

# **Chapter 7:**

## **The Learning Landscapes**



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## Guiding Principle: The Learning Program

**The Kindergarten learning program provides many opportunities for child-initiated play supported by engaged and intentional teachers, in balance with more focused experiential inquiry guided by teachers.**



### A Holistic Approach

When working with children who are learning English as an additional language, take a holistic approach that includes responding to their stage of English language proficiency, in addition to their overall development and interests.

## The Provincial Curriculum within the Kindergarten Setting

As you strive to maintain child-centred, play-based, and developmentally appropriate practices with young learners, it is important to understand how the provincial subject-area curricula fit with the Kindergarten setting. Chapters 7 to 9 of this document take a closer look at the focus and connectivity that the provincial curriculum brings to learning in a play-based environment.

*“In the hands of a skilled kindergarten teacher, play is a rich laboratory that can be used to teach multiple concepts simultaneously in a way that differentiates instruction” (Graue, *Reimagining Kindergarten*).*

The metaphor of *learning landscapes* provides you with an approach to Manitoba’s Kindergarten curriculum that uses an inquiry-based process of learning to encourage children to “activate, acquire, and apply knowledge” and responds to children’s emerging interests. Chapters 7 to 9 address the following big ideas (overarching understandings):

- children’s multiple ways of knowing
- processes for creating rich learning contexts that support children’s inquiry
- designing deeply integrated curricular learning and assessment
- snapshots of Manitoba’s Kindergarten curricula
- departmental priorities (*integratables*) that are infused across all subject areas and for all children throughout the Kindergarten day

These big ideas are illustrated with examples of practice in the disciplines (or subject areas) and with classroom vignettes.

You need to be familiar with the curricula of the disciplines to set appropriate instructional goals for your students and to “seed” play contexts with materials and scaffolding that promote deeper learning processes (Graue, *Reimagining Kindergarten*). You can then identify opportunities to invite children to extend and deepen the questions that arise during play into learning that connects with the curricular areas. Children are at the centre of their own respective and shared learning landscapes.

## The Role of the Curriculum in a Play-Based Environment

As children ask questions and play with language, gain physical and social skills, and interact successfully with adults and peers, they are laying the foundation for lifelong learning. Play centres may be used to explore new ideas and concepts, provide strategic instruction, or give children time to practise and consolidate new learning. While at learning centres, children

- imagine, experiment, and create to learn through play
- make their own inquiries
- further develop their independence in making choices, problem solving, time management, and personal responsibility

For more about this play-based approach, see Chapter 6.

Complex make-believe play and child-initiated inquiry foster habits of mind (such as curiosity, problem solving, taking different perspectives, and creativity) that lead to and show evidence of intellectual engagement. The various subject areas within the provincial curriculum represent different ways of exploring and thinking about the world, but they are ideally introduced through holistic, cross-curricular learning approaches. As the teacher, you guide learning with rich experiential and inquiry-based opportunities that follow the child’s readiness and interests. Such playful learning naturally supports the development of language, literacy, and other ways of interacting with the world.

Children’s Kindergarten experiences shape their motivation and approaches to learning in subsequent years. Children bring to Kindergarten a wide range of experiences, personal interests, and family, linguistic, and/or cultural backgrounds, which should be respected and drawn upon wherever possible. When you are guided by the children’s voices and their natural development, as well as by social and contextual factors, the provincial curriculum helps children from diverse backgrounds to acquire foundational knowledge, skills, and attitudes that prepare them for life and future school-based learning. In the process, children will develop and enrich their self-identities as confident and active learners.

Although Kindergarten is often the starting point for the journey across the landscapes of “academic” learning, and the first step toward formalized inquiries in the disciplines, this learning is not a linear, systematic march to a distant horizon, but a child-centred exploration of the features along the way, guided by the teacher’s knowledge of what is important. Such learning will be integrated, holistic, and play-based, and will lay the social and intellectual groundwork for later schooling.

The provincial curriculum frameworks do not attempt to standardize young learners, but identify the knowledge, skills, processes, and ways of thinking—usually referred to as learning outcomes, practices, or recursive learnings—needed to relate to particular subject areas. The disciplines (or subject areas) provide the lenses through which children can view and make sense of the world. The teacher creates many opportunities for children to experience ways of thinking like a scientist, a mathematician, a writer, or an artist. Curriculum frameworks also support you in planning for and assessing the learning of students who will be at different places in their respective learning landscapes.

