

Chapter 4:

SCOPE & SEQUENCE FOR LEARNING STRATEGIES INSTRUCTION

After reading this chapter you will be able to:

- Use the scope and sequence to develop a plan for strategies instruction.



This chapter introduces you to *The Scope and Sequence for Learning Strategies Instruction in the Elementary Immersion Setting*. The scope and sequence is the direct result of our six-year study with elementary immersion students and is therefore specifically designed for elementary immersion teachers. It is a useful tool for selecting strategies appropriate for your students' grade and language level.

What is the scope and sequence?

The main purpose of the scope and sequence is to serve as a guideline for elementary immersion teachers who want to integrate learning strategies instruction into their language and content curriculum. It organizes strategies by grade level and indicates which strategies may be introduced, reviewed, and expanded on at each grade. In addition, it shows how some students' use of strategies develops through the grades. You can use the scope and sequence to identify strategies to teach your students and to check your students' progress in using them.

How was the scope and sequence developed?

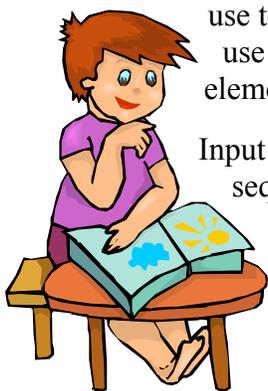
The scope and sequence was shaped partly by the NCLRC study of elementary immersion children, but also includes input from our team of elementary immersion teachers. Several key research findings from the immersion study led to the development of the scope and sequence. They are summarized in the chart below.

Research Finding	Importance to Development of Scope and Sequence
All students, regardless of age or ability, use learning strategies to complete language tasks.	This finding influenced the choice to begin strategies instruction in first grade.
Younger and older students use some different strategies.	This finding guided decisions about which strategies to introduce at the earlier grades and which strategies to present at the upper grades.
Younger and older students use the same strategies in different ways.	This finding led to the integration of a developmental scale that showed the progression from local use to more global use of each strategy.

First, researchers found that *all* immersion students, regardless of age or ability, used learning strategies to complete tasks. This conclusion influenced the choice to begin strategies instruction in first grade. No research was conducted with kindergarten students, although it is quite possible that these students also use strategies and may be receptive to strategies instruction.

Second, researchers found that younger and older students employed some different types of strategies. Younger students tended to focus locally, using strategies such as *Find/Apply Patterns*, whereas older students emphasized more global strategies such as *Make Inferences*, *Make Predictions*, and *Monitor*. This finding, and its supporting data, guided our decisions about which strategies to introduce at the lower grades and which strategies to present at the upper grades.

Finally, researchers discovered that younger and older students used the same strategies in different ways. For example, both younger and older students used the strategy *Use Background Knowledge* when preparing to read a text; however, younger students tended to activate personal background knowledge whereas older students tended to activate knowledge of texts, literature, and media as well. Furthermore, younger students relied more heavily on pictures, whereas older students used both pictures and the text. These data suggest that younger students tend to focus locally and attend to what is concrete and familiar. Older students, on the other hand, generally have a more global perspective. They spend less time deciphering word by word and more time considering the text as a whole. This finding led us to integrate a developmental scale of strategy use to the scope and sequence that shows the progression from local to more global use of each strategy (For additional information on the NCLRC study of elementary immersion students, see Chamot, 1996; Chamot, Keatley, et al., 1996).



Input from teachers in elementary immersion classrooms also shaped the scope and sequence. Teachers reviewed it and addressed the appropriateness of strategies for each grade level. They focused specifically on determining whether students would be able to comprehend the language of strategies instruction. This review was relevant mainly at the lower grades. For, although it is

certain that students as young as first grade use strategies, their ability to understand more abstract concepts and discuss them is less certain. Teachers’ comments were invaluable, as they provided a practical viewpoint of the scope and sequence.

How do I use the scope and sequence?

The scope and sequence is designed to assist you in deciding which strategies to integrate into your language and content instruction. At each grade level there is a selection of strategies that are appropriate for your students’ developmental level and compatible with their content and language tasks. The strategies listed are of three types: *new*, *review*, or *expand*.

