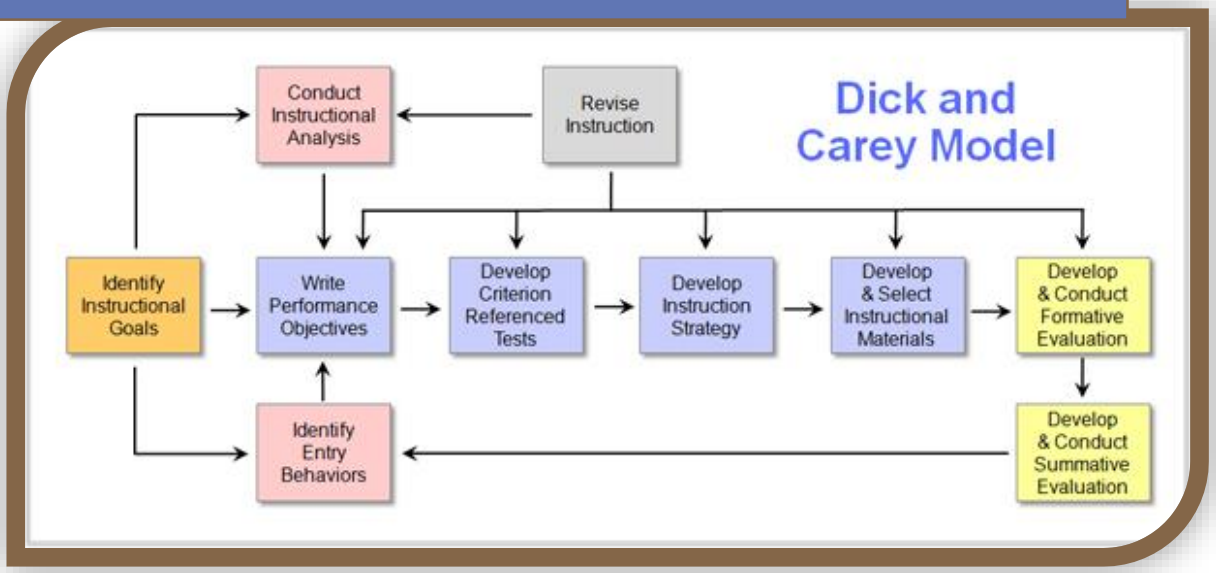
Dick and Carey Model



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LSTE 7311
UALR

Instructional Goals and Analysis

Front-end Analysis

A performance analysis was conducted to determine the instructional goals for Chapter 5 of Dick, Carey & Carey's The Systematic Design of Instruction. A front end analysis was conducted to help determine if students need the information in Chapter 5 to better understand the Instructional Design Process. The results are as follows:

Need

1. Junior/senior level education majors should have an understanding of how to analyze learners and contexts
    a. Junior/senior level education majors often do not know the details of what is taught or how it is taught.
2. Junior/senior level education majors should understand the importance of understanding learners.
    a. In many cases instruction is created without any consideration being given to who the learners are and on the receiving end.
    b. One of the main focuses of Instructional Design Technology is the idea of individualized learning. In order for there to be a chance of that happening, it's important to know who your learners are.
3. Junior/senior level education majors also need to understand the importance of not forgetting the performance and learning context when analyzing learners.
    a. Adequate attention is not usually given to the idea of context.
    b. A better understanding of the settings in which new skills, knowledge, or attitudes will be used will allow uses to do a better job of planning instructional activities that will relate to the real world.

Feasibility

In order for students to have a mastery of Chapter 5 they will need to incorporate the use of the ADDIE model to help them identify how to analyze learners and contexts. It is assumed that the level of mastery taught by this project is the best method for the job even though the analysis is from a small sample size under time constraints.

The instructor has some expertise in this area and will employ the help of other students who are currently mastering instructional design. The subject is a valuable part of the class and warrants enough attention for development/delivery and should be completed in one semester.

Clarity

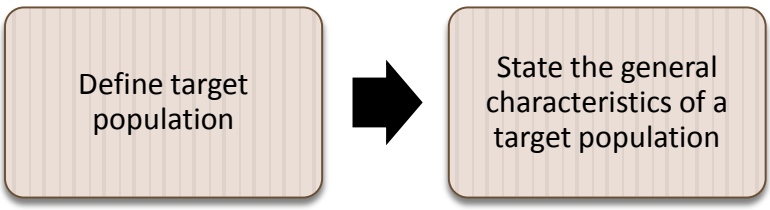
At the conclusion of the training learners will be able to:

1. Name, analyze, and describe the general characteristics of a target population the general characteristics of a target population that are important to consider when developing instruction.
2. Name, analyze, and describe the contextual characteristics contextual characteristics of the eventual setting in which acquired skills will be performed.
3. Name, analyze, and describe contextual characteristics of the instructional setting.
4. For a given instructional goal and context, describe methods and sources for obtaining information about the target population, performance setting, and instructional setting.
5. Review instructional analysis work in light of learner and context information and revise as indicated.

