

## The Systematic Design of Instruction

# Chapter 8 K-12 Case Study with Guidance for Your Original ID Project

After studying all instruction for this chapter	Create these materials:
8	<ul style="list-style-type: none"> <li>■ A list of performance objectives sequenced and clustered</li> <li>■ Learning components for:               <ul style="list-style-type: none"> <li>• Preinstructional activities</li> <li>• Assessment activities</li> <li>• Follow-through activities</li> </ul> </li> <li>■ Learning components for the content presentation and learner participation components</li> <li>■ Lesson allocations based on instructional strategy (session numbers, objectives, and time allocations)</li> <li>■ Specifications for student groupings</li> <li>■ Specifications for media selections and a delivery system</li> </ul>

### Sample Template to Guide Your Planning

Component	Enter Your Design Work Here
Performance objectives sequenced and clustered	
Preinstructional activities	Motivation: Objectives: Entry Behaviors:
Assessment	Descriptions of assessments including: Pretests: Posttests:
Follow-through Activities	Memory aids: Transfer strategies:

Component	Enter Your Design Work Here		
<p><b>Content presentation and student participation</b></p>	<p><b>Performance objective:</b></p> <p><b>Content presentation:</b></p> <p><b>Student participation:</b></p> <p><b>(Repeat)</b></p>		
Lesson Structure	Session	Objectives	Time
<p><b>Student Groupings</b></p>			
<p><b>Consolidation of media selections and choice of delivery system for</b></p>			

## K-12 Case Study Example

### Instructional Goal

In writing short stories, students will use a variety of sentence types based on sentence purpose and the idea or mood being communicated.

#### The following materials contain:

- A list of performance objectives sequenced and tentatively clustered for lessons
- Learning components for:
  - Preinstructional activities
  - Assessment activities
  - Follow-through activities
  - Content presentation and learner participation components
- Lesson allocations based on instructional strategy (session numbers, objectives, and time allocations)
- Specifications for student groupings
- Specifications for media selections and delivery system

Component	Design
<b>Objective sequence and clusters</b>	Six lessons (each column below) with objectives clustered by lesson and sequenced within and across lessons Allow one hour for each lesson

1	2	3	4	5	6
5.6	5.12	5.18	5.25	5.11	5.32
5.7	5.13	5.19	5.26	5.17	
5.8	5.14	5.20	5.27	5.24	
5.9	5.15	5.21	5.28	5.31	
5.10	5.16	5.22	5.29		
5.11	5.17	5.23	5.30		
		5.24	5.31		

<b>Preinstructional Activities</b>	<p><b>MOTIVATION:</b> A brief story will be used as an introduction. It will be on a topic of high interest to sixth graders, and it will contain all four sentence types to illustrate the point of variety and increased interest through varying sentence type.</p> <p>The class will begin a school newspaper, and 6<sup>th</sup> graders will plan and write the articles for the newspaper.</p> <p><b>OBJECTIVES:</b> Each of the four types of sentences in the sample story will be highlighted and described in the introduction. The purpose of the unit, learning to write stories that contain a variety of sentence types, will be included.</p> <p><b>ENTRY BEHAVIORS:</b> Since there are several entry behaviors noted in the instructional analysis, a test including entry behaviors will be developed and administered to determine whether students have the required prerequisite skills.</p>
<b>Assessment</b>	<p><b>ENTRY BEHAVIORS:</b> Administer a brief test of entry behaviors for subskills 5.1, 5.2, 5.3, 5.4, and 5.5. The test will be a short, paper-and-pencil test. If learners do not have prerequisites, then a lesson covering these subskills will be inserted as the first lesson in the unit.</p> <p><b>PRETESTS:</b> Two pretests will be administered after the first lesson, which will be used to motivate learners, inform them of the objectives, and provide example stories. For the pretests, students will be asked to write a brief story using all four sentence types as well as to complete objective questions on subordinate skills.</p>

