Daily Lesson Plans Instructional Days: 1-2

Topic Description: What is a computer? In this lesson the concepts of computer and computing are explored through examples of each.

Objectives:

The student will be able to: Explain and give examples of the concepts of computer and computing.

Outline of the Lesson:

• •Journal Entry. (10 minutes)

• •Exploring computers (60 minutes)

• •Classification of computing groups (10 minutes)

• •Definition of the terms computer and computing (10 minutes)

• •Demo of Computer Buying Project Assignment (20 minutes)

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Student Activities:

• Complete journal entry.

• Groups of students create lists of their ideas of what a computer is.

• Groups do presentations.

• Participate in discussion of classification groups and definition of computer and computing.

Teaching/Learning

Strategies:

•Journal Entry: How many computers are in the room or in their work area? Xx work area

• Have students write responses to the question in their journals and then share the response with their elbow partner.

• Ask a few student pairs to share their responses.

•Exploring computers

• Some students may have counted only the desktop computers in the room while others may have recognized that there are other items that are computers as well.

• Divide students into groups of 3 or 4. Ask the students to discuss additional examples of computers (or things containing computers). Have students write their examples on post-its and add them to a large chart at the front of the room or have groups make a list on flipchart paper and tape their list somewhere in the classroom. Students who cannot free hand write their items can type them into the computer or use a ruler to guide their printing (if possible). (Examples of computers include: Macintosh, Windows PC, cell phone, mp3 player, most appliances (television, coffee maker, washer, dishwasher, etc.), cars, medical equipment, planes, watches, cash registers, ATMs, traffic lights, scoreboards, humans, and calculators.)

• Have student groups share their ideas. After each presentation, give the other students an opportunity to suggest why any particular example seems not to be a computer (or is not obviously a computer). If necessary, ask questions to draw out the student questions and responses. (For example, if the student says “dishwasher,” you might ask, “why is a dishwasher a computer.”)

• Have a brief discussion of the power of cell phones. Mention collection of data as a foreshadowing of unit 5.

•Classification of computing groups

• Ask students to suggest possible classifications for the items on the list; create a new list with the various items listed under a group classification.

•Definition of the terms computer and computing.

• Revisit the question “What is a computer?” and ask the possibly more pertinent question, “What is computing?”

• Have the students use their list of “computers” and their classifications to help formalize their answers.

• Note that there is no “correct” answer. These definitions will be revisited and possibly modified throughout the course of the unit.

• Reinforce the idea of different types of computers and classifications by reviewing the lists and groups created by the students.

•Computer Buying Project Assignment

• Each student will interview a family member or friend to find out what features that person would like to have if they were buying a new personal computer. In a camp situation, students can ask a pre-selected person such as a grad student, staff member, etc.

• Demonstrate the interview process by asking a student to participate in an interview and ask them questions such as: What will be the uses of the computer? What are the space constraints? What is the price range? Etc. You may wish to provide students with a specific list of interview questions.

Resources:

•No additional resources needed