Well-planned Kindergarten learning programs provide you with numerous opportunities for year-round observation and authentic assessment of

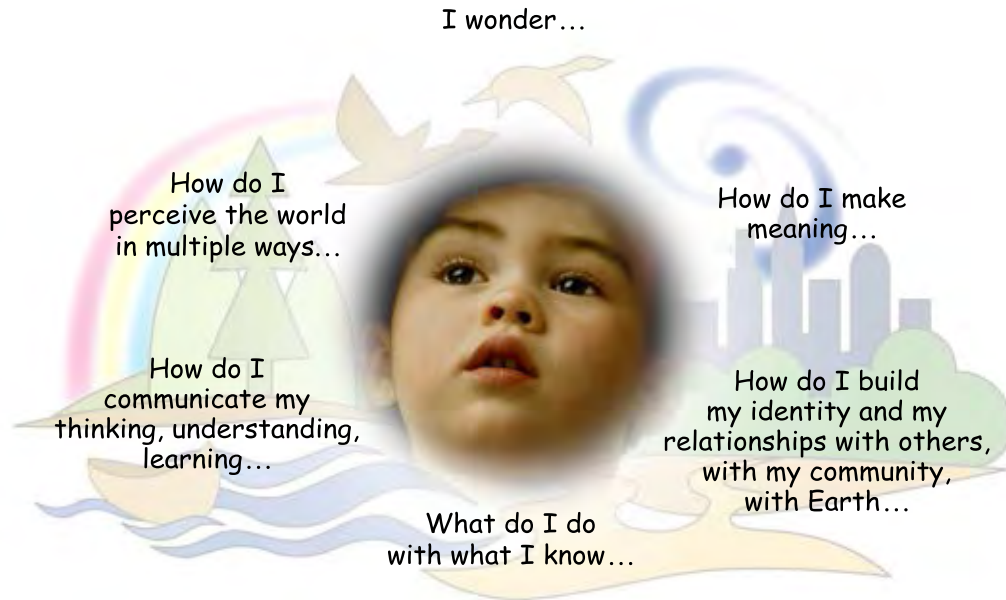
- children’s strengths and interests
- emerging developmental and learning landmarks
- areas of children’s knowledge, skills, and processes that require development
- ways to support individual children’s learning

### Learning Landscapes: Multiple Ways of Knowing

As discussed in the introduction to this document, *learning landscapes* can support the way you plan to address the Kindergarten curricula in your play-based environment. The various curricula themselves and the classroom environment are learning landscapes—both are the contexts in which children explore and engage in meaningful inquiry. Think of Kindergarten as a full landscape of knowledge where educators and children meet in the work of active, embodied learning. How children interact with and travel through a landscape is affected by the lenses of the disciplines.

Educators and children are invited into the living field of education through curricula designed to place students in the dynamic, complex, working culture of the disciplines or subject areas. The different curricula identify the signposts (generally referred to as learning outcomes) that teachers use as they help children navigate through the learning landscapes. Learning occurs when teachers consider both the landscape and the traveller. However, children will take “different paths to common outcomes in learning” (Clay, *Becoming Literate* 23).

The following landscape image and questions (see Figure 7.1) provide a way of understanding children’s multiple ways of knowing. Rich learning is possible when you use these questions for both long-range and daily planning.



**Figure 7.1:** A Child's Multiple Ways of Knowing within the Learning Landscapes

Learning in a Kindergarten classroom grows and evolves, much like the learning that happens on a trapline:

When I want my grandson to learn about trapping, I take him out with me on the trapline. And when we are out on the land, I teach him about the things he needs to know. I don't teach him all those things first, like the animal tracks, how to set traps, where to set the traps, what trails to take. If I did that he would never get to go out. We would starve. (Personal communication, Cree Elder, as cited in *Western and Northern Canadian Protocol for Collaboration in Education 3*)

The curriculum is not doled out one piece at a time in a fragmented linear fashion. Rather, learning is as complex as the landscape is. When teachers provide many purposeful experiences that invite children to view the landscape through the disciplinary lenses, the children begin to discover, interact with, and understand their world.