A *New Strategy* is one being introduced into the curriculum for the first time. It later becomes a *Review Strategy* when recycled through different content and language tasks so that students get ample practice learning to use it independently. For example, if in first grade you introduce *Cooperate* to learn new vocabulary words, you can later review the same strategy to conduct a science experiment, to complete math word problems, or to read a folk tale.

An *Expand Strategy* is the third and final type. To expand a *New* or *Review Strategy*, have students put it to a more sophisticated use. For example, the strategy *Make Predictions Using a Picture* may be introduced in first grade for preparing students to listen to a story. In second grade, it may be expanded: the students can *Make Predictions Using a Text* to figure out, based on the title, what a story is about. In third grade, the students may *Make Predictions Using a Text* not only at the beginning of the story, but throughout. Once students become familiar with a strategy, reviewing and expanding it prove essential to ensure that they learn to use it independently, in more sophisticated ways, as learning tasks become more challenging.

Please refer to the charts below for a summary of these types.

Type of strategy	Description
New	Introducing a strategy into the curriculum for the first time.
Review	Applying a known strategy to a different content or language task.
Expand	Introducing a more sophisticated use of a known strategy

A school district, a school, or an individual teacher can use the scope and sequence to plan and implement learning strategies instruction. Districts or institutions may find it helpful for integrating learning strategies instruction into the curriculum. The scope and sequence is an effective tool for selecting strategies to introduce to your students. Teachers can benefit from it on a day-

Teaching Tip

Limit the number of strategies you introduce in any one grade. Practice and review strategies often.

to-day basis as they actively introduce strategies to their students. The scope and sequence should be integrated into your pre-existing language and content curriculum while taking into account the strategies your students already employ. Using all three sources will guarantee that your learning strategies instruction is appropriate for your students.

It is important to remember that the scope and sequence is based on the average child's progress with strategy use. During the NCLRC study with students in immersion programs, a small number of students in first grade demonstrated more sophisticated use of strategies. Likewise, a handful at the upper grades demonstrated less successful strategy use (Chamot, 1996). Students develop at different rates; some may use advanced strategies earlier than others. In a similar way, the strategies a student favors may depend on her preferred learning style(s). For example, she may gravitate towards strategies such as *Use Imagery* and *Use Real Objects / Role Play* if she prefers to learn visually and kinesthetically.

Although learning styles can indicate an individual's preference for particular learning strategies, every student can profit from experience and practice with a wide variety. Two main reasons justify this call for widespread exposure to learning strategies. First, to succeed in school, all students need to learn certain strategies—for instance, *Use Graphic Organizers/Take Notes* and *Organize/Plan*. Second, some students may be unaware of specific strategies until you introduce them. As the teacher, you can observe students and tailor learning strategies instruction to meet their individual needs, as you do with content or language instruction.

The organization of learning strategies instruction is facilitated by teachers working together to construct a coherent strategy curriculum across grade levels. Students learn strategies in a consistent and systematic way when we implement instruction program-wide. Teachers know what students have learned in the previous years and can build on this instruction. In turn, students already familiar with learning strategies instruction from the early grades can expand their knowledge as they progress through the grades. Fairfax County in Virginia, for example, has begun to blend learning strategies into its existing curriculum guide. This blending ensures that strategies are taught as an integral part of the instructional program.

On the following pages you will find five charts that illustrate the scope and sequence by grade level. The names of the strategies appear in bold print. The strategies in the scope and sequence are considered appropriate for most students. Although many are listed for each grade, you should choose strategies that match your students' needs as well as the content and language you are teaching. It is common to introduce as few as three or four strategies in a year for first or second grade and no more than six or seven for the upper elementary grades. (For each level, examples of strategies are divided into the following categories: Introduce, Review and Expand.)

By limiting the number you introduce, you leave more time for practice and review which helps teach students to use strategies independently. This independence is the ultimate goal of strategies instruction.