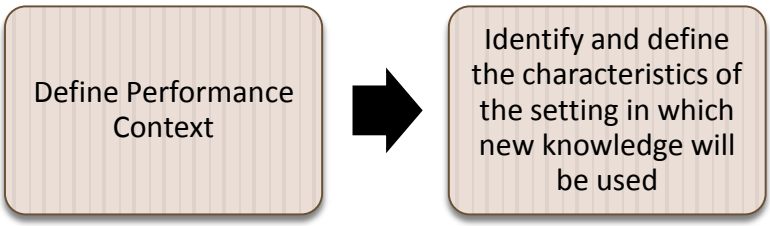
Goal Analysis

The five goals for Chapter 5 coincide with the chapter objectives at the beginning of Chapter 5. The analysis for each goal is as follows:

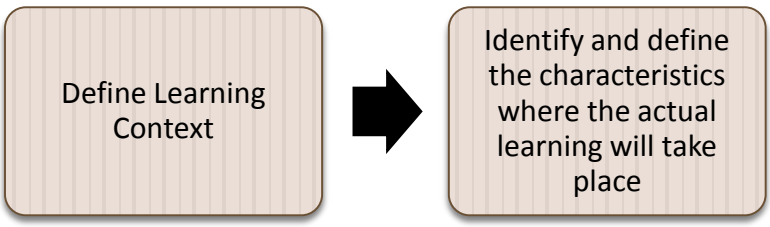
Goal 1: Name, analyze and describe the general characteristics of a target population the general characteristics of a target population that are important to consider when developing instruction.



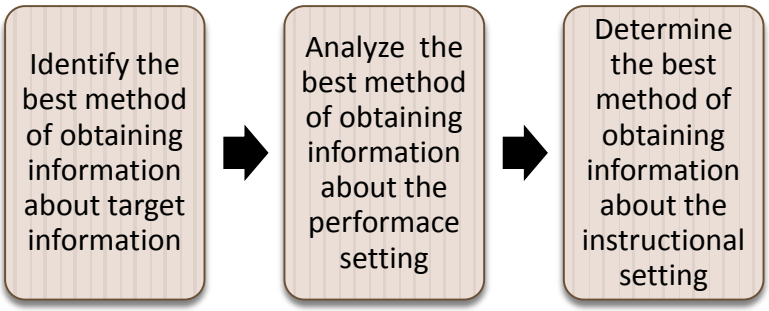
Goal 2: Name, analyze, and describe the contextual characteristics of the eventual setting in which acquired skills will be performed.



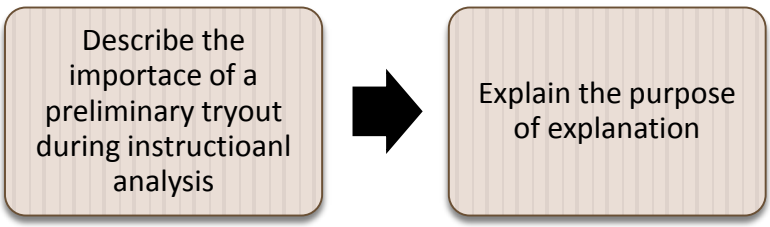
Goal 3: Name, analyze, and describe contextual characteristics of the instructional setting.



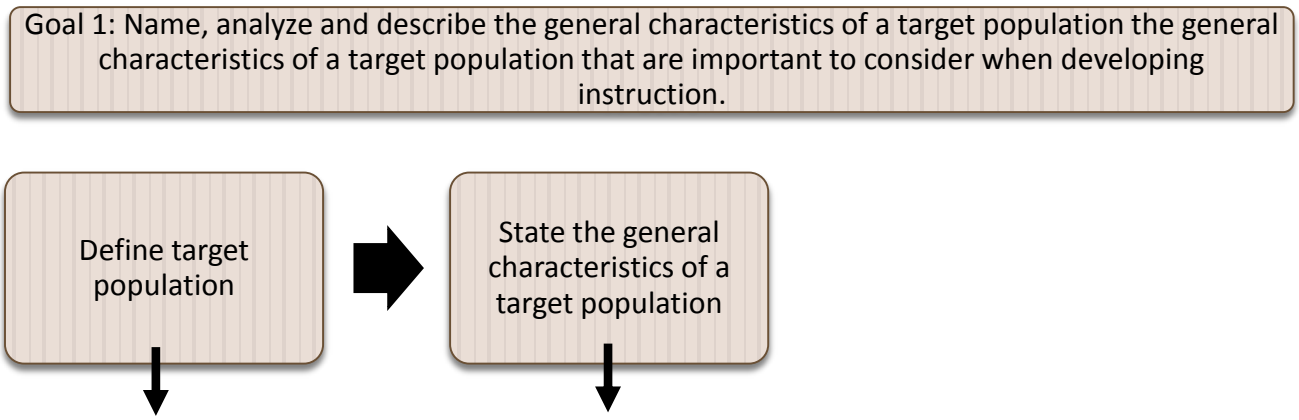
Goal 4: For a given instructional goal and context, describe methods and sources for obtaining information about the target population, performance setting, and instructional setting.

