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Assignment – Book Review

Zull, J. (2002). *The art of changing the brain: Enriching the practice of teaching by exploring the biology of learning.* Sterling, Virginia: Stylus

Zull (2002) captures the essence of learning, brain, mind and neuroscience is one phrase: “Learning is change.” It is change in ourselves because it is change in the brain. Thus the art of teaching must be the art of changing the brain" (p.xiv). Whose brain are we talking about as educators? It is the students’ brain. Every new opportunity in learning is reshaping our brain and this process is neuro plasticity.

I must admit that my initial reaction of the title of the book startled me. It reminded me of Biology 101 and naming the parts of the brain. However, my attention clutched on to each page the minute I began to read the introduction of the book. This book is fabulously written by Zull explaining personal experiences to introduce complex concepts of the brain and the mind. It is simple enough to understand the impact of the profession of teaching and complex enough to understand the responsibility of the impact that teachers have in the lives of students in shaping their learning.

” Teaching is the art of changing the brain (p.5). I find this really applicable in the profession of early childhood education because in order to make learning meaningful to young children teachers must think of hands on learning activities so that children learn by actively engaged in their learning environments using all senses. Zull (2012) shares the importance of concrete experiences and building on existing knowledge in order for neurons will fuse and neuro plasticity takes effect.

Zull (2012) explains the learning cycle in a simplified manner based on theories of Jean Piaget and John Dewey: Concrete (experiences) —Reflective (observation) --Abstract (hypothesis) – Active (testing) (p.17). Zull (2002) explains beautifully how the biology of the brain functions in concert with our thoughts and emotions. As a result of this ensemble our physical world gets affected and vice versa. By reading this book educators will gain the conceptual understanding of the learning cycle which will motivate them to plan lessons that are meaningful to students.

“We view the learner as needing our help, which we hand down to him. From this perspective we can forget that the actual learning takes place down there in the brain and the body of the learner (p.xiii). Zull challenges educators to turn this around and think of education differently. When was the last time you asked your students questions to spark their interest and ignite their fire? --“What do you think?” “How do you know?” My philosophy in education is we learn together. Questions from a preschooler’s curious mind makes me wonder about the universe and life in general. According to Zull (2002) neuronal networks in our brain in the knowledge we acquire. So if we want to knowledge to grow these neuronal networks must physically change. What this means is “Learning is physical.” It is the educator’s responsibility to offer a stimulating learning environment for students so that there will be change in the neuronal connections. Whether it be a change to make connections harder, stronger or different. If connections don’t occur learning don’t take place. So make learning fun, hands incorporating all modalities for these connections to happen. This is serious business…

I recommend this book to anyone who works with children: educators, administrators and parents. We must know that teaching and learning is reshaping the brain one student at a time. Ask yourself, “Am I providing maximum opportunities for all students to learn and grow?”