

OJT Training Module Cover Sheet

Title: 020 How to complete premapping in your soil survey area using hardcopy resources.

Type: Skill Knowledge

Performance Objective: Trainee will be able to...

- Complete a premap for use in mapping using available hardcopy resources.

Target Proficiency:

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

Trainer Preparation:

Pull together the following kinds of material available in your survey area:

- B&W photographs
- CIR
- Topographic quadrangles
- Climatic data
- Vegetative data
- Geology
- Other

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:

- 018 How to use a topographic map in your soil survey area.
- 019 How to interpret the photo images in your soil survey area.

Notes:

None

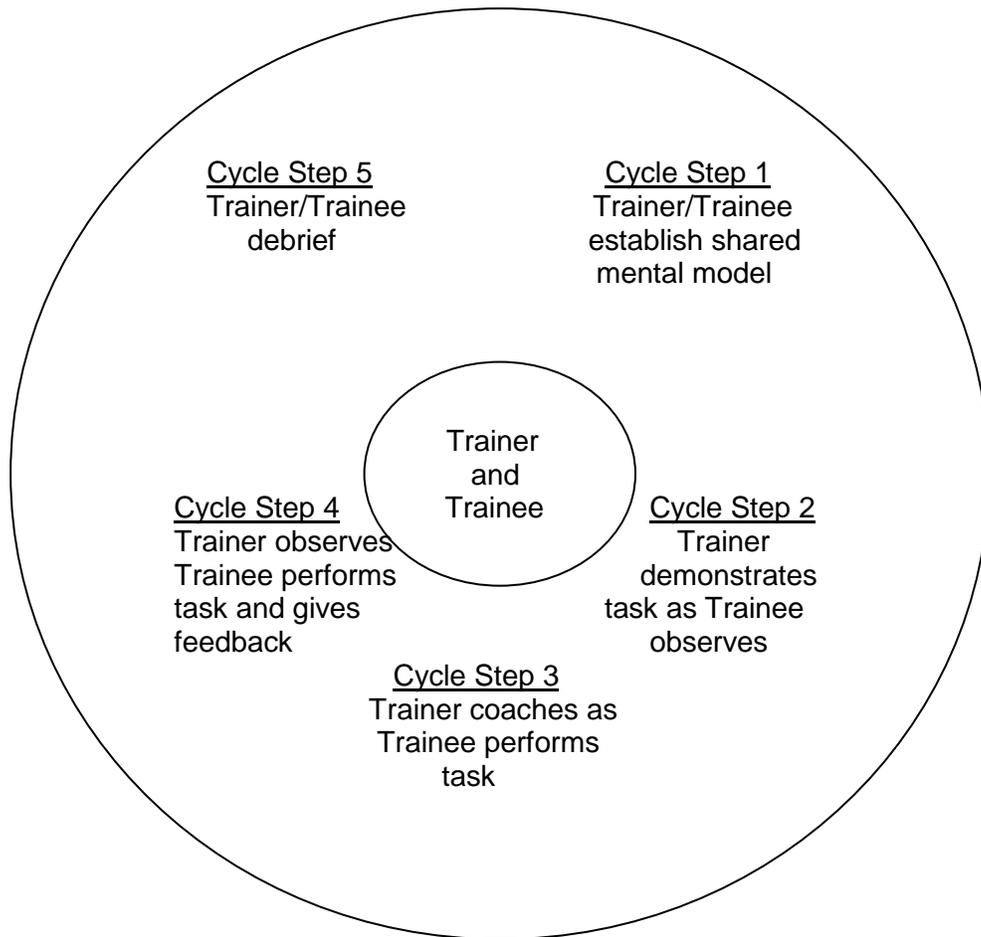
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The Five-Step OJT Cycle for Procedural Training (Skill)



OJT Module Lesson

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| WHAT | WHY, WHEN, WHERE, HOW, SAFETY, QUALITY |
|--|---|
| Cycle step 1 | Trainer and trainee review objectives of module. The trainee should be informed that the Soil Survey Division wants employees to use this “analog” method of premapping as a first step in the training process. |
| Cycle step 2 | Trainer shows trainee the following: |
| 1. Identify the base map, scale of map, and order of survey to be used for the exercise. | <p>Trainer selects and explains the base map. If other image products are available, trainer explains why one has been selected and any advantages to using this particular product.</p> <p>Discuss how scale of map and order of survey and designated smallest delineation will affect the premap process in your survey area.</p> |
| 2. Identify the resources available in your survey area. | Resources will vary from MLRA to MLRA and even within the MLRA. Trainer presents what is available in the survey area for this exercise. |
| 3. Decide which resource should be utilized first in the survey area. | <p>The trainer should decide on the basis of personal preference or resources available. The decision may be based on whether the resource has a large or small scale influence on mapping. For example, climatic data or vegetative data indicating climatic changes (mesic to frigid, for example) may have no affect or only provide one line through the survey area. CIR and topography may provide data for mapping down to the minimum size delineation. The trainer should discuss how each resource is to be used in the survey area.</p> <ul style="list-style-type: none"> ○ CIR ○ Topographic quadrangles ○ Climatic data ○ Vegetative data ○ Geology ○ Other <p>Trainer can then adjust the following sub-steps to the preferred sequence to be followed in the survey area.</p> |
| 4. Recognize parent material changes using available geology maps. | Trainer shows how this information can be transferred from the geology map to the base map. Take this opportunity to discuss how soil map unit |

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| | components represent geological units and/or combinations of units in the survey area. |
| 5. Utilize stereoscope for recognizing relief (optional). | If using this option, the OJT module How to use a stereoscope should be completed first. Trainer should demonstrate adding lines for relief to the base map using the stereoscope. |
| 6. Recognize relief using topographic quadrangles. | Trainer shows how this information can be transferred from the quadrangle to the base map. Trainer should make the trainee aware of the contour interval on the quadrangles used and how the interval may affect use of the quadrangles. |
| 7. Utilize other resources to show where changes will occur. | Using other resources available in the survey area, trainer shows how to add or adjust previous lines on the base map as appropriate. |
| 8. Add map unit symbols as appropriate. | Trainer shows how, with experience, map units can be assigned to polygons of the premap. The trainer should note that there are cases where it may not be possible to assign a map unit to a polygon and that these areas would be targets for ground truthing, whereas areas with predicted map units will be traversed to verify predictions. If a soils key is available for the MLRA, it could be used during this step. |
| Cycle step 3 | Trainer assigns an area of 500+ acres and observes the trainee completing a premap at the scale and order of mapping in the survey area. Repeat by providing another area if the trainee needs repetition. If the trainee has grasped the process, move on to Cycle Step 4. |
| Cycle step 4 | Trainer should select two or more areas of 500-1,000 acres that provide an opportunity to use different sets of the available resources in the survey area. Have the trainee complete this step without observation by the trainer. Assess progress. Repeat Cycle Step 3 if necessary. |
| Cycle step 5 | Trainer can debrief trainee and address any concerns. |

OJT Module Lesson Measurement of Learning

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|--|---|
| Complete premaps using this analog method. | Complete premaps for several 500+-acre areas assigned to the trainee for “analog” mapping. See training plan for new employees. |

SF-182

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