Clinical Interview II Courtney Kimbrough Pool/ Walkway Conducted April 13, 2015

I. The Subject

The subject is a male, is a 20 year old college students who studies business seeking a degree in kinesiology. He is an African American and was raised and a strict Christian upbringing. He has played football for over 13 years and this may have helped with his problem solving techniques. He has had many experiences of problem solving and is very interested in problem solving and word games, though he has never attempted the pool and runway problem. But this subject has had a lot of experience in math up to college algebra. So he is pretty confident on solving these types of problems

II. The Problem

A swimming pool in the shape of a rectangle is surrounded by a 3-foot-wide walkway. The pool is 23 feet wide and 32 feet long. How long would a fence be that just encloses the walkway and the pool?



III. Transcript

Me. How are you doing today?

Subject. Good!

Me. Okay let's begin. If you would read this problem out loud.

Student. A swimming pool in the shape of a rectangle is surrounded by 3 feet of walkway. The pool is 23 feet wide and 32 feet long. How long would the fence be that just encloses the walkway and the pool?

Me.: Take your time and try to assess what the problem is asking you.

Student. Is it okay to draw a picture so I can see whats going on

Me. Yes

Student. I'll draw a rectangle and 3 feet wide surrounded by 3 feet wide walkway and then the pool is 23 feet wide and 32 feet long. So they just want to know how long it is right.

Me. Yes, they essential want to find how much fencing they need to by to fence the pool.

Student. OK

(Student continues drawing his picture)

Me. Okay so explain what you have done.

Student. I was trying to find the area of the rectangle which is the pool and I did that by multiplying 23 times 32 and I got 736, and then I am not sure, just 3 times 3 equal 9.

Me. Okay just try to go off your instinct and your previous knowledge. So, where is the fence that we are going to build in terms of your picture here? Where would the fence be?

Student. It would be around the outside.

Me. Yeah, that's where it would be and we want to know how much fencing to buy.

Student. OK, let's try 23 plus 3, 26, and 32 plus 3 because it is all the way around. The let's to that instead. OK, let's try about...OK, I took the 23 and added the 3 and the 32 and added the 3 and I multiplied the sums and got 850.

Me. Yes.

Student. That's it I think

Me. So if I pick up 850 feet of fencing that would be enough

Student. (Laughs ummmmm.) Yea I think so

Me. OK, so 850 feet would be the distance around the pool. Thank you

IV. Learned Methods Used

The subject showed methods of solving the problem were clear he kept reading the problem out indicating that he is a auditory learn, he also draw a picture which gave the indication of a visual learn. Human Information Processing (HIP) theory was definitely on display. As he was trying different things it was clear that as he became more confused he wanted to check with me to reassure he was on the right path. It was also clear that he was think out loud as he would write down his work and then scratch it out as if he was going in the wrong direction.

V. Analysis

The student's mathematical reasoning is not as strong as I anticipate. His actions such as multiplying 23 times 32 shows a lack of a sense making orientation. His final answer was off and I could tell it didn't make sense to him. My personal opinions suggests that previous emphasis on procedures has inhibited her ability to reason; he thinks about what procedure to apply rather than making sense of the situation. (This is a very bright, serious, disciplined student with high educational aspirations, his GPA is very exceptcutal) my thoughts are is that the subject may have a condition response to test taking, I'm more than positive he knows the answer. His actions to this problem provides overwhelming evidence that a procedural approach to mathematics instruction has serious limitations.

VI. Reflection and Application

As a teacher you always want to be able to tell how your student is doing or what type of learner they are. I think its key in being a teacher that you most know how to assess your students more than on a letter graded basis. What I got from this clinical interview is that a good teacher must know how to assess and accommodate each student that they have the pleasure of teaching. A teacher must not only teach a student but learn from a student as well, after all a good teacher is someone who can listen and interrupt. I learned that it's important that direct observation is a must when teaching but indirect observation is also just as important. It's also vital to know what you're looking for from your students, be clear with the end goals so they situation or the problem can be well defined. I found it highly reasonable that you can draw a lot of information from watching someone solve a problem, it's almost like you're watching there thought process to take place.