First Grade		
Introduce	Review	Expand
<p style="text-align: center;">Evaluate</p> <p style="text-align: center;"><i>“Did I understand? Did the strategy help me understand?”</i></p>		
<p style="text-align: center;">Use Background Knowledge</p> <p style="text-align: center;"><i>Use a picture and/or personal information to prepare for a task.</i></p>		
<p style="text-align: center;">Make Inferences</p> <p style="text-align: center;"><i>Use pictures to understand a story.</i></p>		
<p style="text-align: center;">Make Predictions</p> <p style="text-align: center;"><i>Use a picture or what you know to predict the main idea of a text or what you will learn.</i></p>		
<p style="text-align: center;">Use Real Objects / Role Play</p> <p style="text-align: center;"><i>Use pantomime to remember new words or ideas.</i></p>		
<p style="text-align: center;">Group / Classify</p> <p style="text-align: center;"><i>Group objects by attribute.</i></p>		
<p style="text-align: center;">Use Selective Attention</p> <p style="text-align: center;"><i>Attend to attributes to classify objects.</i></p>		
<p style="text-align: center;">Access Information Sources</p> <p style="text-align: center;"><i>Ask a teacher or friend for help.</i></p>		
<p style="text-align: center;">Cooperate</p> <p style="text-align: center;"><i>Work with a classmate to complete a task. Work with a classmate to solve a problem.</i></p>		
<p style="text-align: center;">Find/Apply Patterns</p> <p style="text-align: center;"><i>Apply a rule or make a rule. Match sounds to letters to read a word.</i></p>		

Second Grade		
New	Review	Expand
<p>Organize / Plan Use a graphic organizer to plan the beginning, middle and end of a task such as writing a story, conducting an experiment, or solving a math problem.</p>	<p>Evaluate "Did I understand? Did the strategy help me understand?"</p>	<p>Use Background Knowledge Use knowledge of literature and media to plan to listen, read, or speak. Use knowledge of literature and media to check understanding.</p>
<p>Manage Your Own Learning Figure out how you learn best. Focus your attention on your work.</p>	<p>Use Background Knowledge Use a picture and/or personal information to prepare for a task. Use pictures and/or personal information to monitor understanding.</p>	<p>Make Inferences Use personal knowledge to figure out the meaning of unknown words.</p>
<p>Monitor Ask, "Does this make sense?" to check comprehension and identify problems.</p>	<p>Make Inferences Use pictures to understand a story.</p>	<p>Use Real Objects / Role Play Use manipulatives to retell and remember a story.</p>
<p>Evaluate Was my prediction of the genre/main idea correct?</p>	<p>Use Real Objects / Role Play Use pantomime to remember new words or ideas.</p>	<p>Group / Classify Group words in a meaningful way or by attributes.</p>
<p>Summarize Retell a story with pictures to evaluate understanding. Retell steps in a math problem.</p>	<p>Find/Apply Patterns Apply a rule. Make a rule. Match letters to sounds to read new words. Use Selective Attention Attend to attributes to classify objects.</p>	<p>Use Selective Attention Focus on words you know to figure out the meaning of a text. Access Information Sources Use charts, posters, dictionaries and other reference books.</p>
	<p>Access Information Sources Ask a teacher or friend for help.</p>	
	<p>Cooperate Work with a classmate to complete a task. Work with a classmate to solve a problem.</p>	

Third Grade		
New	Review	Expand
<p>Transfer/ Use Cognates Use previously acquired linguistic knowledge. Recognize words that are similar in other known languages.</p> <p>Use Graphic Organizers/Take Notes Use outlines or webs to write down important words or contents that will help you understand and remember.</p>	<p>Evaluate Ask, “Does this make sense?” to check understanding and identify problems. “Did I understand? Did the strategy help me understand?”</p>	<p>Organize / Plan Use a graphic organizer to plan main ideas, details, setting, character, and plot in writing.</p>
	<p>Use Background Knowledge Use a picture and/or personal information to prepare for a task. Use pictures and/or personal information to monitor understanding.</p>	<p>Evaluate “Was my prediction correct?”</p> <p>Use Background Knowledge Use text, school and world knowledge to plan to listen, read, write or speak.</p>
	<p>Make Inferences Use personal knowledge to figure out the meaning of unknown words</p>	<p>Make Predictions Use personal knowledge, subject knowledge and text to predict the main idea of a story or hypothesize in an experiment.</p>
	<p>Use Selective Attention Focus on words you know to figure out the meaning of a text.</p>	<p>Use Real Objects / Role Play Act out a story or concept to remember it.</p>
	<p>Access Information Sources Use charts, posters, dictionaries and other reference books.</p>	<p>Find/Apply Patterns Match sounds to letters to read and write new words.</p>
	<p>Cooperate Work with a classmate to do a task. Work with a classmate to solve a problem.</p>	<p>Summarize Retell story/passage, focusing on the main idea.</p>
	<p>Manage Your Own Learning Figure out how you learn best. Focus your attention on your work.</p>	<p>Access Information Sources Use encyclopedias to access information.</p>