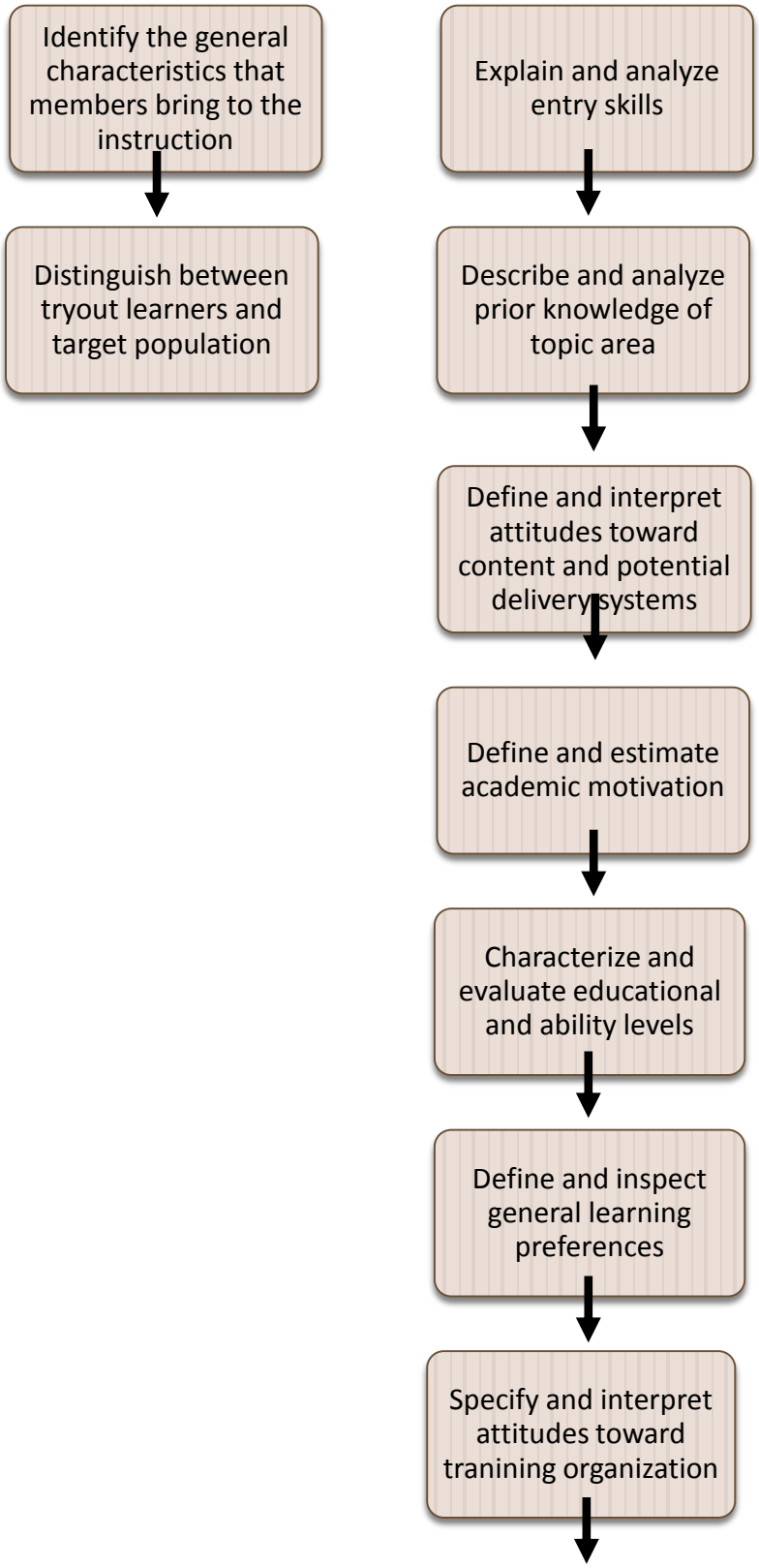


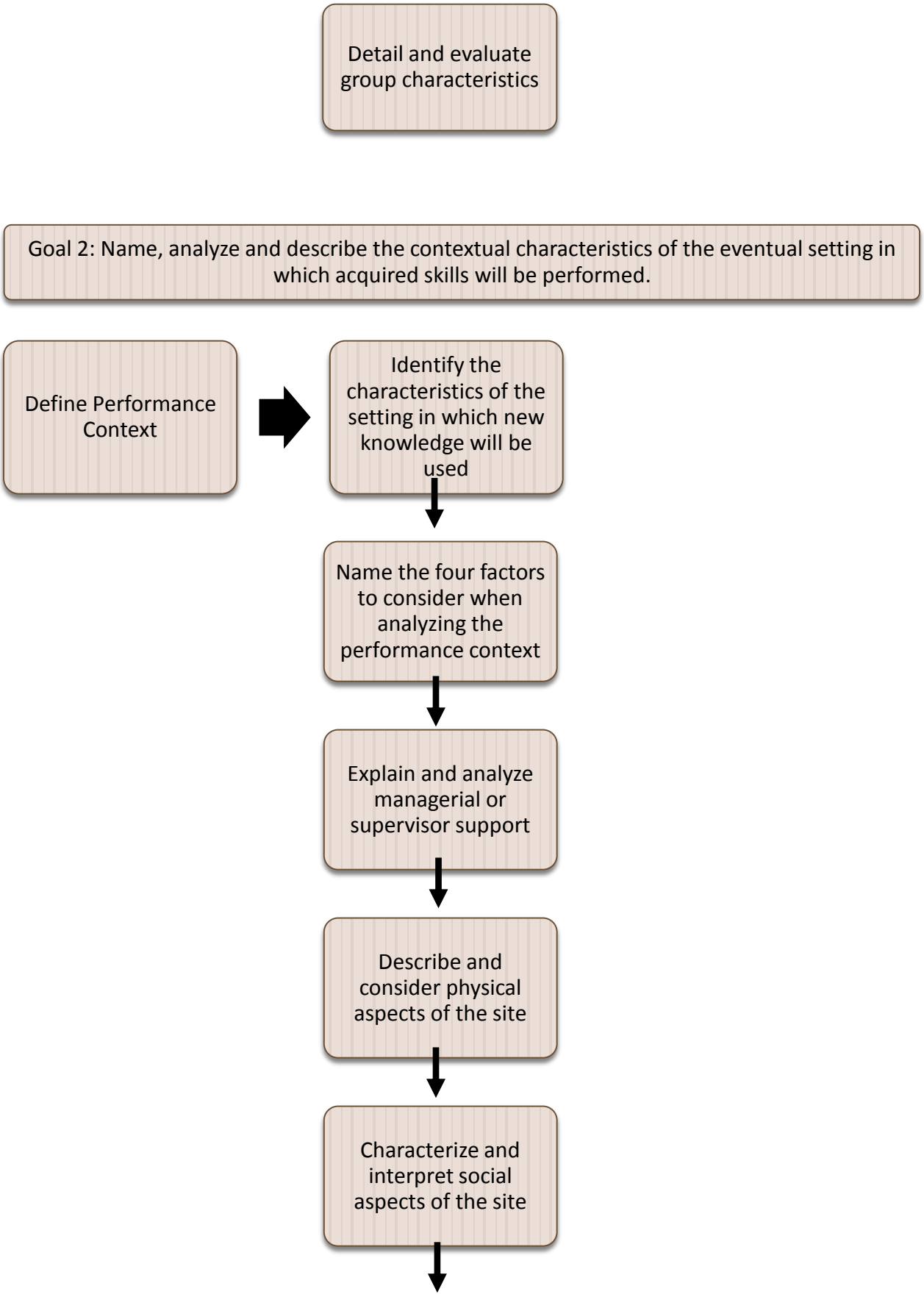
Goal 5: Review instructional analysis work in light of learner and context information and revise as indicated.