Continued

Component	Design
<b>Assessment</b>	<p><b>POSTTESTS:</b> Two different types of posttest will be administered. An objective test will be administered following instruction on Objective 5 to facilitate diagnosis of problems students may be having with these subordinate skills. A second posttest, story writing, will be administered following all instruction in the unit.</p>
<b>Follow Through Activities</b>	<p><b>Memory Aid:</b> Learners will be given a checklist of criteria for each sentence type they can use to evaluate their stories and articles. Students will be reminded to use the checklist in reviewing and editing their stories.</p> <p><b>Transfer Strategy:</b> Learners will be reminded to use a variety of sentence types in their writing in all subject areas. At the outset of each new writing assignment, they will be reminded They will also be asked to write and edit the 6<sup>th</sup> grade newspaper articles for sentence variety.</p>
<b>Learning Components for Content Presentation, Examples, and Student Participation</b>	
<p>Objective 5.6 State Purpose of Declarative Sentence</p>	<p><b>CONTENT PRESENTATION:</b> <b>Content:</b> Declarative sentences are used to convey information, to tell the reader something.</p> <p><b>Examples:</b> Joan likes to roller skate. It rained the day of the picnic. Fire drills are important. The sixth grade will be in charge of the school newspaper. The roller coaster makes my stomach flutter.</p> <p><b>STUDENT PARTICIPATION:</b> <b>Practice items:</b> What does a declarative sentence do? What does Joan like to do? How does a roller coaster make me feel?</p> <p><b>Feedback:</b> Tell again that a declarative sentence is used to convey information, and point out what each of these sentences tells us.</p>
<p>Objective 5.7 Classify a Complete Sentence As Declarative</p>	<p><b>CONTENT PRESENTATION:</b> <b>Content:</b> Declarative sentences are used to convey information, to tell the reader something.</p> <p><b>Examples:</b> 1. Tom enjoys space stories. 2. The kittens are all sold. 3. Mr. Jones is very tall.</p>

Component	Design
<p>Objective 5.7 Continued</p> <p>Classify a Complete Sentence As Declarative</p>	<p><b>Non-examples:</b> (Point out why each is not an example.)</p> <ol style="list-style-type: none"> <li>1. What does Tom like to read?</li> <li>2. Are the kittens still for sale?</li> <li>3. How does Mr. Jones look?</li> </ol> <p><b>STUDENT PARTICIPATION:</b></p> <p><b>Practice items:</b> Choose the declarative sentences:</p> <ol style="list-style-type: none"> <li>1. How did the flowers smell?</li> <li>2. Where was Julie going?</li> <li>3. The traffic is noisy.</li> <li>4. The sailboat is fun to ride.</li> <li>5. This dog is very, very thin.</li> </ol> <p><b>Feedback:</b> State and show <i>why</i> sentences 3, 4, and 5 are declarative sentences, and 1 and 2 are not.</p>
<p>Objective 5.8 State Periods Used to Close Declarative Sentences.</p>	<p><b>CONTENT PRESENTATION</b></p> <p><b>Content:</b> Periods are used to close declarative sentences.</p> <p><b>Examples:</b></p> <p>The story is exciting.</p> <p>The bear slinked through the campground.</p> <p><b>STUDENT PARTICIPATION</b></p> <p><b>Practice items:</b> What punctuation mark is used to close declarative sentences?</p> <p><b>Feedback:</b> Restate that the period is used to close declarative sentences.</p>
<p>Objective 5.9 Select Punctuation to Close Sentence</p>	<p><b>CONTENT PRESENTATION</b></p> <p><b>Content:</b> Periods are used to close declarative sentences</p> <p><b>Examples:</b></p> <p>The windows had cobwebs in them.</p> <p>The zebra sounded like a horse.</p> <p><b>Nonexamples:</b></p> <p>The poppies were red and orange?</p> <p>The sunset was red and orange!</p> <p><b>STUDENT PARTICIPATION</b></p> <p><b>Practice items:</b> Select the punctuation mark -- period (.), question mark (?), or exclamation mark (!)— to close these declarative sentences:</p> <ol style="list-style-type: none"> <li>1. The frost covered the ground</li> <li>2. Snow was piled along the road</li> <li>3. The pond was covered with ice</li> </ol>

