

I. Learning Task Analysis

ASSIGNMENT: LEARNING TASK ANALYSIS

(25 points)

The second step in the Instructional Design Process is the analysis of the learning task. From the Needs Assessment that you conducted you should have identified instructional (training) and non-instructional needs. The non-instructional needs will be addressed in more detail later. You should now focus on the instructional need. Your instructional need should have been expressed in the form of a goal or series of goals. Those goals represent your starting point for this assignment.

There are four primary components in performing a learning task analysis are based upon the model presented in your textbook.

- Write a learning goal.
- Determine the types of learning (or understanding).
- Write learning objectives for the learning goal and each of the prerequisites.
- Conduct a prerequisite analysis and determine the type of learning of the prerequisites.

Conducting the Learning Task Analysis

Step # 1: Writing the Learning Goal: Write a learning goal based upon your Needs Assessment. Learning goals should be broad statements that describe the final outcome. You may have already written your learning goal or goals in your needs assessment. If so, begin with that goal. Remember your goals are broad statements (5 pts).

Step # 2: Determine the Types of Learning: You will complete step # 2 for each goal that you wrote as part of step # 1. Once you have written the learning goal you need to determine the types of learning or understanding represented within that learning goal. In order to analyze your learning tasks it is helpful to select a theory that will guide your thinking about the learning task. Several prominent theories are common in educational settings. Those theories include, Gagne's Learned Capabilities, Wiggins & McTighe's Theory of Understanding, or Bloom's Cognitive Taxonomy. Which theory you select may depend upon your familiarity and understanding of the theory or upon the organization for whom you are preparing your instructional design. Wiggins & McTighe's theory works well with most subjects, but may be particularly compatible with social studies, science, and English. Gagne's theory may be more compatible with more technical subjects or skill based subjects such as mathematics, art, physical education or technology related applications. You should choose the theory that makes the most sense to you for your analysis.

The focus of this analysis is on WHAT is learned. Select one of the following theories and analyze the learning represented by your learning goal. You may even consider using a couple of models to assist you in your task analysis (10 pts).

Theories of Learning For Learning Task Analysis

The theories are presented as examples. The chart is one way of writing up your analysis. You are free to write up your analysis in any way that is best for you to communicate the embedded learning within your goal or goals. For explanations of the theories below consult your textbooks for this course. Bloom's taxonomy of cognitive learning is not discussed in your textbooks, but is a common theory that you may be familiar with and are free to use for your analysis.

Theory # 1: Gagne's Learning Outcomes

One model that can be used to analyze learning is presented by Gagne. This model is particularly applicable for technology related designs or designs that include rules or procedures. This model can also be very good when using a problem based learning design.

Learned Capability	Overarching Understanding Desired
Declarative Knowledge	Declarative Knowledge: The learners will be familiar with the following terms: Editor, Explorer, Fetch, HTML, Upload, WebBrowser, JPEG, GIF.
Discriminate	Discrimination: The learners will be able to explain the difference between a JPEG and GIF picture format.
Concept	
Rule/Procedure	Procedures: The learner will <ul style="list-style-type: none">• Be able to use the horizontal bar.• Be able to use tables within a web page• Create hyperlinks on the webpage• Attach pictures to the web page• Upload a webpage using Fetch• Change the color of the font on the web page• Change the size of the font on the web page
Principles	
Problem solving	
Attitude	Attitudes: The learner will appreciate the value of having information available to families and students on the web.
Psychomotor	
Metacognitive Strategy	

Theory # 2: This model of analysis utilizes Bloom's Cognitive Taxonomy.

*Note Blooms taxonomy has been recently revised from:

Knowledge>Understanding>Application>Analysis>Synthesis>Evaluation to
Remembering>Understanding>Applying>Analyzing>Evaluating>Creating.

As an instructional designer, it will be your judgment regarding which taxonomy you utilize.

