Strategy Paper #2  

Strategy: Clues Chaining

Content: Soldering Guidelines in Art Metals 1.
Date: November 16th

Setting: Art Metals 1 class with 18 students (an equal ratio of female and male students, mainly upperclassmen, and diverse group of learning styles/needs) and a student assistant. This is the second week of the term. Students worked on sawing techniques, Viking knits, and are developing skills to complete the first major project. The first project requires four major skill groups: sawing, soldering, creating textures, and finishing techniques. The students completed sawing and finishing techniques in their Intro to Art class. This activity was used as an anticipatory set.

Implementation: Prior to the class, I printed the soldering guidelines handout for the class. I also broke the guidelines down into seven steps that I printed, cut into strips, and placed in 20 different envelopes. At the bell, students entered the room grabbing their composition books and tool boxes. A bell ringer was on the board for the students to answer along with the schedule for the class. After the bell ringer, the students worked on their sawing exercises and their Viking knits. I announced that the class would have work time for 30 minutes and then I would demonstrate soldering. The intention was to allow for students to further complete their previous work, to give time to answer questions, time to set up the soldering equipment and tools, and time to hand out the envelopes. After 30 minutes, I instructed individuals to open the envelop take out the strips of paper, and organize them from step one to step four. “Put on safety glasses is not the first step.” I warned them. After a couple minutes, I had the students turn to their neighbor to see if they were in the same. They had time to discuss and rearrange their strips of paper. I then asked for the first step. The class yelled out answers, but not the correct one. I waited until the right answer was called: “Clean, fit, and flux the pieces of metal.” You could see some people smiling and shaking their heads while others were quickly reordering their pieces. I asked for the second step and the class called out answers until I heard “Place solder on the seam of the metal. Remember to use only as much solder as necessary to join the pieces.” At this point I told the students to look at their list and make any changes that are necessary. We continued through the list in the same matter. After this activity I had the class decide whether they would like to write the steps to soldering or receive the handout. The obvious choice was the printed document. The class then joined me in the back of the classroom, where I walked through and demonstrated each step stressing safety procedures as we went. After the demo the class I explained the soldering exercise and students returned to their table to work.

Evaluation: This strategy was the perfect way to engage the students in the soldering demo. They seemed to enjoy guessing the order of the steps and appeared rewarded with the correct guess. Because the students already had previous knowledge, the demo continued smoothly and gave students the knowledge necessary to make connections. The students were also able to ask questions that to further their understanding of each step.