Deeply integrated approaches to curriculum and learning allow your young learners multiple ways of moving through rich, meaningful, and varied landscapes. The process of becoming aware of and interacting with the world is not linear—as the child moves about the landscapes, particular questions will direct the journey at different times:

- **How do I perceive the world in multiple ways . . . ?**  
Children become aware of the world in many different ways, and where children stand affects what they see in the world. Be aware that children's perceptions of the same experiences may differ.
- **How do I make meaning . . . ?**  
Children will make meaning of the world in a variety of ways. Provide multiple opportunities for children to make meaning, both by supporting

children's strengths (e.g., drawing) and by encouraging other ways of making meaning.

- **How do I communicate my thinking, understanding, learning . . . ?**

Carefully observe children's ways of communicating, as their communication strategies may look very different from those you expect. Children are at different points in developing spoken and written language to express their emotions and understanding, and to manage social and learning interactions effectively. They may prefer to communicate in their first language, through the arts, or through demonstrations (see the vignette in Chapter 4 of the boy who danced his story). Look for the substance of children's communication and provide opportunities for children to develop a range of effective communication strategies.

- **How do I build my identity and my relationships with others, with my community, with Earth . . . ?**

Children need opportunities to apply their learning in various places in their lives so that it becomes purposeful for them.

- **What do I do with what I know . . . ?**

Every experience in the Kindergarten classroom builds children's identities, both as individual learners and as valued and capable members of the learning community and the world beyond.

Appendix Q: The Learning Landscapes: Multiple Ways of Knowing applies the questions surrounding the child in Figure 7.1. For convenience, the child's questions are presented in columns within the chart in Appendix Q.

By understanding the variety of possibilities within each question, the teacher can provide many opportunities for children to perceive, make meaning, communicate, and build identity and relationships within rich learning contexts, while reliance on adult-generated "themes" may actually limit children's ability to experience the breadth and depth of integrated curricular experiences.

Kindergarten children learning English as an additional language (EAL) inquire, learn, think, connect, represent, and communicate in both their first language and in English. Their ability to think and learn in English will vary. When the language used in the classroom (English) is unknown or still developing, all aspects of the learning landscapes are affected. The challenge is to foster learning a new language at the same time that this new language is being used for thinking, instructional purposes, and content area learning.

As emerging bilinguals, children who are learning EAL are also learning to *learn, think, inquire, connect, represent, and communicate* in English. When reflecting on the previous questions for the purposes of planning and implementing appropriate classroom experiences for EAL learners, teachers and schools need to take into account the students' general EAL development.

## Rich Learning Contexts

Rich learning contexts provide a focus for learning and give your students multiple entry points and directions through which to explore big ideas (overarching understandings) that have enduring values beyond the classroom. You may develop plans for inquiry, units of study, or learning experiences related to and developed within one or more of these broader contexts. Such contexts invite you and your students to explore meaningful questions. Questions can be explored through the subject area curricula (disciplines). These questions permeate each inquiry, and each unit of study or learning experience. Broad, integrated contexts create opportunities for possible questions from learners, which lead to deep, meaningful exploration and thinking.

Appendix R: Rich Learning Contexts provides many potential questions from learners to support inquiry. Some of the suggested questions may seem mature for Kindergarten children, but the children can begin learning ways of inquiry and thinking within their own surroundings.

Wondering and wandering must include examining topics, ideas, and questions as broadly as possible from many different perspectives and through conversations and observations. Such experiences invite young learners to go beyond what they already know and to develop broader understandings from which their own inquiries emerge and develop.

When you and your Kindergarten students delve into their questions, you may negotiate their wonderings with curricular expectations as the inquiry plays out. Keep in mind that the content, skills, and ways of thinking are inherent in the various disciplines. Think about how children use their senses as they learn about their environment, what questions they have, how they decide to find answers to their questions, and so on. In this way, concepts such as trees, shapes, language, and taking care of our planet are lived out with more depth and in personally relevant ways.

The disciplines also allow learners to explore questions and ideas from multiple perspectives. For example, as the children in your classroom are digging into ideas about the environment, you may respond to and guide their wonderings about trees as they emerge. Such an opening might prompt you and the children to examine the concept of trees for their purposes, functions, and makeup; trees may become inspirations for story creation; shadow and light in relation to trees may provide opportunities to reflect on shape and space; and children may explore the sound of trees through music. The disciplines create opportunities for young learners to perceive the tree differently and to make and communicate meaning.

Within such larger learning contexts, curricular outcomes anchor your focused observation and planning for strategic instruction. See Chapter 4 for more information about how observation informs and guides the intentional teacher's planning.





