

Table 2: A Guideline for Developing Instructional Materials Considering Different Learning Styles

Questions	Student Learning	Type of flexibility & adaptivity	Instructional Strategies (accommodating differences)
<p>What type of information does the student preferentially perceive?</p>	<ul style="list-style-type: none"> • Sensing learners—concrete, practical, oriented toward facts and procedures • Intuitive learners—conceptual, innovative, oriented toward theories and meanings 	<ul style="list-style-type: none"> • Flexible and adaptive Content • Flexible and adaptive curriculum sequence 	<ul style="list-style-type: none"> • Provide concrete and real world examples for new concepts and principles presented in the unit. • Demonstrate procedures by using examples. • Provide real-world learning tasks/activities that allow learners to have concrete learning experiences. • Incorporate enough flexibility in assignments and tasks to allow creativity for the concepts learned in each unit. • Provide extra resources and conceptual materials through the use of textual reading materials, summaries and conceptual diagrams to be explored in addition to required readings for each unit.
<p>Through what sensory modality is sensory information most effectively perceived?</p>	<ul style="list-style-type: none"> • Visual learners—prefer visual representations of presented material—pictures, diagrams, flow charts • Verbal learners—prefer written and spoken explanations 	<ul style="list-style-type: none"> • Flexible and adaptive presentation • Flexible and adaptive navigation/ selection 	<ul style="list-style-type: none"> • Provide content related notes in form of charts, matrices, images, and maps for each unit. • Provide elaborated written and/or auditory notes and explanations with examples. • Offer interactive real time presentation and discussion using synchronous communication tools.

<p>How does the student prefer to process information?</p>	<ul style="list-style-type: none"> • Active learners—learn by trying things out, working with others 	<ul style="list-style-type: none"> • Flexible and adaptive meta-cognitive approach and problem solving support 	<ul style="list-style-type: none"> • Provide real-world, problem solving tasks and a team environment in order to help active learners engage in critical analysis of issues while working with others. • Provide guidelines for effective teamwork and team self-assessment to promote collaboration. • Provide opportunity for large group discussion using both synchronous and asynchronous communication tools.
	<ul style="list-style-type: none"> • Reflective learners—learn by thinking things through, working alone 		<ul style="list-style-type: none"> • Provide learners individual tasks/problems to allow each learner to analyze the unit concepts individually and by thinking and working alone. • Provide self-assessment quizzes to make it possible for reflective learners to self-evaluate their own understanding.
<p>How does the student progress toward understanding?</p>	<ul style="list-style-type: none"> • Sequential learners—linear, orderly, learn in small incremental steps 	<ul style="list-style-type: none"> • Flexible and adaptive meta-cognitive approach and problem solving support 	<ul style="list-style-type: none"> • Provide a detailed and step-by-step procedure for completing each task/assignment both in text and in visual form (tables/charts/images). • Provide specific feedback for each step.
	<ul style="list-style-type: none"> • Global learners—holistic, system thinkers, learn in large leaps 		<ul style="list-style-type: none"> • Provide conceptual sequence for lessons and completion of assignments/tasks (provide larger leaps and holistic view). • Develop an advanced organizer showing the overall structure of the content and tasks for each unit. • Provide an overview of the material and assignment in each unit. • Provide holistic feedback for each step.