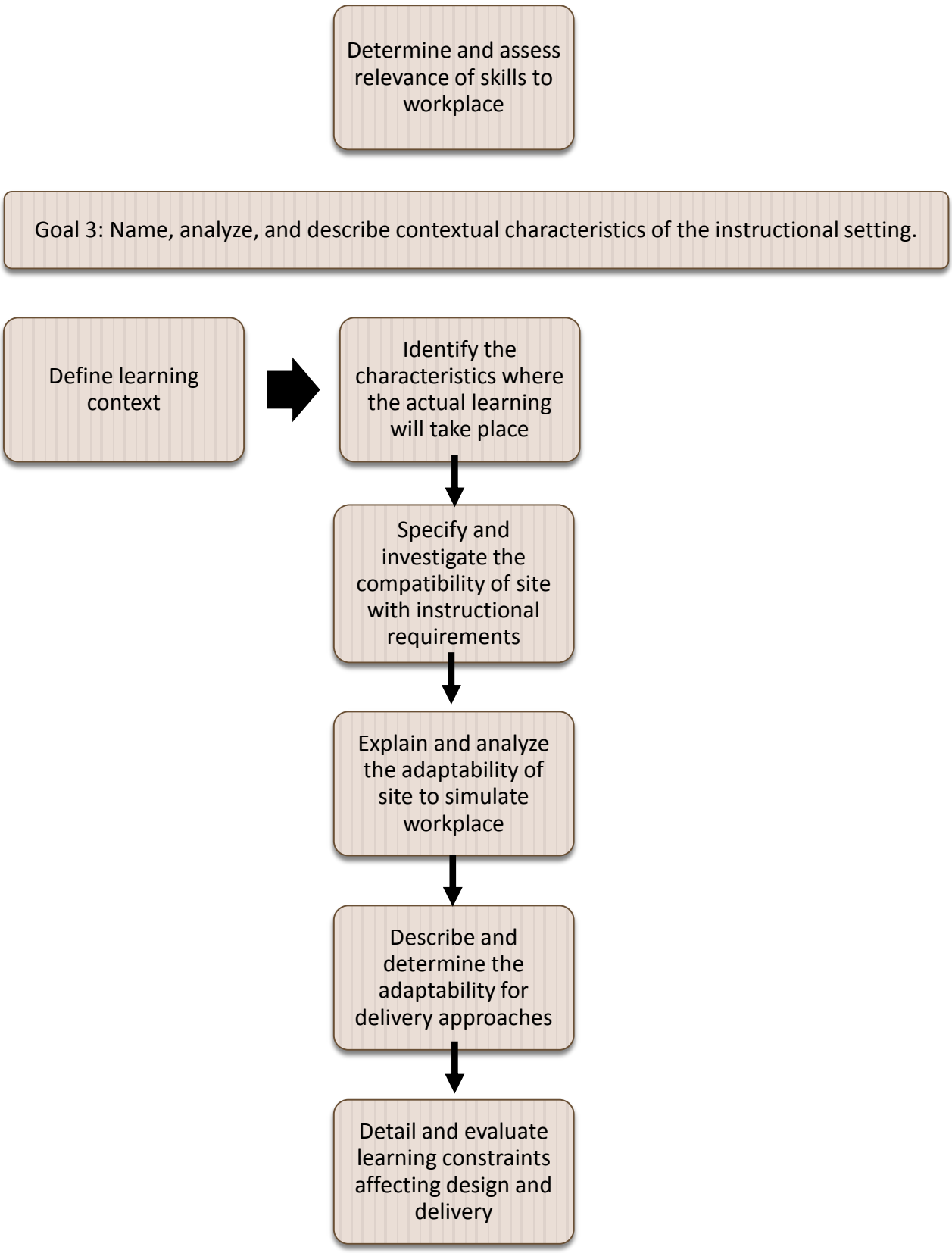


Subordinate and Entry Skill

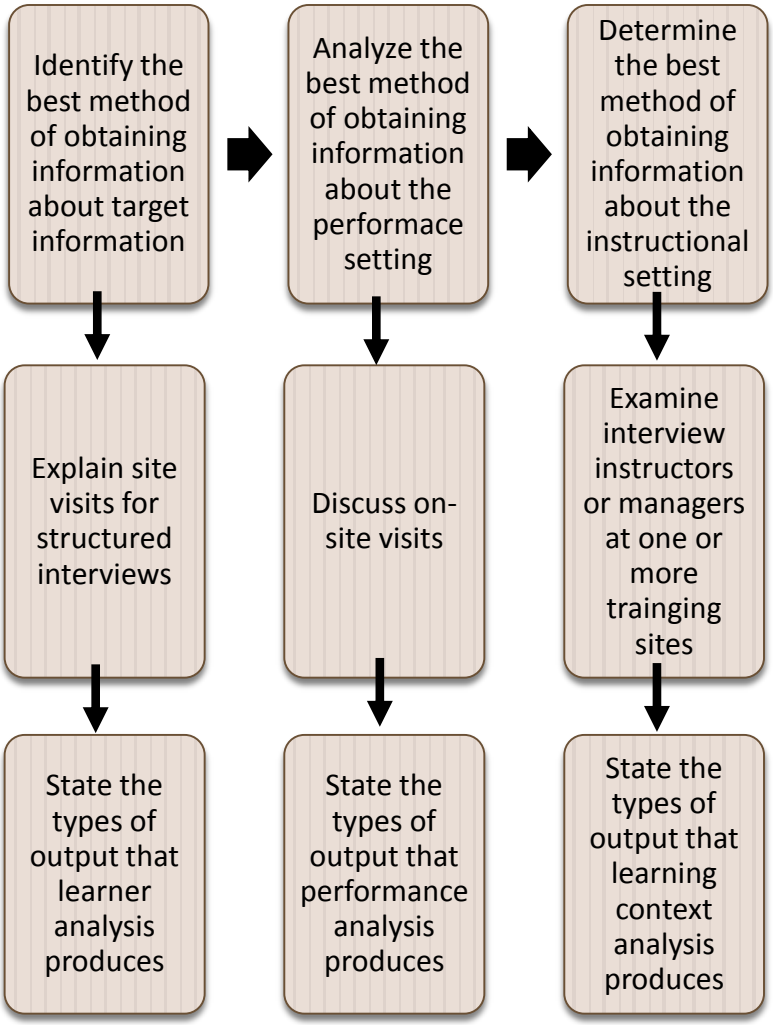



Identify the general characteristics that members bring to the instruction
Distinguish between tryout learners and target population
Explain and analyze entry skills
Describe and analyze prior knowledge of topic area
Define and interpret attitudes toward content and potential delivery systems
Define and estimate academic motivation
Characterize and evaluate educational and ability levels
Define and inspect general learning preferences
Specify and interpret attitudes toward tranining organization

