

| Phases of the Analysis of the Learning Task | |
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| Step | Description |
| Write the learning goals | Are statements of purpose or intention, what learners should be able to do at the conclusion of instruction |
| Determining types of learning | Identifying the type of learning helps the designer to determine how to analyze the learning goal into its component parts. Later this will provide clues as to how to teach and assess student learning of the goal |
| Conducting an information-processing analysis | <p>Is the first step in decomposing or breaking down the goal into its constituent parts, identifying what the students need to learn or attain a goal. Following is a procedure:</p> <p>Read and gather as much information as possible about the task and content implied by the goal. This helps the designer to familiarize with common terminology and help to understand what is involved in the skill.</p> <p>Convert the goal into a representative test question</p> <p>Give the problem to several individuals who know how to complete the task and do one or several of the following activities: observe them completing the task, and ask them to talk aloud about their thought processes as they complete the task, observe and write down the steps, ask the individuals to write the steps.</p> <p>Review the written steps and ask questions about the process</p> <p>If more than one expert is used in steps 3 and 4, identify common steps and decision points used by the experts in steps 3 and 4</p> <p>Identify the shortest, least complex path for completing the task, noting factors that require this simpler path</p> <p>Note factors that may require a more complex path or more steps (these may indicate decision points)</p> <p>Select the circumstances and the simpler or more complex paths, that best match the intentions for your goal</p> <p>List the steps and decision points appropriate to your goals</p> <p>Confirm the analysis with other experts.</p> |
| Conducting the prerequisite analysis | Performing this function will convert the goal and task into a hierarchy. This process is often called top-down analysis, as you are starting at the top of analysis with the most superordinate task and knowledge. |

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| <p>Writing learning objectives</p> | <p>Means that we have to convert each of the prerequisite statements and the goal statement into more precise, concrete, and specific terms. You will be converting prerequisite statements and the goal statement into learning objectives. We must determine what kind of evidence of learning will accept as an indication that learning has occurred. The most explicit learning objectives describe what learners can do to demonstrate that they have learned and it should be observable.</p> <p>Objectives can be written at the lesson level, the course level, or various intermediate levels such as units, blocks or chapters.</p> <p>Three-component objectives are verbal statements of learning outcomes that include three parts: a) a description of the terminal behavior or actions that will demonstrate learning, b) a description of the conditions of demonstration of that action and c) a description of the standard or criterion.</p> |
| <p>Design the evaluation</p> | <p>Evaluation serves two purposes in instructional design: to assess individual student's performances and to provide information about what kinds of revisions are needed in the instructional materials.</p> <p>When designing assessment items for a lesson, you should do the following:</p> <ol style="list-style-type: none"> 1. Identify the purpose of the assessment instrument and the type of model that will be followed in its development 2. Determine what kinds of assessments are necessary and where they should occur in the instructional strategy 3. Determine what forms the items should take (performance test, essay, multiple choice, portfolio, and so on) to adequately assess the type of learning that is represented by the objective 4. Write test items and directions that are clear to the learner, originally in the form of item specifications 5. Determine how many items are needed to assess learner's learning of an objective and what constitutes an adequate performance to reflect that learning 6. Determine how to select among objectives or what proportion of objectives should appear on the assessment instrument by writing an instrument blueprint. |

Smith, P.L. & Ragan, T.J. (2005). Instructional Design. Third Edition. Willey Jossey-Bass Education. Chapter 5-6