

ARCHITECTURE of LEARNING™

Skill Blueprint Sample ▶▶

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KEY PROCESSES

CORE PROCESSES

		experience	comprehension
EXPERIENCE establish a reference point	PLANE CONSTRUCTION Teacher distributes boxes containing a variety of materials to small groups. The teacher instructs the students to use the materials in developing an airplane that could fly across the room.	GUIDED REVIEW The teacher asks “What just happened? What were the steps of the activity?” The students list 1) they received a variety of materials and a task, 2) they used some materials in completing the task, and 3) had some materials left over, not used in the finished product.	
COMPREHENSION develop knowledge	REVISING WRITING: MODIFIERS The teacher 1) lists and states each individual step in the sequence, 2) demonstrates each individual step and the sequential, combined use of the steps to accomplish the task, and 3) reviews the individual steps.	SEQUENCING THE STEPS Referring to the flow chart created in the Experience Strand (EX-ap), the teacher has the students create a similar flow chart, sequencing the skill’s steps: 1) identify the modifiers within a sentence, 2) consider the word(s) each modifier addresses, 3) ask yourself if the modifier repeats the meaning of the targeted word or adds significant meaning to the targeted word, 4) if it repeats the meaning, eliminate it; change the targeted word so the modifier can be eliminated; or, if it clarifies your intended meaning, keep the modifier.	
APPLICATION make use in confined context	AN ESSAY TO REVISE The teacher presents the students with an essay featuring several modifiers for potential revision.	WORKING THE SKILL Student work mentally through the skill, 1) identifying a modifier, 2) identifying and considering the modifier’s target, 3) evaluating the modifier’s role in relation to the targeted word, and 4) considering the best course of revision.	
INTENTION make use in varied contexts	NEW MATERIAL Students producing a draft of significant writing.	WORKING THE SKILL Students identify and evaluate modifiers using the skill’s sequence of steps.	

CORE PROCESSES

elaboration	application
<p>THE PLANE PATTERN</p> <p>The teacher asks, “Considering what we’ve recognized and identified in the experience with the boxes of materials and the finished projects, can we see any patterns or parts of patterns beginning to emerge?” The teacher guides the students to identifying the pattern and asks the students to explain how the Plane Construction activity illustrates it.</p>	<p>PATTERN EXAMPLES FROM EXPERIENCE</p> <p>The teacher presents the pattern in a flow chart and asks the students to identify examples of the pattern from their own experiences.</p>
<p>MODIFIER REVISIONS AND EXPERIENCE</p> <p>The teacher directs attention to the flow chart created in the previous cell and the one created in the Experience Strand. The teacher then asks the students to consider how the process of revising writing by eliminating nonessential modifiers is like the Plane Construction experience. Then, the teacher asks the students to examine the list of pattern examples created in the EX-ap activity and identify one or two that relate to revising writing by eliminating nonessential modifiers.</p>	<p>INITIAL PRACTICE, INSTRUCTIVE FEEDBACK</p> <p>The teacher writes a sentence on the chalkboard, “The man slowly plodded down the alley.” The students write the sentence and then use the skill process to evaluate the modifier slowly. The teacher may ask some students to “think aloud,” speaking their way through the process. Similar examples are repeated until the teacher feels confident that beginner-level or systematic capability with the skill has developed.</p>
<p>PATTERN PAUSE</p> <p>Students consider the processing in relation to the pattern statement established in the Experience Strand: Does my application illustrate the established pattern? An affirmative answer initiates action, moving the student into the next cell. A negative answer returns the student to the previous cell for another attempt at correctly using the skill’s sequence of steps.</p>	<p>REVISING</p> <p>The students actually make the revision or justifiably decide to leave it as is. The strand repeats for each modifier in the essay.</p>
<p>PATTERN PAUSE</p> <p>Students compare the process with the established pattern.</p>	<p>REVISING</p> <p>Students take appropriate action, resulting in justifiable revision or no change. The strand repeats for each modifier in the essay.</p>