Fourth Grade		
New	Review	Expand
<p>Use Imagery Use mental images to help write down the steps in a science experiment.</p> <p>Find/Apply Patterns Use linguistic rules to help you determine the meaning of a word. Use rules to help you solve a math problem.</p>	<p>Monitor Ask, "Does this make sense?" to check understanding and identify problems.</p>	<p>Organize / Plan Use a graphic organizer to plan text structure and sequence of events in writing.</p>
	<p>Evaluate Did the strategy help me understand?"</p>	<p>Make Predictions Predict style, voice and person in the text.</p>
	<p>Make Inferences Look back, reread, and use context clues to figure out the meaning of unknown words.</p>	<p>Use Background Knowledge Use background knowledge of genre (ex. Fiction, non-fiction, letters, biography) to facilitate understanding. Use knowledge of text structure to check understanding.</p>
	<p>Transfer/Use Cognates Use previously acquired linguistic knowledge. Recognize words that are similar in other known languages.</p>	<p>Access Information Sources Use the internet to access information on the target language.</p>
	<p>Find/Apply Patterns Apply a rule. Make a rule. Match sounds to letters to read and write new words.</p>	<p>Manage Your Own Learning Think about how you learn best and arrange conditions to help you do your best.</p>
	<p>Use Graphic Organizers/Take Notes Use outlines or webs to write down important words or contents that will help you understand and remember.</p>	
	<p>Summarize Retell story/passage/text focusing on the main idea.</p>	
	<p>Use Selective Attention Focus on words you know to figure out the meaning of the text.</p>	
	<p>Access Information Sources Use reference books.</p>	
	<p>Cooperate Work with a classmate to complete a task. Work with a classmate to solve a problem.</p>	

Fifth Grade	
New	Expand
<p>Talk Yourself Through It (Self-Talk) <i>Use your inner resources. Reduce your anxiety by reminding yourself of your progress, the resources you have available, and your goals.</i></p>	<p>Organize / Plan <i>Use a graphic organizer to plan text structure and sequence of events in writing.</i></p> <p>Organize/Plan <i>Make short- and long-term goals for the year. “How am I doing?” “Did I meet my goals for the semester?”</i></p>
<p style="text-align: center;">Evaluate</p> <p><i>Ask, “Did the strategy help me understand?”</i></p>	<p style="text-align: center;">Use Imagery</p> <p><i>Use mental images to elaborate on a text and assist comprehension.</i></p>
<p style="text-align: center;">Make Inferences</p> <p><i>Look back, reread, and use context clues to figure out the meaning of unknown words.</i></p>	<p style="text-align: center;">Manage Your Own Learning</p> <p><i>Seek out opportunities to practice your language, for example, television or radio programs, the Internet, native speakers, or other students..</i></p>
<p style="text-align: center;">Transfer/ Use Cognates</p> <p><i>Use previously acquired linguistic knowledge. Recognize words that are similar in other known languages.</i></p>	
<p style="text-align: center;">Summarize</p> <p><i>Retell the story/passage/text focusing on the main idea.</i></p>	
<p style="text-align: center;">Use Selective Attention</p> <p><i>Focus on words you know to figure out the meaning in a text.</i></p>	
<p style="text-align: center;">Find/Apply Patterns</p> <p><i>Use linguistic rules to help you determine the meaning of a word. Use rules to help you solve a math problem. Match sounds to letters to read and write new words.</i></p>	
<p style="text-align: center;">Access Information Sources</p> <p><i>Use the internet to access information in the target language.</i></p>	

Strategies in the Content Areas

As an immersion teacher, you teach several different content area subjects. To integrate strategies across the curriculum, make sure that you expand strategy use from one subject to another. Conducting learning strategies instruction and practice in varying contexts will encourage students to transfer strategy use across subjects independently. *Make Predictions* in language arts, *Forecast* in social studies, *Hypothesize* in science and *Estimate* in mathematics are all similar strategies. By seeing connections, students will more readily transfer strategies to new situations.