## Vignette: Builders in the Learning Landscape

*The following vignette provides a snapshot of a creative teacher, Ms. Smith, as she applies the ideas behind the learning landscapes in her daily work with young learners in Kindergarten. Here you will see the teaching, learning, and planning processes across much of the Kindergarten curriculum, including English language arts, mathematics, science, and social studies.*

Ms. Smith's Kindergarten classroom is vibrant with excitement and abundant possibilities as she reflects on the various learning centres available to her students. Some children are engaged in inquiry-based learning at the block centre where a few children are creating plans for their structures. Several of the children begin to talk about ways to build a very tall block tower so that it will not fall down. Others seem to be building enclosures with sloping walls around a large open space. Ms. Smith realizes that the children are excited about the new stadium being built not far from their school. She attends carefully to the children, and gathers information by observing students and documenting "stories" from the block centre to help her planning.

Her documentation demonstrates that the children are trying to build taller and taller structures, as well as large open spaces encircled by walls. She purposefully adds various shapes and sizes of blocks, including cylinders, prisms, and pyramids (commercial and non-commercial) to the 3-D block centre. She encourages building complex buildings in order to support children's understandings of 3-D representations of our world.



Children build tall structures using unit blocks.



Some boys are building with blocks.

### Overheard at the Block Centre:

"I am going to put the big block on the small block and make it tall," describes Nick as he is building a structure in the block centre. The building he is trying to create crashes under the tenuous weight load.

"Oh no!" laments Nick. "Why did that happen?" He is looking at the pile of blocks of various shapes and sizes to determine the cause.

"What else could you have done?" prompts Ms. Smith.

"I could have used a different block on the bottom?" inquires Nick.

"That happened to me," joins Matthew. "I used the big ones on the bottom."

"The big ones look different," replies Nick.

"They are different sizes," adds Susie, "and they have sides!"

"Tell me how they are different," encourages Ms. Smith. Several other young learners join in the conversation as Nick ponders how the blocks are different.

"This one is a rectangle," announces Matthew.

"So you are saying they are different shapes," surmises Ms. Smith.

"Yes!" say the children.

"I **wonder** if shapes matter when you're building?" asks Matthew.

And so, the children's inquiry into how our community is shaped begins. Inquiry processes focus on the development of powerful questions, just like the one Matthew poses: "Do shapes matter?"

Based on her initial documentation and reflection (see sidebar, right), Ms. Smith begins to consider how she will plan for children's learning, using the Inquiry Planning form (see Appendix E) to which you were introduced in Chapter 4. She chooses the social, cultural, and historical learning contexts for children to examine their community and make meaningful connections to how communities are built and shaped. She uses the questions children ask as her reflective lens, and watches for ways children are making meaning, building relationships, and wondering.

Over the next few days, Ms. Smith sees children sharing their ideas and their resources. Together, they create theories about what will work best, and then test them out. Children model teamwork as they strategize together, encourage one another, and willingly cooperate. She watches carefully for the learning outcomes that are emerging, and intentionally targets some others she has not yet observed. As the children work, they demonstrate the many things they already know about the community they live in and the many Kindergarten learning outcomes they are in the process of mastering. They count aloud, name the shapes and colours of the blocks they are using, and use reference books about construction and tall buildings to inform their decision making. Some children create signs, while others create blueprints, like the one Ms. Smith added to the block centre to extend their ideas about their buildings. Children use a portable whiteboard to represent their 3-D building ideas in a 2-D format, a learning activity that really stretches their thinking.

### Documentation and Reflection

#### *Inquiry Questions and Ideas*

- I wonder if shapes matter when you build?
- What do construction workers use when they build tall structures?

#### *Learning Invitations (Provocations)*

Ms. Smith considers how she can enhance the learning environment to support children's inquiry further. She decides to add some additional materials to the block centre: new block shapes; books about construction and about football and soccer; blueprints, clipboards, large sheets of drawing paper, graph paper, and carpenter's pencils; reflective vests, ropes, and pulleys; and measuring tapes, string, levels, and interlocking cubes.

#### *Learning Contexts*

Social, cultural, and historical (for more about these ideas, see Appendix R: Rich Learning Contexts)

#### *Questions Supporting Inquiry*

- How are buildings and communities shaped?
- What do you think would happen if you built your wall even taller?
- What do you wonder about the stability of your buildings?