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Content Blueprint Sample ▶▶

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KEY PROCESSES

CORE PROCESSES

	experience	comprehension
EXPERIENCE establish a reference point	<p>IDENTIFYING INFLUENCE</p> <p>The teacher displays a definition of influence and presents the ten most influential Americans as published in <i>The Atlantic Monthly</i> (December 2006). The teacher then asks the students to identify the five most influential individuals or groups of people in today's world. The results are briefly discussed and a list of suggestions is recorded and displayed.</p>	<p>INFLUENCE ANALYSIS</p> <p>The teacher may ask the students a series of thought-prompting questions: What factors did you consider when choosing the individuals for your list? How many people are influenced by each one of your choices? Do any of your choices influence whole groups of people?... Students respond to these questions individually and then discuss them in small groups or whole class discussion. The teacher may insert additional thought prompts, such as "Who is affected by this individual's influence?" The discussion continues, noting the ideas of influencers, cause and effect, and influenced individuals, groups, and areas of life.</p>
COMPREHENSION develop knowledge	<p>MEDIEVAL INFLUENCERS</p> <p>The teacher presents new content for the students to process, using any effective means of transmitting the content or use a combination of methods. For example, the teacher may assign textbook reading for homework and follow up with a lecture or informative video presentation in the class the next day.</p>	<p>ORGANIZING MEDIEVAL INFLUENCES</p> <p>The students identify Medieval influencers, the action or product taken that produced influence, and the resulting effect or contribution. These may be organized into three-box flow charts.</p>
ELABORATION develop understanding	<p>CARDS OF INFLUENCE</p> <p>The students write the names of the influential medieval individuals and groups and write each on an index card. The students also select several examples from their personal lists of influencers and/or the common posted list and write each on an index card.</p>	<p>DETAILING THE CARDS</p> <p>The students record significant details about each subject, writing these on the back of the index card.</p>
INTENTION make use in varied contexts	<p>INFLUENCE IN THE NEWS</p> <p>While browsing the daily newspaper, the teacher selects an article detailing the issues surrounding a current Supreme Court case. The teacher brings copies of the article for students to read, or reads the article to the students</p>	<p>NEWS ANALYSIS</p> <p>The students identify the area(s) being addressed within the article. Obviously, the scenario involves legal elements, but the case itself may also possess areas of potential influence.</p>

CORE PROCESSES

elaboration	application
<p>PATTERN OF INFLUENCE</p> <p>Using questioning, the teacher guides the students to recognizing the pattern: <i>Individuals and groups can affect/influence other individuals, groups, and areas of life.</i> “Based on the relationships we see between the prominent ideas illustrated by our experience, what statement could we make?” The teacher continues questioning to help students “discover” the pattern.</p>	<p>EXAMPLE OF INFLUENCE</p> <p>The teacher directs the discussion to other examples that illustrate the pattern, asking the students to create a private list of both individuals and groups they have been influenced by and individuals, groups, and areas they have influenced. The teacher concludes the cell by creating a flow chart showing cause/effect or influencer/“influencee” relationships and suggests students chart their best examples in the same form.</p>
<p>INFLUENCE CONNECTIONS</p> <p>The students examine their lists of Medieval influencers and identify connections to the posted list of influencers created in the Experience Strand. The connections may be anything justifiable, including areas of influence (e.g., law, the arts), roles (e.g., leaders, artists, thinkers), or contributions (e.g., codes, paintings, ideas). For example, a student may identify a connection between Byzantine ruler Justinian and a congressman who recently proposed significant changes to an area of law in that both influenced (or sought to influence) laws. At this point, the connections should be quick and may be relatively simplistic. The students then individually identify some connections and lead a class or small group discussion of their observations.</p>	<p>SUMMARIZING MEDIEVAL INFLUENCE</p> <p>The students use the three-box flow charts developed in the CO-co cell as the basis of a written summary of medieval era influences and the contributions they made.</p>
<p>MORE INFLUENCE CONNECTIONS</p> <p>The students arrange the index cards so that the entire set may be seen, and then study the index cards, thinking about the influences they represent. As they identify two sharing something significant in common, one medieval and one more recent, the students set the two index cards side by side and write brief notes about how the two subjects blend. This continues, possibly as homework, until each of the new content elements (i.e., medieval influences) are paired with at least one pattern illustrative element.</p>	<p>CONNECTION EXPLANATIONS</p> <p>The students to select one or two of their merged ideas—perhaps the one or two that they think represent the most significant connections—and write a paragraph that presents the ways the ideas merge and explain how both illustrate the pattern, <i>Individuals and groups can affect/influence other individuals, groups, and areas of life.</i></p>
<p>HISTORY AND THE NEWS</p> <p>Students identify connections between the case and historical precedence—in this case, the influences and results of the medieval era. Questions such as “What areas does the case share with areas of influence evident in the medieval era?” and “In light of what we know about the influences of the medieval era, what influence(s) could result from this case?” guide the elaborative thinking.</p>	<p>LOOKING AHEAD</p> <p>The teacher asks the students to make some predictions about the current case, using examples from the medieval era as justification for their ideas. These may be informally written (i.e., each student drafts ideas) and then discussed in small groups or with the whole class. Throughout the discussion, the teacher guides the students to relate their ideas to an understanding of the influences of the medieval era. NOTE: The students are not asked to provide an opinion on the case. Though such discussions may have a place, the purpose here is to use an understanding of the unit’s content (the medieval era) to understand and evaluate contemporary conditions.</p>