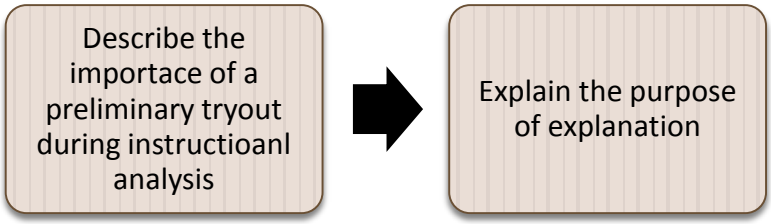

Detail and evaluate group characteristics
Goal 2: Name, analyze and describe the contextual characteristics of the eventual setting in which acquired skills will be performed.
Define Performance Context
Identify the characteristics of the setting in which new knowledge will be used
Name the four factors to consider when analyzing the performance context
Explain and analyze managerial or supervisor support
Describe and consider physical aspects of the site
Characterize and interpret social aspects of the site


Determine and assess relevance of skills to workplace
Goal 3: Name, analyze, and describe contextual characteristics of the instructional setting.
Define learning context
Identify the characteristics where the actual learning will take place
Specify and investigate the compatibility of site with instructional requirements
Explain and analyze the adaptability of site to simulate workplace
Describe and determine the adaptability for delivery approaches
Detail and evaluate learning constraints affecting design and delivery

Goal 4: For a given instructional goal and context, describe methods and sources for obtaining information about the target population, performance setting, and instructional setting.



Goal 5: Review instructional analysis work in light of learner and context information and revise as indicated.



Identify Entry Behaviors

Learners are junior/senior level education majors in the LSTE program, but this chapter can be used by any students who wish to learn more about instructional design. Up to this point, learners should have mastered entry behaviors such as writing, college-level vocabulary, and recognizing parts of a lesson plan.

Learners have been exposed to a variety of approaches and should be functioning at a motivated experienced college level due to this being a graduate level course. It assumed that learners will have experience in an online environment using Black board where no "live" instructor is required.

Learners come from a wide range of education fields of varying age groups and professional experience. Learners will possess a variety of preferred learning styles and attributes with active learning potentially being the focus either through hands-on related experiences or discussion.

Performance Objectives

Objective 1

From a specific set of population identifiers; name, analyze and describe the general characteristics of a target population that are important to consider when developing instruction. Be sure to cite specific examples to cover all 7 categories.

This objective falls under the Analysis Level of Bloom's Taxonomy. The Analysis Level has attributes of examining and breaking information into parts by identifying motives or causes; making inferences and finding evidence to support generalizations.

Objective 4

For a given instructional goal and context, describe methods and sources for obtaining information about the target population, performance setting, and instructional setting. Explain in your own words how information for a specific target population would be collected and measured.

This objective falls under the Comprehension Level of Bloom's Taxonomy. The Comprehension Level has attributes of demonstrating understanding of facts and ideas by organizing, comparing, translating, interpreting, giving descriptions and stating main ideas.

Objective 5

Given the results of an instructional analysis, review instructional analysis work in light of learner and context information and revise as indicated. Provide a list of steps used to prove the reasonableness of your analysis.

This objective falls under the Synthesis Level of Bloom's Taxonomy. The Synthesis Level has attributes of compiling information together in a different way by combining elements in a new pattern or proposing alternative solution.

Instructional Strategy

Chunk	Reinforcement Activity	Introduction/Transition
Background	Objective 1 Discussion on Analyzing Learners and Contexts. Provide information about project for chapter 5. State that leaners are allowed to make some assumptions regarding learners.	**Introduction:** Explanation of graphical representation of the Dick and Carey model relating to the section on Analyze and Learners and Contexts. **Summary:** Now that you have some background information on analyzing learners and contexts, **Transition:** let's begin by breaking down the specific components Introduction: starting with learner analysis. **Bridge:** Let's begin by considering the learners for any given set of instruction, referred to as the target population.
Learner Analysis	Objective 1 Study table 5.1 Example for Analyzing Learner Characteristics. Answer a set of questions, each one related to a different characteristic of the target population. Create a description of the target population from a provided list of learners. (Provide list of learner descriptions to be used in project) The Analysis should be broken down by the 7 categories.	**Summary:** By the time you reach this step in the instructional design process you should know what goal is expected to be accomplished and what is expected of your learners. **Transition:** However, you may need to know more about the learners. Although you identified who was associated with the need and who should accomplish the goal, you should take a closer look at these learners in order to identify possible mismatches between the learners and the goals. **Introduction:** In order to identify these mismatches we need various ways to compare and collect data about our learners.

