OJT Training Module Cover Sheet

Title: How to develop a soils key for your soil survey area

Type: **X** Skill ☐ Knowledge

Performance Objective: Trainee will be able to…

- Develop a soils key for his or her soil survey area

Target Proficiency:

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

Trainer Preparation:

- Have access to statewide keys to soils, if one exists.
- Have access to countywide keys to soils, if they exist.
- Have access to NASIS and a GIS application for determining soil series in your area.
- Have access to existing published county surveys or Preliminary Identification Legends for area of interest.
- Have access to Official Series Description information.

Special Requirements:

Prerequisite Modules:

- Understand the relationship of the factors of soil formation in your soil survey area
- Understand the concept of landscape models and soil catenas

Notes:

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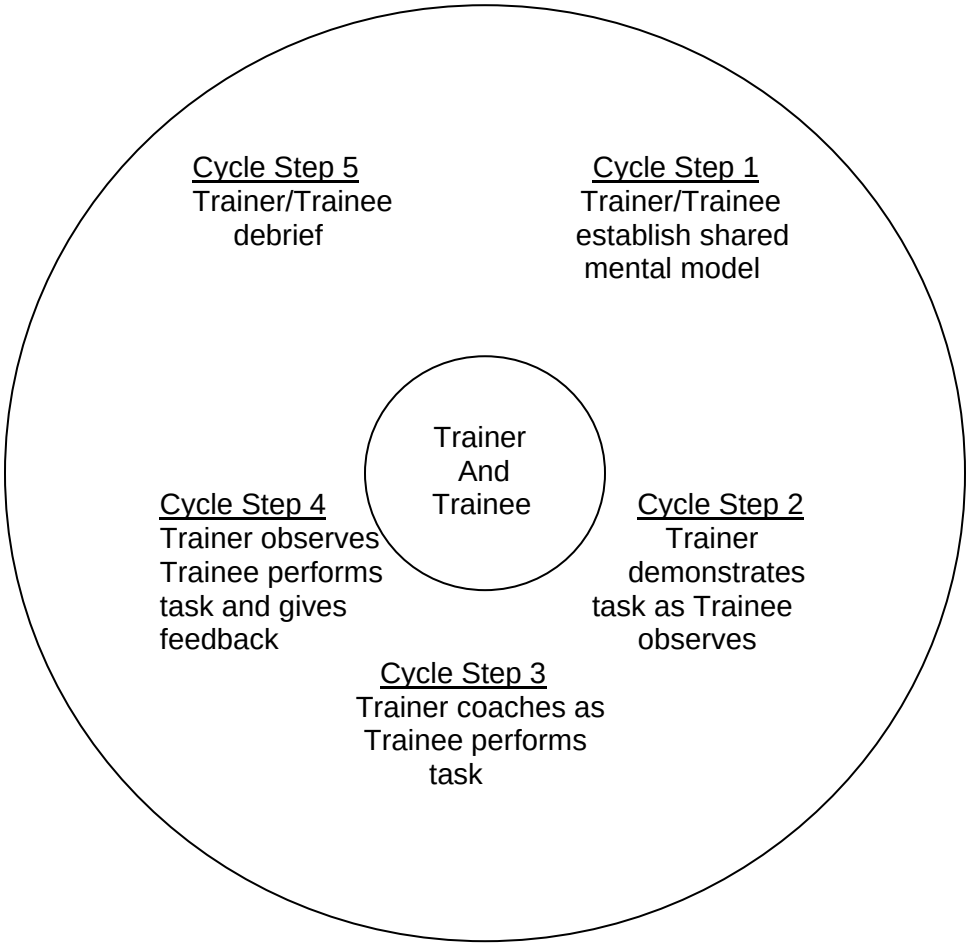
The Five-Step OJT Cycle for Procedural Training (Skill)



OJT Module Lesson

Title: **Develop a soils key for your soil survey area**	
WHAT	**WHY, WHEN, WHERE, HOW, SAFETY, QUALITY**
1. Trainer and Trainee review needed/desired properties of the key.	Discuss the intent of the soil key. (How do you want a key to help you?) - As an aid to identify soil in the field. - As a written record of the general landscape model used to make a survey. - As an educational tool. - Other.
Part 1- Preparation	
2. Trainer provides Trainee with one or two examples of existing soil keys. Include one for own soil survey area if it exists.	See Attachment: Key to Illinois Soils.pdf.
3. Identify the desired properties to be shown in the key.	Discuss the important properties that assist in identifying soil series and separating one series from another. Decide which properties to use in the key.
Part 2-Develop the soil key.	
4. Identify the soil series in the survey area.	Discuss use of GIS to determine soil series in survey area. If necessary, request assistance from Resource Analyst (GIS person). Are any series “inactive”?
5. Locate the data for the properties selected (parent material, drainage, etc).	Discuss use of OSD Web site and NASIS data to assist in obtaining needed properties.
6. Group the properties into categories.	Discuss use of OSD information to assist with grouping soils. Decide how you will group soils for this key (similar depth to bedrock, surface color, etc.).
7. Decide upon a format for displaying the key.	Develop the structure and select application (Word table, Excel, etc.).
8. Complete the key.	Point: This is as much an exercise to learn something about the soils in the area as it is to build a soils key. Trainee should focus on what is being learned about the soils.

OJT Module Lesson Measurement of Learning

Title: **How to develop a soils key for your soil survey area**	
WHAT	**WHY, WHEN, WHERE, HOW, SAFETY, QUALITY**
1. Measurement of learning	Trainee should perform above exercise independently on sample area (county or other geographic area within the MLRA). Determine the soil series in the test area. Determine the properties to use as criteria to group or separate soil series. Separate the soils into groups. Report completion of exercise to Trainer.

Performance Report Form

See attachment: Trainee performance Report Form template.pdf.