

OJT Training Module Cover Sheet

Title: 005 How to differentiate between scales and orders of mapping in soil survey.

Type: Skill Knowledge

Performance Objective: Trainee will be able to...

- Understand the concept of map scale.
- Understand the concept of orders of mapping in soil survey.
- Identify the order of mapping in a soil survey and the map publication scale.

Target Proficiency:

Awareness Understanding Perform w/ Supervision
 Apply Independently Proficiency, can teach others

Trainer Preparation:

- Trainer should be familiar with the assigned reading/review material in the lesson plan that follows.
- Assemble examples of different soil survey products that show different orders of mapping and map scales.

Optional Preparation

- Collect reference templates, scale rulers, and electronic geospatial data tools to use with the various types of media.

Special Requirements:

Initiate an external learning request with a SF-182 in Aglearn for this activity. Instructions and a template are located on the training webpages for OJT modules.

Prerequisite Modules:

- 012 How to recognize and distinguish map units.

Notes:

None

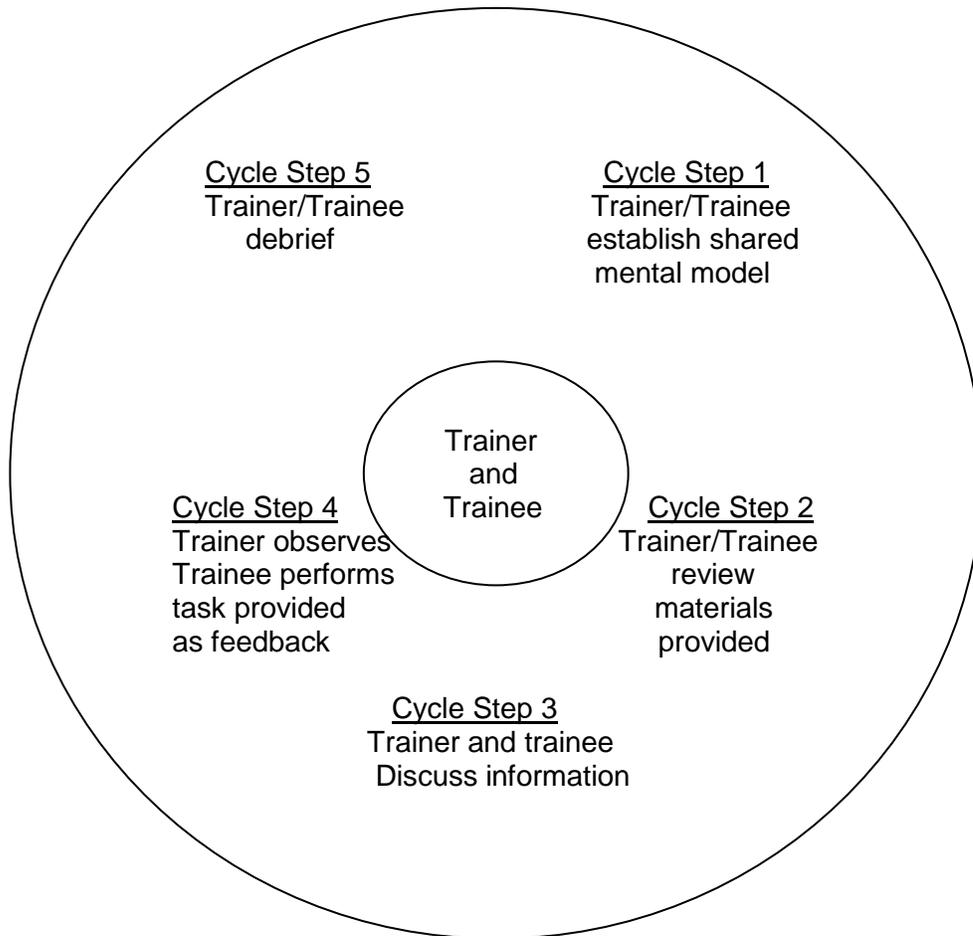
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The Five-Step OJT Cycle for Declarative Training (Knowledge)



OJT Module Lesson

Title: 005 How to differentiate between scales and orders of mapping in soil survey.	
WHAT	WHY, WHEN, WHERE, HOW, SAFETY, QUALITY
Cycle step 1	<p>Trainer and trainee review objectives of module and identify attached materials to be studied by trainee.</p> <p>Discuss the concept of scale in maps. Give a brief overview concerning the orders of mapping used in soil survey and how they relate to the final publication scale of the soil survey maps.</p>
Cycle step 2	<p>Trainee accesses via the internet and reads Soil Survey Manual, Chapter 2,</p> <ul style="list-style-type: none"> • Section on Orders of Soil Survey • Review of Table 2-1, Figure 2-4, and Table 2-2. <p>Trainee reviews attached reference materials by opening the pdf attachments in this order:</p> <ul style="list-style-type: none"> • Scale concepts • Commonly used map scale and equivalents • Map scale and orders of mapping in soil survey • Finding map scale information within SSURGO data
Cycle step 3	<p>Trainer and trainee discuss information. Trainer leads by asking these questions.</p>
1. Map scale	<ul style="list-style-type: none"> • Ask trainee to describe the concept of map scale. • Ask trainee to give an example of verbal scale, fractional scale, and graphical scale. • Ask trainee to give an example of a large scale map in the survey area. • Ask trainee to give an example of a small scale map in the survey area.
2. Order of soil survey	<ul style="list-style-type: none"> • Ask trainee to describe the concept of orders of soil survey. • Ask trainee to give the order of soil survey he or she is currently working with in his or her project office.
3. Minimum delineation size	<ul style="list-style-type: none"> • Ask trainee to describe the concept of minimum delineation size and give the minimum size(s) that should be used in the survey area.
Cycle step 4	<p>Trainer provides trainee with several sets of maps (topographic, soil survey, soil survey field sheets) and asks him or her to report the map scale and order of soil survey. If the map is not a soil survey map, ask the trainee to provide a plausible soil survey order that could be applied to the base map scale. Also ask for the minimum delineation size for each map product.</p>
Cycle step 5	<p>Trainer and trainee review topics. Trainer responds to questions and concerns.</p>

OJT Module Lesson Measurement of Learning

Title: 005 How to differentiate between scales and orders of mapping in soil survey.	
WHAT	WHY, WHEN, WHERE, HOW, SAFETY, QUALITY
Trainee's learning is measured.	Have the trainee complete the quiz below to reinforce the concepts in this module.
Apply knowledge gained to field work.	The trainee successfully applies scaling techniques appropriate to the soil survey in his or her area.

SF-182

Trainee and/or supervisor access Aglearn to verify completion of the module via its SF-182.

Quiz

1. True or False? Map scale is the relationship between map distance and the actual distance which the map represents.
2. True or False? Graphic scale relates to a ratio between map distances and distances on the earth.
3. True or False? Small-scale maps provide a lot of detail.
4. A map gives a graphical scale of "1 inch equals 2000 ft". What is the fractional scale?
 - A) 1:12,000
 - B) 1:24,000
 - C) Other
5. True or False? Orders of soil surveys relate to the intensity of field work.
6. True or False? An order 5 soil survey provides the maximum amount of detail in the finished product.
7. Referencing table 2-2 of the SSM, what is the approximate minimum size delineation for a soil survey at publication scale of 1:24000?
 - A) 3
 - B) 5
 - C) 10
8. True or False? With the use of GIS products, the effective minimum size delineation is limited only by the zoom power of the program.