You can help build learner confidence and continued learning strategy expansion by identifying, then praising students' use of a strategy in new contexts. If the class learned to use *Use Graphic Organizers/Take Notes* on a Health reading assignment, you can praise a student who transfers it to a writing assignment. Likewise, you can praise a student who transfers it to a Science reading assignment.

The following chart lists each learning strategy, states its purpose, and illustrates its use in four content areas – Science, Social Studies, Language Arts, and Math.



How Strategies Are Used in Various Content Areas

Learning Strategy	Purpose	Science	Social Studies	Language Arts	Math
Metacognitive Strategies					
Organize/Plan	To develop personal objectives, identify the purpose of a task, and plan how to accomplish it.	Before a lesson about soil, a third grader identifies three questions he wants to answer during the activity.	A third grader sets the goal of being able to list five personal rights and responsibilities before a lesson on citizenship.	A fifth grader identifies her specific purposes for reading a story in the target language-- to gain information, for pleasure.	A fourth grader sets the objective to remember to check her work on a math test.
Manage Your Own Learning	To determine how one learns best; to arrange conditions to learn better.	A third grader needs to learn the water cycle and decides to draw pictures to help him learn it well.	A fourth grader learns best by writing information down so he makes cards with the names of the geographic terminology.	A sixth grader wants to improve her reading comprehension, so she orders a subscription to a magazine in the target language.	A fifth grader chooses a quiet place in his house to work on his math homework so he can concentrate better.
Monitor	To check one's progress on a task while working on it.	A third grader checks to see if he remembers all the forms of precipitation while studying the weather.	A sixth grader checks how well he is learning the facts about the culture of China.	A fourth grader asks herself if she is making sense as she writes sentences in the target language.	A third grader stops and checks his math problems by estimating the answers in his head.

Learning Strategy	Purpose	Science	Social Studies	Language Arts	Math
Evaluate	To judge how well one accomplished a task; to decide how effective strategies were in accomplishing the task.	A second grader checks whether she has accurately measured a plant.	A third grader asks and answers questions in small groups to check that he understands the purpose and procedure for the election of the President of the United States.	A fourth grader uses a rubric to evaluate his performance on understanding the lyrics of a song in the target language.	A fifth grader solves a problem backward to make sure he has done it correctly.
Task-Based Strategies: Use What You Know					
Use Background Knowledge	To think about what one already knows; to make associations.	A second grader remembers the life cycle of the frog as he begins to learn the life cycle of a butterfly.	A student remembers what he knows about the Pilgrims when beginning to study the history of the Thanksgiving holiday.	When reading aloud, a second grader remembers learning that the “e” at the end of a word is normally silent.	A third grader applies her knowledge of simple multiplication to more complex multiplication problems.
Make Inferences	To use context to figure out meaning.	A first grader looks at the clothing of children in a book and guesses that it is winter.	During an economics-centered lesson, a third grader infers that if a consumer needs to buy a product, there must be a producer of that product.	A second grader sees a period at the end of a sentence and infers that the sentence is declarative.	After learning that a fourth is smaller than a half, a second grader infers that an eighth is smaller than a fourth.
Make Predictions	To anticipate information; to prepare and give directions for the task.	A fourth grader learning about reasoning and logic makes predictions using patterns.	Before a lesson in which a second grader needs to describe how workers depend on one another, she predicts ways she believes people can help each other at work.	A first grader predicts how the outcome of a story could be different if characters or events changed.	A fifth grader studying probability makes predictions based on results of simple experiments.