		Bridge: Figure 5.4 shows an example of how this data is collected.
Data for Learner Analysis	Objective 4 Study table 5.4. Use table 5.4 as an example to create part I of a mock interview that includes learner characteristics.	**Summary:** That may seem like a lot of information to collect about your learners, but it can aid you immensely in providing more meaningful learning experiences for the learners. **Transition:** In addition to analyzing the learners, this step of the instructional design process also deals with analyzing the performance context. **Introduction:** The performance context is the setting in which the new skills and knowledge will be used by learners after the instruction is completed. **Bridge:** There are four considerations that should be used when analyzing performance context**.**
Performance Context Analysis	Objective 2 Study table 5.5 Part II of mock interview	**Summary:** Knowing this information will enable you to create a more applicable environment for learning and should help increase learners' motivation, and aid in the transfer of new knowledge. **Transition:** The purpose of these visits are to gather information from potential learners and managers as well as the physical environment. **Introduction:** Analyzing the performance context requires that you actually visit the site in question. Information can be obtained from on-site visits using interviews and observations. **Bridge:** These interviews and observations should be planned well in advance and are important because they provide critical information to the project and the skills of designers.
Data for Performance Context Analysis	Objective 4 Produce written questions that focus on performance context to be used in interviews of the project. Each question should cover 2 major outputs of the	**Summary:** The major outputs, or answers to the written questions of this step, should be unique depending on the setting. **Transition:** The other type of context is the learning context. This is the setting where the actual learning will take place.

	Performance Context Analysis Phase.	**Introduction:** The goal of this context is to familiarize yourself with the facilities where the learning will occur, and to identify any confines of the setting that might affect the design of instruction. **Bridge:** Dick and Carey list several factors to consider when analyzing the learning context.
Learning Context Analysis	Objective 3 Study table 5.6 Create a learning context analysis for ongoing project containing the four key elements	**Summary:** It is important to familiarize yourself with the surroundings where learning will take place, and to recognize any limitations of the setting that might affect the final outcome of instruction. **Transition:** These limitations are identified by data produced by on-site interviews. **Introduction:** Analyzing the learning context requires that you actually visit the site in question. Information can be obtained from on-site visits by interviewing instructors, managers, and potential learners, as well as observing the site in use. **Bridge:**
Data for Learning Context Analysis	Objective 4 Provide a list of example questions and have students create a list of questions that can be used to interview instructors, managers, and potential learners	**Summary:** At the end of this process you should have an idea of who your learners are, the context in which they will be exposed to your instructional materials, and the context in which they will use their new skills. **Transition:** With this information you will be ready review and revise your Instructional Analysis. **Introduction:** Evaluation and Revision allows you to make changes you want to make based on information to improve your instruction. **Bridge:** It provides a detailed summary of the criteria you can use to evaluate statements of learner's characteristics, performance, and instructional goals.
Evaluation and Revision of the Instructional Analysis	Objective 5 Combine all the previous parts of the project and use the rubric at the end of the chapter to evaluate your	**Summary:** The evaluation and revision process can be done in many ways. However, the easiest and most convenient way is to use a rubric that classifies and summarizes all the

	project of Analysis of Learners and Contexts.	information one needs to have in a complete analysis.

Instructional Material

Objective 1- From a specific set of population identifiers; name, analyze and describe the general characteristics of a target population that are important to consider when developing instruction. Be sure to cite specific examples to cover all 7 categories.

Formative Assessment:

- Criterion-referenced practice test that assess each student's achievement of the goal and allows students to test their knowledge and practice their skill as we go along.

Summative Assessment:

- Discussion board posting. Students will be provided with information about a project relating to Chapter 5. Students will discuss the difference between target population and tryout learners.
- Short answer questions. Answer a set of questions, each one related to a different characteristic of the target population.
- Project development. Create a description of the target population from a provided list of learners. (Provide list of learner descriptions to be used in on-going project) The Analysis should be broken down by the 7 categories of Learner Analysis.

Instructional Materials:

1. Dick, Carey, and Carey (2015). This is our primary text and focuses on the ID process developed by Dick, Carey, and Carey.
2. Discussion board postings. These are formal assessments that serve as instructional materials allow the learning practice in describing what is taking place in each part of the analysis and context.
3. Short answer questions related to target population. These questions will help the student recognize different areas of the target population that can later be used to create a description from a provided list.
4. Sample lists, questions, and criteria of learners that will be used to in parts of the cumulative project

Objective 2- From a specific set of given learners; Name, analyze, and describe the contextual characteristics contextual characteristics of the eventual setting in which acquired skills will be performed.

Formative Assessment:

- Criterion-referenced practice test that assess each student's achievement of the goal and allows students to test their knowledge and practice their skill as we go along.

Summative Assessment:

- Project development. Students will create part 2 of the mock interview. In this part of the interview students will be required to classify characteristics into information categories, data sources, and performance site characteristics.

