own perspective and response

  — use various language arts forms

  — shape a text to the needs and preferences of an actual audience

  At this time, students and teachers will construct criteria for a quality performance, demonstration, or product. Students' action plans will guide them as they prepare for summative assessment.

- **Creating performances, demonstrations, or products:** At this stage of inquiry, students need large blocks of time, accessible resources, and clear criteria of quality work. Use of a workshop format is ideal, as it allows students and the teacher to have conferences, make revisions and decisions, and reflect upon the inquiry and new learning. Teachers can use this time to assess processes and guide those needing more assistance. Ongoing self-assessment and peer assessment are evident as independent learners apply their learning.

  Not all inquiry will be shared with an audience. If learning outcomes reflecting processes were initially targeted, then summative assessments and closure may take place at this time. Individuals, peers, and the teacher will use the established criteria for evidence of learning (see BLM 8) and assessment. Rubrics may be developed from the criteria if marks need to be assigned (Grade 6 to Senior 4).

  If targeted learning outcomes reflect formal sharing, as in the English language arts outcomes in GLO 4, then it will be necessary to revise and polish the performance, demonstration, or product for the intended audience.

- **Celebrating and reflecting:** Whether closure takes place with or without a culminating event, assessment and reflection are essential to the inquiry cycle, not only to synthesize what has been learned, but also to determine what the next inquiry might be. In the multilevel classroom, celebration and reflection become the culmination of the formative assessment(s) and may be the summative assessment as well. Learners are able to look back on their journey and grow in confidence as a result of their learning. (For more information on reflection, see BLM 1).

Considerations for Reflection

- Debrief the process students used in inquiry, and ask students how they would do things differently next time.
- List the questions students now have about the topic and discuss how they differ from the questions that prompted the inquiry.
- Identify questions that students would like to pursue in a new inquiry.
- Discuss the importance of this learning to students' understanding of the world.

As partners in the multilevel learning community, teachers also celebrate and reflect on the learning that has taken place during the inquiry. Growth in confidence and learning is observable. Teachers reflect on what they see and hear. Both students and teachers use the student-generated criteria of quality work to guide their assessment and reflection.

Through reflection, students and teachers can set goals for further learning. This reflection may take the form of whole-class discussion or individual students' independent writing.

Optional: Culminating Event

Celebrations of inquiry projects may also take the form of a culminating event. Culminating events may include

- exhibitions of models
- dramatic performances
- book launches
- interactive demonstrations
- assemblies

Teachers act as facilitators as students plan culminating events in which each student has a role. These events may be as simple as a classroom celebration, or they may be more formal events to which members of the multilevel learning community or the wider community are invited. In planning and publicizing events, students have opportunities to practise language arts, mathematics, and health education skills (e.g., writing invitations, creating posters, sending notices to a school newspaper, reading announcements on the school's public address system, estimating numbers, choosing nutritious snacks, and thinking about the safety of guests). A visitors' book may be set up for guests to record comments and feedback.

Multidisciplinary Learning through Inquiry

As students plan, conduct, reflect on, and celebrate their inquiry, they learn and practise academic skills and strategies that address the learning outcomes of various curricula.

- In collaborating at every stage of the inquiry project, students learn group skills and processes.
- In recording and managing their ideas, students learn and use organizing strategies such as concept maps and KWL charts.
- In collecting and recording information, students learn mathematics concepts and skills such as counting, measuring, and graphing.

- In interpreting findings, students learn scientific methods and concepts, as well as critical thinking.
- In compiling information from diverse sources, students expand their knowledge base in social studies, science, and health education.
- Throughout the entire inquiry process, students learn and reinforce language arts skills.
- In creating performances or products to share their findings, students use information and communication technologies, art, music, and drama, as well as writing and speaking.
- Through self-assessment, reflection, and goal setting, students grow in confidence and acquire lifelong learning skills and dispositions.

Several dimensions of the multilevel classroom converge with the Guided Planning Model: the learning community, ongoing classroom assessment, a continuum of learning, and multiple curricula. Building classrooms around inquiry is an effective and efficient means towards self-directed learning and celebration of learning in the multilevel classroom.

Resources

Brownlie, Faye, and Susan Close. *Beyond Chalk and Talk: Collaborative Strategies for the Middle and High School Years*. Markham, ON: Pembroke, 1992.