Component	Design
<p>Objective 5.9 Continued</p> <p>Select Punctuation to Close Sentence</p>	<p><b>Feedback:</b> State that periods should be used to close all the declarative sentences.</p>
<p>Objective 5.10 Recognize Declarative Sentences with Correct Punctuation</p>	<p><b>CONTENT PRESENTATION</b></p> <p><b>Content:</b> Only periods are used to close declarative sentences.</p> <p><b>Examples:</b></p> <ol style="list-style-type: none"> <li>1. The store had many different bicycles.</li> <li>2. The store had several types of trains.</li> </ol> <p><b>Nonexamples:</b></p> <p>What types of trains did the store have? Put your trains away! I feel so happy!</p> <p><b>STUDENT PARTICIPATION</b></p> <p><b>Practice items:</b> Which of the following are declarative sentences with correct punctuation?</p> <ol style="list-style-type: none"> <li>1. Place your hands on the desk!</li> <li>2. Begin on page one!</li> <li>3. Where should we stop?</li> <li>4. Camping can be fun.</li> <li>5. Surfing is good exercise.</li> </ol> <p><b>Feedback:</b></p> <p>Indicate <i>why</i> 4 and 5 are declarative, and 1, 2, and 3 are not.</p>
<p>Objective 5.11 Write a Declarative Sentence with Correct Punctuation</p>	<p><b>CONTENT PRESENTATION</b></p> <p><b>Content:</b> Declarative sentences convey information and are closed using a period.</p> <p><b>Examples:</b></p> <ol style="list-style-type: none"> <li>1. The classroom was sunny and bright.</li> <li>2. Everyone came to the party.</li> </ol> <p><b>Nonexamples:</b></p> <ol style="list-style-type: none"> <li>1. Did John come to the party?</li> <li>2. John, look out!</li> </ol>

Component	Design	
<p>Objective 5.11 Continued</p> <p>Write a Declarative Sentence with Correct Punctuation</p>	<p><b>STUDENT PARTICIPATION</b></p> <p><b>Practice items:</b></p> <ol style="list-style-type: none"> <li>1. Write five declarative sentences.</li> <li>2. Change the following sentences to declarative.               <ol style="list-style-type: none"> <li>a. How did John look?</li> <li>b. Where did Billie go?</li> <li>c. Watch out for lightening!</li> </ol> </li> </ol> <p><b>Feedback:</b></p> <p>Show examples of how 2a, b, and c could be rewritten as declarative sentences.</p> <p>Provide students with list of criteria they can use to evaluate their sentences as they write them, e.g., Does your sentence:</p> <p>___ have a subject?          ___ have a predicate?          ___ tell something to the reader?          ___ have a period at the end?</p>	
Lesson allocation based on instructional strategy	Activity	Time Planned
	<p><b>Session 1</b></p> <ol style="list-style-type: none"> <li>1. Introductory, motivational materials</li> <li>2. Entry behaviors pretest</li> <li>3. News story writing pretest</li> </ol>	1 hour
	<p><b>Session 2</b></p> <ol style="list-style-type: none"> <li>1. Pretest on objectives 5.6–5.11</li> <li>2. Instruction on objectives 5.6–5.11</li> </ol>	15 minutes 40 minutes
	<p><b>Session 3</b></p> <ol style="list-style-type: none"> <li>1. Pretest on objectives 5.12–5.17</li> <li>2. Instruction on objectives 5.12–5.17</li> </ol>	15 minutes 40 minutes
	<p><b>Session 4</b></p> <ol style="list-style-type: none"> <li>1. Pretest on objectives 5.18–5.24</li> <li>2. Instruction on objectives 5.18–5.24</li> </ol>	15 minutes 40 minutes
	<p><b>Session 5</b></p> <ol style="list-style-type: none"> <li>1. Pretest on objectives 5.25–5.31</li> <li>2. Instruction on objectives 5.25–5.31</li> </ol>	15 minutes 40 minutes
	<p><b>Session 6</b></p> <ol style="list-style-type: none"> <li>1. Review of objectives 5.11, 5.17, 5.24, and 5.31</li> </ol>	1 hour

Component	Activity	Time Planned
	<b>Session 7</b> 1. Pretest on objective 5.32 2. Instruction on objective 5.32	15 minutes 40 minutes
	<b>Session 8</b> 1. Posttest on objectives 5.6–5.32	1 hour
<b>Student Groupings</b>	Students will work individually, but will also convene as needed in small work groups with the teacher for question/answer, extra practice, customized feedback, and to maintain pacing.	
<b>Consolidation of media selection and choice of delivery system f</b>	The primary medium will be individualized, web-based instruction, but the teacher will be prepared with extra examples, nonexamples, and practice to support small group work when needed.	

