

The Dick and Carey Model

Input	Step	Tasks Within Step	Output
<p>Defined problem that can be addressed with instruction</p>	<p>1 Assess needs to identify goals</p>	<p>Clearly define need Clearly define instructional goal based on need Generally describe learners, performance context, and tools that will be available in the context</p>	<p>Instructional goal Overview of the learners, performance context, and tools</p>
<p>Instructional goal Overview of the learners, performance context, and tools</p>	<p>2 Conduct instructional analysis</p>	<p>Determine step-by-step what people are doing when they perform the goal</p>	<ul style="list-style-type: none"> ■ Diagram of <i>main steps</i> required to perform instructional goal ■ Diagram of <i>skills, knowledge, and attitudes</i> required to perform each of the main steps ■ Designation of <i>entry behaviors</i> (required to begin instruction)
<ul style="list-style-type: none"> ■ Diagram of <i>main steps</i> required to perform instructional goal ■ Diagram of <i>skills, knowledge, and attitudes</i> required to perform each of the main steps ■ Designation of <i>entry behaviors</i> 	<p>3 Analyze learners and contexts</p>	<ul style="list-style-type: none"> ■ Conduct learner analysis to identify learners' current knowledge and skills, preferences, and attitudes (including dispositions) ■ Perform context analysis of performance setting ■ Perform context analysis of learning environment 	<p>Detailed descriptions of learners, the performance environment, and the learning environment including resources and tools</p>

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<p>Input from step 3</p> <ul style="list-style-type: none"> ■ Diagram of <i>main steps</i> required to perform instructional goal ■ Diagram of <i>skills, knowledge, and attitudes</i> required to perform each of the main steps ■ Designation of <i>entry behaviors</i> (required to begin instruction) <p>Output from step 3</p> <p>Detailed descriptions of learners, the performance environment, and the learning environment including resources and tools</p>	<p style="text-align: center;">4</p> <p>Write performance objectives</p>	<p>Synthesize information about the skills to be learned, the characteristics of the target group, the learning context, and the performance context to derive statements of learning outcomes tailored for the content domain, the learners' characteristics, and the learning and performance contexts</p>	<p>Performance objectives for each step in the model that identify the</p> <ul style="list-style-type: none"> ■ Skills to be learned ■ Conditions under which they will be performed ■ Criteria for successful performance
<p>Performance objectives for each step in the model that identify the</p> <ul style="list-style-type: none"> ■ Skills to be learned ■ Conditions under which they will be performed Criteria for successful performance 	<p style="text-align: center;">5</p> <p>Develop assessment instruments</p>	<ul style="list-style-type: none"> ■ Analyze performance objectives to identify format of test item or task (objective, live performance, product creation) that is most congruent with the behavior or action in the objective ■ Use rules of item formatting to create test items, directions, and rubrics if needed 	<p>Enough criterion-referenced test items for each performance objective to create the different tests needed for the instruction including:</p> <ul style="list-style-type: none"> ■ entry behaviors tests ■ pretests ■ practice tests ■ posttests

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<p>All outputs above from steps 1 through 5 above</p>	<p>6 Develop instructional strategy</p>	<p>Synthesize materials created from steps 1 through 5 to identify an appropriate instructional strategy</p> <p>Synthesize the following areas into the strategy on:</p> <ul style="list-style-type: none"> ■ Current theories of learning ■ Results of learning research ■ Characteristics of instructional delivery medium ■ Content ■ Learner characteristics ■ Contexts' characteristics (e.g., resources) 	<p>Descriptions of:</p> <ul style="list-style-type: none"> ■ Preinstructional activities ■ Presentation of information ■ Practice and feedback ■ Testing ■ Follow-through activities
<p>Descriptions of:</p> <ul style="list-style-type: none"> ■ Preinstructional activities ■ Presentation of information ■ Practice and feedback ■ Testing <p>Follow-through activities</p>	<p>7 Develop and select instructional materials</p>	<p>Follow instructional strategy to <i>produce</i> the instruction prescribed (write, select, organize, package, etc.)</p>	<p>All appropriate instructional materials such as:</p> <ul style="list-style-type: none"> ■ Instructor's manual ■ Student's manual ■ Student instruction ■ Projection (e.g., Power Point) ■ Video ■ Web-based instruction
<p>All appropriate instructional materials such as:</p> <ul style="list-style-type: none"> ■ Instructor's manual ■ Student's manual ■ Student instruction (modules) ■ Projection (e.g., Power Point) ■ Video ■ Web-based instruction 	<p>8 Design and conduct formative evaluation of instruction</p>	<ul style="list-style-type: none"> ■ Implement and evaluate materials and tests with individuals from target group (one-to-one evaluations) ■ Implement and evaluate materials and tests with a small group from target population (small group evaluations) ■ Implement and evaluate materials and tests in the intended learning setting (field trial) 	<ul style="list-style-type: none"> ■ Learner-based data on feasibility given learners, resources, and setting; clarity of vocabulary, descriptions, examples, illustrations; sequence, size chunks; learner attitudes. ■ Learner-based data from entry behaviors tests, pretests, posttests, and attitude questionnaires and/or interviews

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<p>■ Learner-based data on feasibility given learners, resources, and setting; clarity of vocabulary, descriptions, examples, illustrations; sequence, size chunks; learner attitudes.</p> <p>■ Learner-based data from entry behaviors tests, pretests, posttests, and attitude questionnaires and/or interviews</p> <p>Quality instruction, appropriate for domain, learners, and setting that has undergone formative evaluation and revision</p>	<p>9 Revise instruction</p>	<p>Summarize and analyze data from one-to-one trials, small group trials, and field trials</p> <p>Revise instructional materials and procedures using learner-based data tables that indicate areas of strength and problems in the materials or procedures</p>	<p>Instruction revised following each one-to-one trial</p> <p>Instruction revised again following small group trial</p> <p>Instruction revised again following field trial</p>
	<p>10 Design and conduct summative evaluation</p>	<p>Conduct <i>expert judgment</i> evaluation including:</p> <ul style="list-style-type: none"> ■ Congruence analysis ■ Content analysis ■ Design analysis ■ Feasibility analysis <p>Conduct field trial (outcomes analysis) evaluation including:</p> <ul style="list-style-type: none"> ■ Impact on learners ■ Impact on job ■ Impact on organization ■ Management analysis 	<p>Evidence of materials potential for meeting the organizations' needs</p> <p>Evidence of materials effectiveness with target learners in the prescribed setting</p>