

TxCETP Course Component for Classification: “The paths most traveled”

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II. Operational Details

Knowledge Level I

Inquiry Activity

A. Objective: Students establish that classification is relevant to their lives by classifying objects and evaluating their classifications.

B. Time Frame for Activity: 30 - 50 minutes

C. Materials: None

D. Procedure:

1. Individually, students list examples of classification systems based upon their experience.
2. Students confer and consult with each other regarding their respective lists and decide whether their classifications are scientific or non-scientific.
3. Instructor provides the opportunity for at least some of the groups to present their reasoning to the class as an introduction to the following information.
4. Students are asked to review the criteria necessary for something to be called “scientific” (covered in the Scientific Inquiry CC):
 1. Testable
 2. Part of the natural world
 3. Tentative
 4. Reproducible
 5. Objective
5. Students re-evaluate their initial lists from Step #1.

E. Formative Assessment:

1. After Step #5 of the Procedure, ask the students to individually (anonymously if they wish) record a response to the following question which is then collected:
 1. What prior conceptions did you possess? What new concepts have you learned regarding the classification?
2. Collect the list of classifications each student wrote and then modified (if modification occurred!).