PROJECT:

Mirror Drawing

Essential Question:

* What happens when the visual feedback that our brain receives is not what is expected?

GOALS:

* Provide an example of procedural memory
* discuss hemispherical control
* provide an experience of right vs. left hand control

PREPARATION:

* prepare mirrors with standing cardboard bases
* Prepare and print out shapes

MATERIALS:

* small pieces of cardboard (8 1/2"x 11)
* printouts of shapes for tracing
* pencils
* mirrors with stands
* tape for paper and mirrors

SUBJECT CONNECTIONS:

* Procedural memory
* Hemispherical control

LEAD IN:

* discuss hemispheric control over visual and spatial tasks. (what parts of the brain are responsible for specific tasks & how this can be demonstrated)

PROCEDURES:

* have students break up into pairs 2 min
* set up mirrors 5 min
* give a short demonstration 2 min
* have students complete a control tracing 2 min
* have students complete two tracings while the other records time and amount of errors. 10 min
* have students switch to their non dominant hand and complete one more drawing 2 min
* Have students trade places and repeat the above 15 min

CLOSING QUESTIONS:

* What happened when you switched to using the mirror?
* Why was it more difficult?

DIRECTIONS:

1. Break up into pairs
2. Set mirrors in front of you
3. Have your partner hold a sheet of paper over your drawing hand so that you can only see it in the mirror (demonstrate this)
4. trace your shape attempting to stay within the lines
5. have your partner time you while you do this (using the clock projected on the screen) write down the results
6. do this again
7. switch to your left hand and trace one more shape
8. count up all of the times you went outside of the lines on each tracing