Chard, S.C. *The Project Approach: Making Curriculum Come Alive.* New York, NY: Scholastic Inc., 1998.

---. *The Project Approach: Managing Successful Projects.* New York, NY: Scholastic Inc., 1998.

Harste, J.C. "Inquiry Based Instruction." *Primary Voices K-6* 1.1 (1992): 2-5.

Jacobs, H. *Mapping the Big Picture: Integrating Curriculum and Assessment K-12.* Alexandria, VA: Association for Supervision and Curriculum Development, 1997.

Katz, L.G., and S.C. Chard. *Engaging Children's Minds: The Project Approach.* 2nd ed. Stanford, CT: Ablex Publishing Corporation, 2000.

Manitoba Education and Training. *Grades 5 to 8 English Language Arts: A Foundation for Implementation.* Winnipeg, MB: Manitoba Education and Training, 1998.

---. *Grades 5 to 8 Mathematics: A Foundation for Implementation.* Winnipeg, MB: Manitoba Education and Training, 1997.

---. *Grades 5 to 8 Science: A Foundation for Implementation.* Winnipeg, MB: Manitoba Education and Training, 2000.

---. *Kindergarten to Grade 4 English Language Arts: A Foundation for Implementation.* Winnipeg, MB: Manitoba Education and Training, 1996.

---. *Kindergarten to Grade 4 Mathematics: A Foundation for Implementation.* Winnipeg, MB: Manitoba Education and Training, 1996.

---. *Kindergarten to Grade 4 Science: A Foundation for Implementation.* Winnipeg, MB: Manitoba Education and Training, 1999.

---. *Native Studies: Early Years (K-4): A Teacher's Resource Book.* Winnipeg, MB: Manitoba Education and Training, 1995.

---. *Native Studies: Early Years (K-4): A Teacher's Resource Book Framework.* Winnipeg, MB: Manitoba Education and Training, 1995.

---. *Native Studies: Middle Years (5-8): A Teacher's Resource Book.* Winnipeg, MB: Manitoba Education and Training, 1997.

---. *Native Studies: Middle Years (5-8): A Teacher's Resource Book Framework.* Winnipeg, MB: Manitoba Education and Training, 1997.

---. *Resource-Based Learning: An Educational Model*. Winnipeg, MB: Manitoba Education and Training, 1994.

---. *Success for All Learners: A Handbook on Differentiating Instruction: A Resource for Kindergarten to Senior 4 Schools.* Winnipeg, MB: Manitoba Education and Training, 1996.

---. *Technology As a Foundation Skill Area: A Journey toward Information Technology Literacy.* Winnipeg, MB: Manitoba Education and Training, 1998.

Manitoba Education, Training and Youth. *Kindergarten to Grade 4 Physical Education/Health Education: A Foundation for Implementation.* Winnipeg, MB: Manitoba Education, Training and Youth, 2001.

Manitoba Education and Youth. *Grades 5 to 8 Physical Education/ Health Education: A Foundation for Implementation.* Winnipeg, MB: Manitoba Education and Youth, 2002.

---. *Integrating Aboriginal Perspectives into Curricula: A Resource for Curriculum Developers, Teachers, and Administrators.* Winnipeg, MB: Manitoba Education and Youth, 2003.

---. *Kindergarten to Grade 4 Social Studies: A Foundation for Implementation.* Winnipeg, MB: Manitoba Education and Youth, in development.

Morgan, N., and J. Saxton. *Asking Better Questions: Models, Techniques and Classroom Activities for Engaging Students in Learning.* Markham, ON: Pembroke Publishers, 1994.

Ogle, Donna. "K-W-L: A Teaching Model That Develops Active Reading of Expository Text." *The Reading Teacher* 39 (1986): 564-570.

Politano, Colleen, and Joy Paquin. *Brain-Based Learning with Class.* Winnipeg, MB: Portage and Main Press, 2000.

Short, K., J. Harste, and C. Burke. *Creating Classrooms for Authors and Inquirers.* 2nd ed. Portsmouth, NH: Heinemann, 1996.

Whitin, P., and K.J. Whitin. *Inquiry at the Window: Pursuing the Wonders of Learners.* Portsmouth, NH: Heinemann, 1997.