Learning Strategy	Purpose	Science	Social Studies	Language Arts	Math
Personalize	To relate information to personal experience.	A fourth grader identifies uses of metric measurement in his daily activities.	A fifth grader links natural resources to aspects of his life (food, shelter, medicine, technology) to demonstrate that human survival depends on Earth's resources.	A second grader compares himself to a character in a story.	A third grader talks about his experiences with weather and sports in order to conceptualize degrees of probability.
Task-Based Strategies: Use Your Imagination					
Use Imagery	To create an image to represent information.	A fourth grader draws pictures to compare and contrast the characteristics of a plant cell and an animal cell.	A fifth grader creates a complex mental image to remember the various parts of the U.S. political system.	A fourth grader visualizes a selected passage in his mind to interpret a story.	A fifth grader draws a picture to help write a two-step equation based on a story.
Use Real Objects/Role Play	To manipulate real objects as one uses the language of instruction; to act out or imagine oneself in different roles.	A second grader manipulates simple machines to see how they work.	First graders use a globe to understand that the earth is round.	Third graders use puppets to act out a story the teacher reads to them.	A kindergartener uses counters to see how to divide the number 10 in different ways.
Task-Based Strategies: Use Your Organizational Skills					
Find/Apply Patterns	To apply a rule; to make a rule; to recognize a word by matching written letters and spoken sounds.	A fifth grader breaks the term for "tectonics" in the target language into syllables in order to pronounce it.	On a worksheet, a first grader circles pictures of the dinosaurs whose names start with the letter "T" in the target language.	A third grader knows how to conjugate "mettre" in French and applies the pattern to a new verb, "permettre."	A first grader makes piles of five marbles, five blocks, and five crayons and discovers that each pile contains the same number of objects.

Learning Strategy	Purpose	Science	Social Studies	Language Arts	Math
Group/Classify	To relate or classify items according to attributes.	A first grader classifies objects by comparing their similarities and differences.	A fourth grader makes charts to organize information.	A fifth grader organizes vocabulary words according to topic.	A third grader recognizes and sorts shapes.
Use Graphic Organizers/Take Notes	To take notes or to use or create an image to understand and/or represent information.	A second grader creates a chart showing the various stages of water (solid, liquid, gas)	A fifth grader creates a timeline to represent the order of events in the American Civil War.	A fourth grader creates a chart showing the time, place, and main characters in a group of stories.	A third grader creates a multiplication table to use while completing an assignment.
Summarize	To create a mental, oral, or written summary of information.	A sixth grader orally summarizes the respiratory process for the class.	A third grader writes a summary of a book about different cultures.	A sixth grader stops to summarize each paragraph as she reads a text in the target language.	After the teacher's presentation on long division, a fourth grader summarizes the steps in her head.
Use Selective Attention	To focus on specific information or ideas.	A second grader looks around the classroom to identify products made from plants.	A fourth grader listens for clues about the causes of the American Revolution as the teacher gives a presentation.	A third grader looks for information about setting as he reads a story.	A sixth grader doing a story problem focuses on the relevant information in the problem rather than the "extra" information.

Learning Strategy	Purpose	Science	Social Studies	Language Arts	Math
Task-Based Strategies: Use A Variety of Resources					
Access Information Sources	To use reference materials about the language and content matter; to ask for explanation, verification and examples.	A second grader studying the solar day asks the teacher questions to clarify the concept that when it is daytime where we live, it is nighttime on the other side of the earth.	A third grader uses a map to locate places.	A fourth grader asks the teacher, classmates, and himself questions about a story to make sure he understands the author's message.	A fourth grader checks his work on multiplication problems by referring to a multiplication table.
Cooperate	To work with others to complete tasks, build confidence, and give and receive feedback.	A group of second graders work together to examine and describe plants, animals, and humans.	Two first graders draw a map of a town to identify resources in the community.	A third grader shares ideas, reactions, and opinions about literature and content with a group of peers.	A group of fourth graders play a concentration-type card game to distinguish between different kinds of triangles.

Learning Strategy	Purpose	Science	Social Studies	Language Arts	Math
Talk Yourself Through It (Self-Talk)	To use one's inner resources; to reduce one's anxiety by reminding self of progress, resources available, and goals.	A second grader is worried about classifying vertebrates so she tells herself that if she gets stuck, she can always check in her textbook.	During an oral presentation, a fifth grader remains calm by reminding herself that she has done a lot of research and knows her presentation well.	A fourth grader reading a text comes across a word she doesn't understand. She remembers that she can usually figure out the meaning of the word by looking at context.	A fourth grader is not sure of the next step in a long division problem and is worried about finishing the assignment on time. He reminds himself that he can always ask the teacher for help.