Instructional Materials:

1. Dick, Carey, and Carey (2015). This is our primary text and focuses on the ID process developed by Dick, Carey, and Carey.
2. Mock interview template that will be used for the 2 part mock interview assignment.
3. Table 5.4 from text book

Objective 3- From a specific set of given learners; Name, analyze, and describe contextual characteristics of the instructional setting.

Formative Assessment:

- Criterion-referenced practice test that assess each student's achievement of the goal and allows students to test their knowledge and practice their skill as we go along.

Summative Assessment:

- Project development. Students will study table 5.6 and create a learning context analysis for ongoing project containing the four key elements

Instructional Materials:

1. Dick, Carey, and Carey (2015). This is our primary text and focuses on the ID process developed by Dick, Carey, and Carey.

2. Table 5.6 from text book

Objective 4- For a given instructional goal and context, describe methods and sources for obtaining information about the target population, performance setting, and instructional setting. Explain in your own words how information for a specific target population would be collected and measured.

Formative Assessment:

- Criterion-referenced practice test that assess each student's achievement of the goal and allows students to test their knowledge and practice their skill as we go along.

Summative Assessment:

- Project development. Students will produce written questions that focus on performance context to be used in interviews of the project. Each question should cover 2 major outputs of the Performance Context Analysis Phase.
- Project development. With the help of table 5.4 students will create a mock interview that includes learner characteristics.
- Project development. Student will be provided with a list of example questions and have asked to create a list of questions that can be used to interview instructors, managers, and potential learners.

Instructional Materials:

1. Dick, Carey, and Carey (2015). This is our primary text and focuses on the ID process developed by Dick, Carey, and Carey.
2. Table 5.4 from text book
3. Sample lists, questions, and criteria of learners that will be used to in parts of the cumulative project

Objective 5- Given the results of an instructional analysis, review instructional analysis work in light of learner and context information and revise as indicated. Provide a list of steps used to prove the reasonableness of your analysis.

Formative Assessment:

- Criterion-referenced practice test that assess each student's achievement of the goal and allows students to test their knowledge and practice their skill as we go along.

Summative Assessment:

- Students will be required to combine all the previous parts of the project and use the rubric at the end of Chapter 5 to evaluate their project of Analysis of Learners and Contexts.

Instructional Materials:

1. Dick, Carey, and Carey (2015). This is our primary text and focuses on the ID process developed by Dick, Carey, and Carey.
2. Rubric for Evaluating Analysis of Learners and Contexts

Formative and Summative Evaluation

Data Collection Method	Evaluation	Revision Strategy
Reactions of the subject matter expert	**Initial Evaluation** Assignments will be provided to a SME who will review them and make suggestions for improvement.	Adjustments will be made based on input of SME
Reactions of a manager or supervisor	**Initial Evaluation** Instructor will conduct a one-two-one evaluation with learner, manager, or supervisor **Subordinate Evaluation** Students will be used in place of manager/supervisor after initial implementation	**Initial Revision** Instructor will review reactions of learner, manager, or supervisor and make appropriate changes. **Subordinate Revision** The instructor will review student reactions and responses to the assignments making careful note of areas where learners seem to be having trouble applying the concepts specific to the lesson.
Test data collected on entry skills tests, pretests, and posttests	**Initial Evaluation** Criteria data gained from one-to-one evaluation with learners **Subordinate Evaluation** Student rubrics Instructor evaluation	**Initial Revision** Instructor will collect criteria data from one-to-one evaluation with learners. Data gathered from one-to-one evaluations will be evaluated for deficiencies observed using a criteria test. **Subordinate Revision**

		Modifications will be made based of discrepancies between one-to-one criteria data, student rubrics, and instructor evaluation at the end of each course with the understanding that it is an ongoing process.
Learner comments on difficulties of materials	**Initial Evaluation** Initial comments will be obtained from learner in one-to-one environment either verbally or in writing. **Subordinate Evaluation** Email/LMS messaging Discussion board posting	**Initial Revision** Changes will be made based on one-to-one comments. **Subordinate Revision** Instructor will answer questions through email/LMS and discussion board posting relating to questions asked by the class. Minor adjustments will be made throughout the course. Major modifications will be made once the course ends based on severity of questions asked and difficulties encountered.
Data collected on attitude questionnaires or debriefing comments	**Initial Evaluation** Questionnaire will be provided to learner during on-to-one evaluation **Subordinate Evaluation** Mid-course survey End of course survey	**Initial Revision** Changes will be made based on one-to-one comments from the questionnaire. **Subordinate Revision** Data will be gathered using surveys and minor adjustments will be made throughout the course. Major modifications will be made once the course ends based on severity of attitudes encountered from the surveys
Time required for completion	**Initial Evaluation** Evaluate the amount of time the learner takes to complete instruction during the one-to-one evaluation **Subordinate Evaluation** Mid-course survey End of course survey	**Initial Revision** Changes made based on results of one-to-one evaluation **Subordinate Revision** Adjust as needed based on data from student surveys