ARCHITECTURE of LEARNING™
Combination Blueprint Sample ▶▶

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KEY PROCESSES

CORE PROCESSES

		experience	comprehension
EXPERIENCE establish a reference point	MERGING GROUPS The teacher distributes a variety of small items, making sure that only two students have the same type of items. The students are told to count how many items they have. Then, the teacher tells the students to find the other person who has the same kind of item, ask how many items they have, and then put all the items together in one group and count how many they have.	SEEING THE GROUPS MERGE The teacher asks the students to think about what happened: How many did you have to start? How many did your partner have? What happened when you put your items together—how many did you have then? When did you have more—when you each had a group or when you put the two groups together?”	
COMPREHENSION develop knowledge	ADDITION: THE PATTERN & THE SKILL The teacher presents the mathematical representation of the pattern and the steps in the associated skill, modeling the conceptual recognition and skill application with several story problems.	REORGANIZING ADDITION The teacher asks the students to restate, in some form, the five-step process that has been presented and modeled. This could be as simple as having the students tell each other the five steps in order or having the class recite them together. Another option would be to have index cards with the five steps illustrated in some way. The students could then place them in order and use them as a reference to tell each other the five steps. This visual reference could also be used throughout the rest of the unit.	
ELABORATION develop understanding	PATTERN PICTURES The teacher displays a representation of the pattern for students to consider (e.g., two squares containing dots merging to form a rectangle) and gives students a chance to examine it.	PICTURES ANALYSIS The teacher asks the students to describe to a partner what they see in the graphic. The teacher uses guiding questions: What do you notice in this section of the picture? What seems to happen in this section of the picture?	
APPLICATION make use in confined setting	STORY PROBLEM The teacher presents the students with a short story problem.	STORY PROBLEM ANALYSIS The students identify the story problem’s important details.	
INTENTION make use in varied contexts	ADDITION IN THE WORLD The teacher arranges a real-world scenario in which the pattern of addition is illustrated.	SCENARIO ANALYSIS The students identify the scenario’s important details.	

CORE PROCESSES

elaboration	application
<p>SEEING THE PATTERN</p> <p>The teacher reviews all that has taken place, and guides the students to recognize that when two groups get put together into one group, the new group has a larger number of items. The teacher may state the pattern, but as much as possible, guides the students to recognize it. The teacher records and displays the pattern statement, possibly adding an illustration showing two smaller groups (e.g., red dots and blue dots) combining to form a larger group.</p>	<p>EXAMPLES OF THE PATTERN</p> <p>The teacher asks the students to think of other examples of the pattern. The teacher notes the best suggestions and adds them to a posted list. If desired, the teacher may also distribute manipulatives and guide the students in illustrating the pattern by creating and combining groups of the manipulatives.</p>
<p>ADDITION CONNECTIONS</p> <p>The teacher asks 1) What is the pattern we noticed when we put groups of items and groups of people together?, 2) What were some of the examples you came up with that showed that pattern?, and 3) What do the story problems we're studying have in common with those examples? The teacher then asks the students to close their eyes and imagine the story they hear. The teacher reads aloud a story problem, pausing between details so students can visualize them. For example, the teacher may read, "John has 7 balloons," and then pause, possibly guiding the students to imagine a boy holding 7 balloons. Once the story has been read aloud and imagined, the teacher may plan to ask the students to describe how the story illustrates the pattern.</p>	<p>SEEING & ADDING</p> <p>The teacher reads several story problems to the students. After each one, the teacher guides the students through the thinking necessary to recognize the pattern of addition. After a few, the teacher may ask the students if the story problem presents the pattern of addition, and if so, how. (Because this is first grade, the teacher provides the necessary guidance and support for the students to be successful.) After several examples, the teacher presents a few story problems that the class works together to solve. The teacher, once again, draws attention to the pattern illustrated by the story problem and the five-step process used to find the answer.</p>
<p>NEW PICTURES</p> <p>The students develop graphics that illustrate addition within a context. A student may, for example, draw a picture of a birthday party where there are six children at a table and two more coming through the door. Once the illustrations are complete, the teacher asks the students to write the mathematical equation that represents their illustration. (In the birthday party example, the equation would be $6+2=$). By reexamining their illustrations or creating new ones and adding the associated equation, the students demonstrate an understanding between the illustrated pattern and mathematical equation—both targets of understanding identified in the objectives. The activity is simplified (e.g., illustrations with no contexts) and supported as necessary.</p>	<p>ADDING OUR PICTURES</p> <p>The teacher shows the class one of the illustrations without revealing the equation. The teacher asks the class if the illustration shows the pattern of addition, and if so, what the mathematical equation would be. The class then works together, led by the teacher, to solve the equation. The teacher then asks the students to think about times and places where two groups of items or people get put together. The teacher guides the students in using the suggestions to form addition story problems, and then discuss how the result illustrates the pattern. (All of this would be very guided and supported.)</p>
<p>CHECKING THE PATTERN</p> <p>The students consider the pattern the short story illustrates, identifying it as an addition (or not addition) problem.</p>	<p>SOLVING THE STORY</p> <p>The students solve the problem and label the result. This Strand's series of activities repeats for several short story problems, giving the students sufficient practice to independently recognize word problems that require addition and use addition to find the solution.</p>
<p>CHECKING THE PATTERN</p> <p>The students consider the pattern the scenario illustrates, identifying it as an addition (or not addition) problem.</p>	<p>SOLVING THE SCENARIO</p> <p>The students solve the problem and label the result.</p>