Common Ground: A Constructivist Teacher's Reflections on The Orton-Gillingham Math Lesson Plan: Yes, there one! -Kelly-Lynn Everfree

On a rainy Saturday last month, I attended an OG Math workshop presented by Marilyn Wardrop and Donna Cole. With coffee in one hand and a notebook in the other, I came to see what OG Math was all about. I'm glad I did. I am a newcomer to Orton-Gillingham as of April this year, and being a PreK-5 Constructivist teacher, and one who has enjoyed teaching math in particular, I was thrilled to learn how much in sync OG Math is to the methods of Constructivist teaching and learning. While this workshop highlighted effective strategies for teaching math, what I especially delighted in was learning some of the theoretical underpinnings of Orton-Gillingham and discovering a common ground among OG Practitioners and Constructivist teachers.

One of the benefits of understanding the background of teaching methods is that knowledge protects educators from the pitfalls of default teaching tactics, especially those that corroborate the "blank slate" or "empty vessel" ideology. The view of children as having no intellectual or cultural framework in which to makes sense of their world is the cornerstone of our Western society, dating back to Aristotelian days. When teachers push children to memorize math facts, for example, and then manipulate the children's behavioural output by rewarding (or refraining from rewarding) them with stars, stickers, or grades, they are implementing the behaviourist, or blank slate, model. Understandably, we teachers easily fall prey to these outdated, yet ingrained, approaches. Modern research, however, shows us that children do indeed come with intelligence. Since immersing myself in the OG world, OG practitioners, like Constructivist teachers, see children as fully intelligent beings capable of cognitively constructing meaning from their world. We both take it upon ourselves to present learning tasks as discoveries for students, and then we serve our students as their mediators in a cooperative pedagogical journey.

To further illustrate my point, Wardrop and Cole presented an instructional approach they called, *Building, Drawing, and Naming*, or BDN. In her presentation, Wardrop discussed deriving this concept from a mathematic teaching strategy known as CRA, or *Concrete, Representational, Abstract*. BDN is a simplified version of CRA. In teaching order, the first instructional step is the concrete stage of building or working with manipulatives. The second step is the representational stage of drawing the manipulatives or shapes to represent concepts. The final step is the abstract stage of naming the written numerical expressions. CRA and BDN stem directly from the Constructivist line. In the 1960's Jerome Bruner, a cognitive psychologist largely influenced by the works of Piaget and Vygotsky, introduced the CRA teaching strategy. He also coined the term, *scaffolding*, which is a concept derived from Vygotsky's *Zone of Proximal Development*, or ZPD. This instructional strategy is carefully scaffolded for students. Looking further, the concepts of CRA and BDN echo J.P. Guilford's *Structure of Intellect* theory. In 1955 Gilford asserted that part of the combined factors of intelligence involve a hierarchal construct he termed *Figural, Symbolic, and Semantic*. The *figure* is the tactile object; the *symbol* is the pictorial representation of that object; and the *semantic* is the name of

the object. Does this sound familiar? At this point, it appears to me that OG practitioners adhere to Constructivist principles.

While Orton-Gillingham may be a constructivist approach, it differentiates itself by the students it serves. Most of these aforementioned psychologists worked with typically developing children. They did not outline the characteristics of children with special needs, like Dr. Orton did. Dr. Orton's theories were kindled by Anne Sullivan's work with Helen Keller. Here is the crux of our work. We all may be Constructivist teachers, but we are a branch of educators that work with and care deeply for children and adults who learn and develop in their own unique way.

Wardrop and Cole presented other important elements of the Orton-Gillingham method, in addition to BDN. They emphasized the importance of VAKT, or the multisensory element to teaching; visual, auditory, kinesthetic, and tactile inputs to learning. They also offered teaching ideas that were both creative and yet easy to implement. Those of you who have taken the OG Math course would be very familiar with the material presented. Other participants commented that this training was a nice overview of the OG Math course. The presentation was straightforward and easy to grasp. Should this workshop be offered again, I would recommend it to beginners like myself, to practitioners wanting either a reminder or an overview of OG Math, and to parents with kids struggling with mathematical concepts. Some of these ideas, such as bunny feet and post-it note number lines, would be simple and effective homework strategies.

Overall, I enjoyed my drizzly Saturday spent at this cozy, interactive seminar. The food was delicious and the conversations were engaging. I met some very warm-hearted, passionate, and innovative teachers. Although unintended, what I found the most exhilarating aspect of my day was a path to a common ground between Orton-Gillingham and Constructivist teachers. Unlike the "empty vessel" view of children, we therapeutic educators believe that people with special learning challenges are equipped with an inherent intelligence to construct their own understanding of the world. We also know that they are a fully capable of achievements commonly thought to be out of their reach. In workshops like these, we have the opportunity to come together with heart and indefatigable faith in our students' abilities, and to remind one another of the common ground we educators share.