As she interacts with the children in her classroom, Ms. Smith uses some specific strategies to promote mathematics skills that encourage the children to go further and deeper in their inquiry. She asks children how many blocks they have used in total to build their stadium, and provides clipboards and pencils nearby to facilitate that investigation.



Children represent their 3-D building ideas in a 2-D format.

Children measure the height and the width of their stadium and tower, and can choose from a variety of materials (measuring tapes, string, or interlocking cubes) to apply their numeracy skills through play. Children can record their findings on graph paper as they work.

Ms. Smith knows that block play allows many opportunities for experimenting with representational building, as children work with patterns, symmetry, and design. Block play encourages children to use language to inquire, to test, and to collaborate with others. Such a context also allows Ms. Smith to use descriptive language and the language of the disciplines in meaningful ways. Children can, therefore, hear and use the practices (or the ways of

thinking and talking) in mathematics and science. For example, Ms. Smith and the children use language to make predictions or hypotheses (e.g., what if . . . , I think that . . . because . . . ) and connect the discipline-specific language to describe what they observe, such as height, gravity, balance, action and reaction, and cause and effect. Ms. Smith and the children add words she has been using with the children to the classroom wall for easy reference. The clipboards, carpenter's pencils, large chart paper, and books help children to apply their literacy skills during their playful learning. Ms. Smith ensures that choice time is at least 45 minutes to an hour each day to provide the large uninterrupted blocks of time the children need during this exciting time of learning.

Over the next few days, while interacting with the children, Ms. Smith documents their learning and successes with their complex building, using her computer tablet (with photos and short video clips). This pedagogical documentation allows her to collect evidence of children's learning, which she can share with the children and their families. There are many opportunities for authentic assessment during the inquiry.

## Curricular Connections in This Vignette

This brief vignette demonstrates many cross-curricular connections that are part of this learning experience, including (but not limited to) the following:

### Cross-Curricular Connections

#### English Language Arts

- Language as Sense Making
  - Access, use, build, and refine schema.
  - Use a variety of strategies.
  - Be aware of and articulate own ways of engaging with text.
- Language as System
  - Recognize, apply, and adapt rules and conventions.
  - Identify, analyze, and apply understandings of whole-part-whole relationships.
- Language as Exploration and Design
  - Research and study topics and ideas.
  - Interpret and integrate information and ideas from multiple texts and sources.
  - Manage information and ideas.
  - Invent, take risks, and reflect to create possibilities.
- Language as Power and Agency
  - Recognize viewpoints in texts and ideas.
  - Investigate complex issues.
  - Contemplate the actions that can be taken, consider alternative viewpoints, and contribute other perspectives.

#### Social Studies

0-KL-015\* Identify familiar places and landmarks.

0-KL-016 Recognize globes, maps, and models as representations of actual places.

#### Mathematics

K.SS.1 Use direct comparison to compare two objects based on a single attribute, such as length (height), mass (weight), and volume (capacity).

K.SS.3 Build and describe 3-D objects.

K.PR.1 Demonstrate an understanding of repeating patterns.

#### Science

K-0-1a. Ask questions that demonstrate a curiosity about living things, objects, and events in the immediate environment.

K-2-01 Use appropriate vocabulary related to their investigations of colours.

K-0-4a. Manipulate materials purposefully.

\* The specific learning outcome codes are identified in the respective curriculum framework documents.

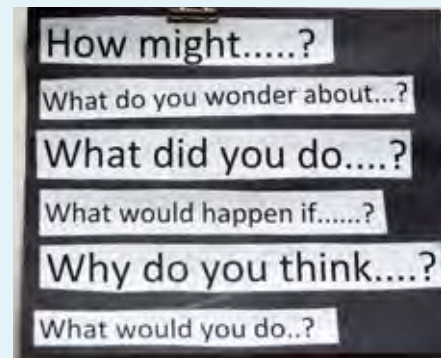
Chapter 8 of this document provides snapshots of the core curricular areas and further highlights some of the many curricular connections and learning targets/expectations planned for this inquiry (and in other stories shared by Kindergarten teachers).



## Reflection: Teaching and Learning Processes

Think about the ways you create learning environments that provide opportunities for children to explore their own interests while working toward meeting curricular targets/expectations in meaningful ways.

How do you facilitate your students' learning by respecting their thinking and allowing them to construct understanding through "hands-on" AND "minds-on" explorations? The reflective questions in the following chart are linked to teaching and learning processes and can support your important thinking about these ideas. You can read more about designing learning environments in Chapter 5 and about strategies for teaching and learning in Chapter 4.