Bloom's Cognitive Level	Overarching Understanding Desired
Knowledge	Learn the following terms: ROM RAM CPU
Understanding	
Application	
Analysis	
Synthesis	
Evaluation	

Theory # 3: One model for instructional design is the Wiggins & McTighe Model: This model is particularly effective for content-based instructional needs. If you select the Wiggins & McTighe model use the following chart to analyze the learning task:

Use the following chart as a guide for your analysis. This analysis is based upon the figure 5.6 on pages 76 and 77 of Wiggins and McTighe.

FACET	Overarching Understanding Desired
EXPLANATION	Explanation: Students will explain, using political events, why the southern states decided to secede from the Union in 1860 rather than prior to 1860.
INTERPRETATION	Interpretation: Students will use primary source documents to prepare for their dramatization depicting a conversation about the expansion of slavery into the territories.
APPLICATION	
PERSPECTIVE	Perspective: Students will dramatize the southern and northern views of the election of 1860 and associated views of slavery and the expansion of slavery into the territories.
EMPATHY	
SELF-KNOWLEDGE	Self-Knowledge: Students will prepare a reflection about how they would respond to the political and social events of the late 1850s from the perspective of a teenager who must contemplate joining the Union or Confederate army and why they would fight for their chosen cause.

Step # 3: Writing Educational Objectives: Objectives are written at the lesson or learning task level. Once you have conducted an information processing analysis you are able to determine what the prerequisite skills, knowledge and attitudes should be. The remaining skills, knowledge and attitudes will be taught or experienced by the learners who engage in your instructional sequence. For each of these skills, knowledge, attitudes and processes you should write an educational objective. Objectives should be more specific than learning goals. Remember that objectives need to be specific and measurable (5 pts).

For Example:

FACET	Overarching Understanding Desired	Objectives
EXPLANATION	Explanation: Students will explain, using political events, why the southern states decided to secede from the Union in 1860 rather than prior to 1860.	<ol style="list-style-type: none"> 1. Students will explain the rise of the Republican Party 2. Students will define the Compromise of 1820 and 1850. 3. Students will explain how political party shifted to the northern states during the 1830-1850s. 4. Students will explain the effect of multiple party candidates on the elections during the 1850s.
INTERPRETATION	Interpretation: Students will use primary source documents to prepare for their dramatization depicting a conversation about the expansion of slavery into the territories.	<ol style="list-style-type: none"> 1. Students will identify the background of the writer of the primary source document. 2. Student will place the document within historical context. 3. Students will read and interpret the Dred Scott decision.
APPLICATION		
PERSPECTIVE	Perspective: Students will dramatize the southern and northern views of the election of 1860 and associated views of slavery and the expansion of slavery into the territories.	<ol style="list-style-type: none"> 1. Students will assume the role of a character from either the northern or southern states and demonstrate their understanding of their characters socio-economic status by their selection of costume and demeanor. 2. Students will engage in dialogue that represents their character's views of the slavery issues of the 1850s.

EMPATHY		
SELF KNOWLEDGE	Self-Knowledge: Students will prepare a reflection about how they would respond to the political and social events of the late 1850s from the perspective of a teenager who must contemplate joining the Union or Confederate army and why they would fight for their chosen cause.	

Step # 4: Identify what pre-requisite skills, knowledge and beliefs your students need prior to coming to your instructional design: If your educational objectives build upon pre-requisite knowledge or skills you'll want to explain those pre-requisites. In addition, if your students need to come with certain attitudes or dispositions than you'll need to explain those as well. For example: When you enter our undergraduate teacher education program you need to pass the basic skills test. That is a pre-requisite requirement before being admitted into our teacher education program. In addition, applicants to the teacher education program also are required to participate in an interview. That interview identifies the to what degree certain attitudes necessary to be successful in teacher are exhibited by the interviewee. For your design are there certain knowledge, skills or attitudes that need to be present for success? Keep in mind that you don't necessarily need to have a test or interview to measure those, but they should still be identified (5pts.).

Writing Up Your Results

You may write up your results in any fashion that you choose. The above use of charts for analysis is just one example meant to illustrate a way of thinking about your task analysis. You may choose to use the charts as part of your write up. You may also choose to write up the analysis in a narrative. Choose a way to write up your results that makes the most sense to you and is appropriate for your intended audience.