MAT 630 – ECE/ELED Methods and Management
Summer 2007
Learning Guide
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Grade Level: Second Grade
Approximate Length of Time for Phase I & II: 45 minutes
Curriculum Areas: Math & Language Arts
Utah State Core:

Math
Standard 1
Objective 1: Identify and represent the relationships among numbers, quantities, and place value in whole numbers up to 1000.

Objective 2: Use unit fractions to identify parts of the whole and parts of a set.

Standard 2
Objective 2: Model, represent, and interpret number relationships using mathematical symbols.

Standard 3
Objective 2: Identify and use units of measure, iterate (repeat) that unit, and compare the number of iterations to the item being measured.

Objective 3: Collect, record, organize, display, and interpret numerical data.

Language Arts
Standard 1
Objective 1: Develop language through listening and speaking.

Standard 4
Objective 3: Spell words correctly.

Personal Objectives: To assist children in recognizing coins and matching coins with their monetary value. Additionally, I want to help students recognize coin value from a both a written and symbolic perspective. I would also like students to be able to add coins together to determine the worth of items $1.00 or less. Lastly, I would like students be able to understand how to use money in real life situations.

Materials:
• Plastic bags for each student that contain one real penny, one real nickel, one real dime, and one real quarter
• Chalkboard and chalk
• Coin poem (listed below)
• Worksheets for students to fill out that assess their ability to recognize coins.
• Large piece of butcher paper that looks like a large version of the worksheet
• Silver, copper and black crayons at each table (assuming that the desks are in groups of four).
• Tape
• Center materials
  ▪ Three different kinds of candy
  ▪ Receipts (please see attachment)
  ▪ Pencils
  ▪ Tin can with sign “pay here” taped to it
  ▪ Labels with cent values written on them for the candy

**Phase I: Exploration and Explanation**

1) **Assessing Prior Knowledge:** First I would ask the students a series of questions and ask them to raise their hands.
   
   a) How many of you know what money is?
   b) Do you know what money is used for? (call on a student to answer question)
   c) How many of you have used money to buy something?
   d) How many of you know how to count with coins?

2) **Read coin poem to class.** Have poem also written on the chalkboard (or have an overhead transparency) so students can follow.

   Penny, penny
   Easily spent
   Copper brown
   and worth one cent.

   Nickel, nickel
   Thick and fat
   You’re worth five cents
   I know that.

   Dime, dime
   Little and thin
   I remember
   You’re worth ten.

   Quarter, quarter
   Big and bold
   You’re worth twenty-five
   I am told!

   a) Next to the poem write out Penny, Nickel, Dime and Quarter in order to create lists underneath each coin.

   b) Reread sections of the poem now asking students to list out specific coin identifiers (i.e. a penny is copper, brown, and easily spent).

   i) Ask students if they know what “identify” means? Have a student either explain the definition to the rest of the students, or have someone look the word up in the dictionary and read definition to class. Give examples of
synonyms in a sentence to make sure every student understands.

ii) Call on a student to repeat the definition before moving forward

c) Make a list for each coin.
d) Pass out bags of coins to each student
e) Now ask students to reach inside their bag and see if they can identify each coin. Tell them they can look at the list of identifiers if they need help. Example: ask students to pull out the penny and hold it in the air.
f) Ask students to examine each coin
g) After examining each coin, ask students if they have anything they would like to add to the identifier list.
h) Now tell students that I am going to eventually have them fill out a worksheet that asks them to identify the coins we have discussed.

3) Introduce numeric value of each coin. Write out numeric value of coin above coin headings on the list.
a) Start putting basic match problems on the board, such as 5+5 and ask a student to come to the board and write out the answer. (NOTE: students have previously learned addition and subtraction using whole numbers up to 100)
b) Once students appear to have brushed up on their mask skills, use addition examples using coins. Ex: one nickel (5) + one nickel (5) = one dime (10). Have students answer problems on board. Also – ask students to create their own problems for the class to solve. I will help in solving problems on board.
c) Now tell students that I am going to eventually have them fill out a worksheet that asks them to identify the coins that we have discussed as well as add coins together.

4) Model Technique.
a) Pull out butcher paper and tape on wall. (Butcher paper will be a condensed version of worksheet, not including the last section asking students to color in coins.)
b) Begin to walk through worksheet with students.
c) After demonstrating and writing in the answer to the first question, ask students to come up to the board and fill in the answer to the next question.
d) When finished modeling, ask a student what to do once they receive their worksheet.

Phase II: Guided Practice
While students are working on their worksheets, I will walk around the room, helping students when and where necessary.

Phase III: Independent Practice/Assessment
Later in the day, I will set up a center while the students are at recess. The center will be located at the corner workstation and will have items listed on the table like a store. There will be lollipops in one area of the table with a price indicator of 35 cents. There will be small tootsie rolls listed at 6 cents. Lastly, I will have smarties listed at 15 cents. There will be four chairs at the center to accommodate four students per center visit. There will be “receipts” on the table as well as pencils for the students to fill out during their time at the center. Additionally, I have a can in the center of the table that will have
sign on it reading “PAY HERE.” Students will arrive at the center and spend roughly 5 minutes there. They will be asked to choose ONE piece of candy that they would like to buy. With their bag of coins, students will have to find the right amount to pay for their candy. They will fill out a receipt that asks them for the candy they purchased, how much money their candy was worth and what coins they used to pay for the candy. Students will then put their money in the can, take their candy and hand their receipts into the assignment basket.

**Task Card:**
1) Grab a pencil and receipt paper.
2) Pick out **ONE** piece of candy that you would like to buy.
3) How much does the candy cost?
4) Choose the coins from your bag that add up to the amount of the candy.
5) Pay for the candy by placing coins in “PAY HERE” can.
6) Fill out receipt.
7) Put receipt in the assignment basket.

**Assessment:**
I will be able to identify the students’ math knowledge by their ability to add up the right coins to equal the candy amount that they purchased. Additionally, I can assess their language by making sure that everything is spelled correctly in the “receipt.”

**Accommodations:**
- Students with visual and hearing struggles will be seated towards the blackboard and teacher.
- I will scaffold during Phase II to ensure that everyone understands. If students are not understanding a certain concept, I can retailer the lesson to better their fit their needs.
- For ELL students, I will read say the numeric value of each coin in their native language.
- For ELL students, I will try to use lots of visuals so that they can have a better understanding of what we are discussing.

**DAP:**
- Integrated lesson plan
- Begins with an assessment of prior knowledge
- Brings real world problem solving into the classroom
RECEIPT

What candy did you buy?
___________________________________________

How much did the candy cost?
___________________________________________

What coins did you use to pay for the candy?
___________________________________________