Children's inquiries are supported through open-ended questions such as these.

## Reflecting on Teaching and Learning Processes

Teaching and Learning Process	Reflective Questions
<b>Contexts</b>	<ul style="list-style-type: none"> <li>■ What are the children's interests and ideas?</li> <li>■ How are the children's interests aligned with the curriculum?</li> <li>■ What is the nature of the geographical, environmental, familial, social, linguistic, and cultural contexts in which the children live?</li> <li>■ How can I create invitations for learning?</li> <li>■ What is meaningful to children?</li> <li>■ What questions do children have about the context?</li> </ul>
<b>Curricular Targets/ Expectations</b>	<ul style="list-style-type: none"> <li>■ How will I integrate curricula?</li> <li>■ What do children know and what are they able to do?</li> <li>■ How will I focus instruction and learning within meaningful play/ inquiry contexts?</li> <li>■ Which curricular expectations will be my focus?</li> </ul>
<b>Observing and Documenting</b>	<ul style="list-style-type: none"> <li>■ What is happening now?</li> <li>■ What does this mean?</li> <li>■ What are the children's thoughts?</li> <li>■ How are children communicating and representing their thinking?</li> <li>■ What are the children's responses to new situations?</li> <li>■ How can I scaffold their learning?</li> <li>■ Where do we go next?</li> <li>■ What is the purpose of the documentation?</li> <li>■ How will I gather and organize the documentation?</li> <li>■ Where will I keep the documentation?</li> <li>■ Who is interested in this documentation?</li> <li>■ What will I do with this documentation?</li> </ul>
<b>Planning for Learning</b>	<ul style="list-style-type: none"> <li>■ What do I see? hear?</li> <li>■ What is happening?</li> <li>■ How can I pose a problem and ask questions to provoke deeper thinking and understanding?</li> <li>■ How can I challenge children's thinking?</li> <li>■ Who is involved?</li> <li>■ How can I support the children?</li> <li>■ What materials or ideas will I use to build on what I see?</li> <li>■ What do others think?</li> <li>■ How can I encourage more in-depth thinking and investigation?</li> </ul>
<b>Assessing and Evaluating</b>	<ul style="list-style-type: none"> <li>■ What does the documentation show about students' learning in relation to curricular expectations?</li> <li>■ What does the child know, do, and feel?</li> <li>■ What is the child's depth of understanding?</li> <li>■ What learning strategies does the child demonstrate?</li> <li>■ How are children thinking at higher levels?</li> <li>■ How can I communicate what I have learned about the child?</li> <li>■ What does this mean for instruction?</li> </ul>

## Summary

In this chapter, you read about and reflected on children’s multiple ways of knowing and their respective journeys through their various learning landscapes in your Kindergarten classroom. In Chapters 8 and 9, you will consider how to apply inquiry-based planning and backward-design approaches to specific curricular outcomes and integratable elements in child-centred, play-based, and holistic ways.



### Continue Your Learning

For more information about learning landscapes, see:

Friesen, Sharon, and David Jardine. *21st Century Learning and Learners*. Prepared for Western and Northern Canadian Curriculum Protocol by Galileo Educational Network. 2010. Available on the Alberta Education website at [http://education.alberta.ca/media/1087278/wncp%2021st%20cent%20learning%20\(2\).pdf](http://education.alberta.ca/media/1087278/wncp%2021st%20cent%20learning%20(2).pdf) (16 Apr. 2015).

Western and Northern Canadian Protocol for Collaboration in Education (WNCP). *Guiding Principles for WNCP Curriculum Framework Projects*. Jan 2011. [www.wncp.ca/english/subjectarea/projects.aspx](http://www.wncp.ca/english/subjectarea/projects.aspx) (27 Nov. 2014).

To read more about inquiry learning and teaching, see:

Manitoba Education and Youth. “Chapter 6: Integrated Learning through Inquiry: A Guided Planning Model.” *Independent Together: Supporting the Multilevel Learning Community*. Winnipeg, MB: Manitoba Education and Youth, 2003. 3–18. Available online at [www.edu.gov.mb.ca/k12/docs/support/multilevel/index.html](http://www.edu.gov.mb.ca/k12/docs/support/multilevel/index.html) (5 Feb. 2014).