“The Having of Wonderful Ideas”

For centuries, understanding has been inextricably linked to intelligence. How does one measure understanding? Historically, it has been measured through methods such as standardized tests. Tests, however, are not always the best measure of understanding. In its purest form, understanding involves insight on the part of the learner rather than a correctly filled in bubble on a scantron sheet. Among the multitude of educational theorists to study the phenomenon of understanding was Jean Piaget. Eleanor Duckworth asserts that Piaget’s theories can be applied to the classroom today. This writer is inclined to disagree for the reasons subsequently provided in this essay. While there are portions of Duckworth’s essay that can be applied to the classroom, substantive understanding is more complex than she alleges.

Piaget outlined his theory by laying the foundations of the basic tenets of cognitive development. In closely observing his children and others, he theorized that there were four stages of development. He described the level of understanding a child ought to display at each stage. Duckworth utilizes Piaget’s stages to apply understanding in the classroom.

Duckworth asserts that children stop having their own wonderful ideas in part because they do not feel their intellectual breakthroughs are valued (p. 6). The process of discovery is not valued by adult figures, therefore discouraging children from using their own creative freedom to express their ideas. Children learn that their ideas are not valued; this sets the tone for the rest of their education and they begin to absorb and memorize information without exploring their own creativity.
Duckworth also asserts that conflict in a child’s mind aids in learning (p. 39). In the Geneva research, children were shown a tube with colored marbles and asked to predict which color would be shown next. It took most children more than ten tries to correctly predict the marble color. The children often did not understand why the color would come up the same if the tube was turned once and changed if turned twice. Once they recognized the pattern they correctly guessed which color the next marble would be. The conflict of consistently guessing the wrong marble color prompted the children to observe more closely. In this instance, conflict accelerated learning.

According to Duckworth, knowing the right answer is not always an indication of a depth of understanding. In fact, she feels that it is overrated (p. 64). When a child knows the right answer, they possess the most passive virtue. Teachers often appreciate and reward the correct answer that is given quickly rather than the slower, more pondered answer. Intellectual ability is often tested in the same manner, with higher scores given to children who answer quickly.

In the example of the class with 10-year-old Alec, Duckworth shows that his quick answers are not always correct, although he is an intelligent boy. When he speaks of the pendulum swinging because it has no reason to stop, the teacher makes no response. Slowly, children begin to question Alec’s answer. They finally come to the conclusion that it slowed down at both ends (p. 67). In this particular case, Alec’s quick response prompted the other children to ponder the other possibilities of explaining the larger piles of sand.

While there are portions of Duckworth’s essay that I agree with, there are claims that do not always apply. I agree that children often lose creative ability as they age.
Young children are fascinated with creating new worlds and fantasies, playing games where they can assume new roles and be superheroes or famous athletes. As they age, however, this creativity often becomes suppressed because their parents or other authority figures tell them they need to be realistic about things. They are told to quit dreaming and to live in the real world. I can recall having my own creative imagination suppressed as a child. Rather than being allowed to explore creative writing, I was encouraged to pursue something more academic, a subject with more substance such as mathematics.

Although I do not agree with the suppression of natural creative ability, I believe that children should also learn that fantasy is not reality. In this day and age of video games with false reality and role-playing internet games, children need to learn that they are not superhuman. They need some semblance of reality in order to become functional members of society. After all, I believe the role of educators is to instill a sense of truth seeking in children. Rather than merely accepting information as truth, I will encourage my students to find the truth as they see it in order to make it real, to make it personal.

I agree that conflict often causes children to pause and ponder information rather than absorbing the facts. When things go smoothly, there is less opportunity to begin questioning the mechanics of the problem. I believe that part of the difficulty in education is showing children how to properly question. In my opinion, truly educated individuals spend their lives questioning, answering those questions, and then questioning the results. They are like philosophers who are never fully satisfied with the answer until they have fully explored every other avenue of possibility. My aim as an educator is to allow children to truly question until they reach their own level of understanding.