Introduction to Instructional Design
Assessing Needs to Identify Instructional Goals

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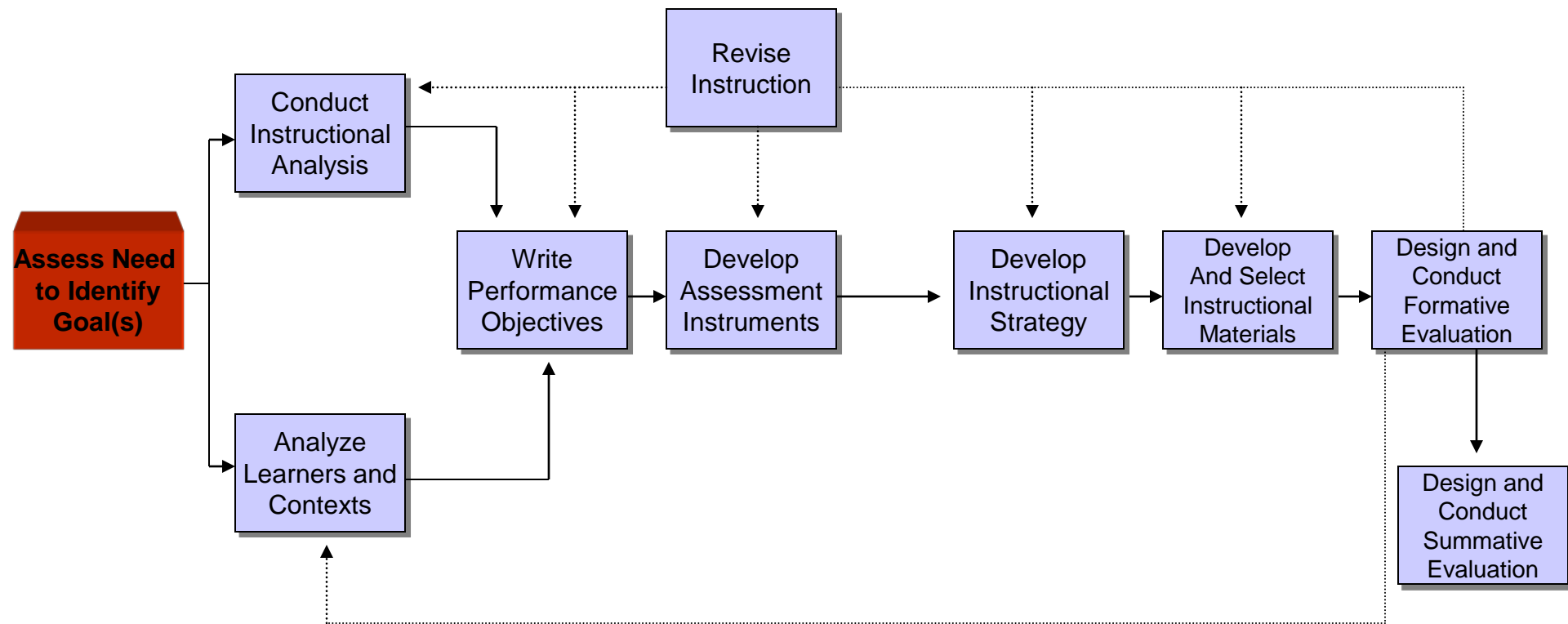## The University of Georgia
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Objectives

- Define needs assessment, needs statements, and instructional goals.

- Identify a need or problem that can be solved with instruction.

- Distinguish the difference between problems and symptoms.

- Write an instructional goal based on a verified need.

(Dick & Carey's Model)

On Needs Assessment

"Instructional designers must become clever investigators, examining the characteristics of potential users, the learning environments, the perceived need for the instruction, and the instructional task before investing time and resources in the costly production of instructional materials."

Smith & Ragan, 1999

The most critical event in the instructional design process is *identifying the instructional goal*

The subject-matter expert approach
- Contain words like know and understand with regard to content information
- Emphasizes the communication of information from instructor to students in the instructional process

The performance technology approach
- Favored by instructional designers
- Instructional goals are set in response to problems or opportunities.

Needs assessment

focus on *what learners will be able to do* when they complete the instruction

The functions of the needs assessment are to:

- Confirm that the problem can be solved with instruction
- Discover the nature of what is to be learned
- Learn more about the target learners
- Understand the instructional context, such as the major physical features of the instructional setting and the factors that support this setting
- Explore the issues surrounding the instructional problem and proposed solution
- Generate goals that will guide the design effort
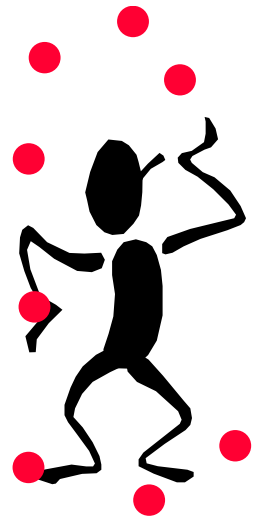
Performance Analysis

A performance analysis is a study conducted to determine the exact nature of *an organizational performance problem* and how it can be resolved. - *Robinson and Robinson(1995)*

The performance model indicates that important performance problems are best identified in terms of the *gap* between the desired goals and mission of an organization and their current status.

