ACTIVITY IA3.6: Disappearing Sequences

Intended learning: To build facility with any forward or backward number word sequence.

Instructional mode: Shorter, rehearsal mode for individuals, partners or whole group.

Materials: Scrap paper and pencil or white board and marker.

Description: This activity is a means of automatizing any number sequence. On a piece of paper or a white board, write out the first twelve terms in the desired sequence in order in a straight line, left to right. Make sure that the sequence is accurate. For example, if working on the multiples of three, students would write: 3, 6, 9, 12, 15, 18, 21, 24, 27, 30, 33, 36. Have the students recite the sequence as you touch each numeral until they can say the sequence with facility. After students have recited the sequence several times, ask for a volunteer to select a number to be covered. Cover the numeral with a sticky note, or scratch it out, such that it cannot be read but its place in the sequence is still marked (see Figure 3.4). Have students recite the sequence again as you point to each numeral, including the covered number. This facilitates students visualizing the sequence. Continue to ask for volunteers to select a term to be covered and then have the whole group recite the full sequence. That is, have students recite the full 'disappearing' sequence each time a numeral is removed. Repeat the process until all twelve numerals have 'disappeared'. Recite one final time, touching the spots in which each numeral used to be.

Responses, variations and extensions:

- This activity is designed to build facility with any number word sequence, forward or backward, by 1s, 10s or other multiples. For example, by tens off the decuple – 4, 14, 24, 34 …; or by threes – 3, 6, 9, 12 ….
- It is critically important to make sure students begin with a correct sequence.
- Before students begin reciting the sequence, the teacher might have students use the constant function of the calculator to check their sequence. For most calculators used at the primary level, the = sign can function as a constant key. For example, students would press the following sequence of keys to check for the sequence of multiples of 3: <0> ,<+>, <3>, <=>, <=>, <=>, <=>, <=>, <=>, <=>, <=>, <=>, <=>, <=>, <=>, <=>
- A variation is to have students write the sequence on both sides of their paper. One side is used for the disappearing sequence. The other side can be used to check if a student gets stuck on producing the sequence.
- Another variation is to use numeral tracks. Rather than scratching out the term, a lid is closed. In this fashion, students may easily check to verify that their sequence is correct.

Figure 3.4 A disappearing sequence for multiples of two