## Rubric for Evaluating Instructional Strategy

The following rubric was included in the Chapter 8 web site to pull together the considerations involved in developing an instructional strategy. It is repeated here for your use in evaluating the work that you do as part of your own instructional design project. When requesting feedback from others, please share this rubric so they are aware of the criteria for evaluating an instructional strategy.

Develop Instructional Strategy	Not Relevant	No	Yes
<b>I. Plan for content sequence is:</b>			
A. Appropriate for type of learning?			
B. Logical (e.g., chronological, simple to complex, concept to rule to principle)?			
C. Follows main steps if procedural?			
D. Covers all skills/information within a main step before moving forward to next step?			
<b>II. Plan for content clusters (chunks) is appropriate for:</b>			
A. Skill complexity?			
B. Learners' age and ability?			
C. Type of learning?			
D. Content compatibility?			
E. Time available (hour, day, week, semester)?			
F. Delivery format (self-paced, instructor-led, televised, web-based, combination, etc.)?			
G. Time required for all learning components per cluster?			

III. Learning Components	Not Relevant	No	Yes
<b>A. Plan for preinstructional activities:</b>			
1. Is appropriate for learners' characteristics?			
2. Is likely to be motivational for learners (gain attention, demonstrate relevance)?			
3. Will inform learners of objectives and purpose for instruction?			
4. Will cause learners to recall prerequisite knowledge and skills?			
5. Will inform learners of any inputs needed to complete any tasks required?			
<b>B. Plan for content and examples includes:</b>			
1. Materials appropriate for the type of learning?			
2. Clear examples and clear non-examples for learners' experience?			
3. Appropriate materials such as explanations, illustrations, diagrams, demonstrations, model solutions, sample performances?			
4. Learner guidance through the presentation materials?			
5. Aids for linking new content and skills to prerequisites?			
6. Progression from the familiar to the unfamiliar?			
7. Organization?			
<b>C. Plan for learner participation is:</b>			
1. Appropriate for learning type?			
2. Congruent with objectives?			
3. Congruent with learner characteristics?			
4. Congruent with instruction?			
5. Likely to be motivational (aid learner by building confidence)?			
6. Appropriately placed in instruction (not too soon, often, infrequent)?			
<b>D. Plan for feedback is:</b>			
1. Appropriate for learning type?			
2. Congruent with objectives?			
3. Congruent with learner characteristics?			
4. Informative and corrective?			
5. Likely to aid learner in building confidence and personal satisfaction?			

<b>E. Plan for assessments is appropriate for:</b>			
1. Prerequisite skills?			
2. Pretests?			
3. Posttests?			
4. Type of learning (objective)?			
5. Learner characteristics (age, attention span)?			
6. Yielding valid and reliable information about learner status and attitudes?			
<b>F. Plan for follow through activities is likely to:</b>			
1. Aid retention of the new information and skills?			
2. Support transfer of skills from learning environment to performance environment?			
a. Includes working with supervisors if helpful?			
b. Includes forming networks and support teams if helpful?			
<b>IV. Planned Student Groupings are appropriate for:</b>			
<b>A. Learning requirements:</b>			
1. Type of learning?			
2. Any required learner interaction?			
3. Clusters of objectives?			
<b>B. Learning context:</b>			
1. Staff available?			
2. Facilities?			
3. Equipment?			
4. Media?			
5. Delivery system?			
<b>V. Media and Delivery system plans are appropriate for:</b>	<b>Not Relevant</b>	<b>No</b>	<b>Yes</b>
<b>A. Learning requirements</b>			
1. Delivering learning components of the instructional strategy?			
2. Assessments?			
3. Intelligent, interactive feedback?			
4. Sensory discrimination?			
5. Social interaction?			
<b>B. Practical resources and constraints</b>			
1. Learning context?			
2. Personnel (designer and instructor) skills?			
3. Learner needs and skills?			
4. Resources available (time, finances)?			
5. Media and delivery systems available?			
6. Materials considerations (durability, transportability, convenience)?			