Desired
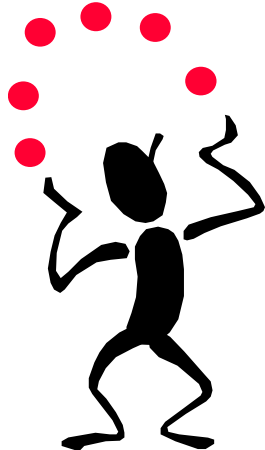
Current

Gap

A gap is defined as *"should status"* minus *"is status"*

The gap between the two is often referred to as *a need*

The outcome of a performance analysis study is *a clear description of a problem* in terms of failure to achieve desired organizational results and the corresponding desired and actual employee behaviors, evidence of the causes of the problem, and *suggested cost-effective solutions.*

When designers use the Robinson and Robinson model

❑ They review existing data and documentation regarding the problem and how "it ought to be."

❑ They collect additional data via interviews, surveys, observations, and small group discussions.

❑ This empirical process is rooted in the realities of the organization conducting the study.

Types of Needs

- Normative
  - Child not reading at grade level
- Felt
  - A person or group's opinion. Secretary of Education believes we need more instruction in math
- Expressed
  - Statistics course has waiting list of 100 people
- Comparative
  - Penn State offers a Dreamweaver course and we don't. Why?
- Anticipated or Future
  - Growth in Hispanic population: ESL instruction

Needs Assessment Methods

- Interviews
- Observation
- Group discussion
- Questionnaires
- Records, reports, or other written material

Conducting a Needs Assessment

1. Identify/list the goals of the organization.
2. Determine how well the identified goals are already being achieved.
3. Determine the gaps between "what is" and "what should be".
4. Prioritize the needs according to agreed-upon criteria.
5. Determine which needs are instructional

Goal Statement

A complete goal statement should describe the following

- ❑ The learners
- ❑ What learners will be able to do in the performance context
- ❑ The performance context in which the skills will be applied
- ❑ The tools that will be available to the learners in the performance context.

Example.

"The Acme call center operators will be able to use the Client Helper job aid to provide information to customers who contact the call center."

All four components of a goal statement are included in this statement.

Any selection of instructional goals must take into account the following concerns:

1. Will the development of this instruction solve the problem that led to the need for it?
2. Are these goals acceptable to those who must approve this instructional development effort?
3. Are there sufficient people and time to complete the development of instruction for this goal?

Will it work?

Will they like it?

Is it doable?

Example of goal statement from DCC (p. 25-26) derived from needs assessment:

- Neighborhood Crime Watch leaders will demonstrate effective discussion group leadership skills in a neighborhood meeting.

Another example (p. 27-28)

- **Fuzzy:**
  Personnel will know the value of courteous, friendly service

- **Clearer and more precise:**
  Personnel will demonstrate courteous, friendly behavior while greeting customers, transacting business, and concluding transactions

Does anybody notice a problem with this goal?

- All students in the State of Georgia will score above average on the State's High School Mathematics Examination.

This all sounds confusing! Help!

Yes, it can be confusing in the abstract, but it will become much clearer as you <u>do it</u> with a good example.

You should answer several questions about the problem and need:

1. Is the need clearly described and verified?
2. Is the need foreseeable in the future as well as currently?
3. Is the most effective solution to the problem instruction?
4. Is there logical agreement between the solution to the problem and the proposed instructional goals?
5. Are the instructional goals acceptable to administrators and managers?

Another way to look at it…

If you were presenting your needs assessment to a group with the authority to allocate resources or spend money, such as:

- **Funding agency (e.g. USDOE)**
- **School board**
- **Board of directors**
- **University curriculum committee**

Would your needs assessment convince them to devote resources to address the problem or opportunity you've identified?

Questions you should answer related to the clarity of the instructional goal include the following:

1. Do the behaviors reflect clearly demonstrable, measurable behaviors?

2. Is the topic area clearly delineated?

3. Is the content relatively stable over time?

Questions to be answered related to resources include the following:

1. Do you have the expertise in the instructional goal area?

2. Are the time and resources required to complete the project available to you?

3. Is a group of learners available during the development process in order for you to evaluate and refine your instruction?

Understanding the difference between symptoms and problems

Remember the distinction between instructional problems and opportunities

Either lead to valid team projects
for this course!

Closing

- Needs assessment is the foundation of the instructional design process.

- Doing a poor job here may waste enormous sums of money and time.

- Doing a good job here will point the way to the rest of the instructional design process.