



# **Learning in Depth: The Role of the Teacher**

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## **Background**

For the past two years I have been deeply engaged in a Masters Program studying Imaginative Education and teaching full time in a Richmond elementary school. My journey has been fraught with philosophic crisis, blissful clarity and total pedagogical reorientation. I am more aware and more deeply confused than ever, though I embrace the chaos because with deeper understanding comes greater appreciation of its complexity.

This year I am teaching a grade 5/6 combined class of very respectful, spirited children who have an abundance of imagination. My students represent the spectrum of strengths and challenges. Our community is mostly working middle class families with a very multicultural heritage. The most visible culture is South East Asian, with European, Asian, and some South American communities also present. Although, attempts are made to provide academic, behavioral and social balance in each class, grade 5/6 classrooms, often have grade 5s that are academically stronger and grade 6s that need extra support.

As a part of my coursework, I have been exposed to different specific programs that seek to incorporate the principles and beliefs of Imaginative Education. Learning in Depth is a very popular program (more internationally than locally) that was designed to provide our current education system with deeper learning in an environment that could more easily extend beyond the classroom walls.

Richmond School District encourages the implementation of innovative, collaborative inquiry based programs by providing a grant to interested educators. By incorporating my Action Research project and the innovation grant, I was able to bring Learning in Depth into my classroom and hire Linda Holmes (an Imaginative Education Research Group) as a consultant.

The Learning in Depth program has been one of the most controversial examples of Imaginative Education amongst my Masters Cohort because it seems to support and contradict many educational beliefs. On the surface it looks very progressive, with components of traditional ideas mixed within.

Throughout my journey I have had many guiding questions that served to mold and direct the experiences of this project. With the uncertainty of philosophic foundation and search for Imaginative Education genealogy, it became clear that my campaign was to discover the role of the teacher in guiding my students to knowledge, understanding and imaginative engagement. The following action research project recounts my journey through theory and practice to realize the teachers role in Learning in Depth.

### **The Red Lunch Bag**

Standing at the front of the class, I held up a red rectangular thermal lunch bag with neon writing squiggled across the outside that read 'Giselle'. I explained that this lunch bag accompanied Mrs. Hughes to school throughout her entire elementary school life when she was a girl. How it had been present when she was first learning the alphabet in kindergarten and as she learned to write and read through grades 3 and 4. It was a dedicated part of her early education; there for the foundation of the things she knows today. When Lily, our daughter, needed a container to hold her plasticine, Ms. Duamel (Mrs. Hughes' mother) brought the bag over to hold the molds and tools she would use to roll and cut the plasticine into creations. This bag represents the process of learning, the possibilities that new ideas and knowledge bring to our thinking. Today it will help your topic pick you.

For months, I had been casually introducing Learning in Depth (LiD) to my students. Trying not to tell them too much and leave a sense of mystery, while creating some excitement and anticipation. It was vital that the ceremony be special, with a hint of the importance of tradition. I had invited the Principal and Learning Assistance Teacher to share in our experience. For refreshments, Mrs. Hughes created handmade apple turnovers and there was carbonated juice in fancy glasses.

### **The Journey Begins**

My class knew that I was currently enrolled in a Master's program where I was learning about Imaginative Education, and I had talked to them about Learning in Depth and the opportunity they would have to become experts about a specially selected topic.

As I stood in front of them on the day of the ceremony, I was terrified. To this point, all of my knowledge about the LiD program was gathered through books and by talking to experience LiD teachers. I had informally interviewed imaginative educators who had run the LiD program for years, carefully accounting for the decisions they had made and how their program evolved through time. Through my school district, I had been awarded \$1900 to fund LiD, hiring a consultant to help guide us through this process. I had sold Learning in Depth to everybody. Now I was hoping that my research and beliefs would result in the claims I had made.

### **Learning in Depth**

Learning in Depth is program created by Kieran Egan and the Imaginative Education Research Group (IERG) at Simon Fraser University. It was designed to supplement our education system in deep, independent, engagement with knowledge and learning. If you were to walk into a Learning in Depth classroom during their study block, you might expect

to see students independently reading, writing, drawing or creating something connected to their topic. Some students might be quietly discussing common ideas, sharing something they found or asking questions of each other. The quiet is not imposed or enforced but the result of respect for each other and keen interest in the task at hand. The task is not assigned, evaluated or directed. It is a student chosen activity, encouraged by the teacher or portfolio supervisor. Over time student create a portfolio that reflects and represents their knowledge about the topic. As they move from grade to grade their chosen activities change with their education. What they know about their topic becomes deeper and more detailed; the knowledge becomes a part of them. (Egan, 2010)

Learning in Depth seeks to provide students with the opportunity to develop a deep relationship with the nature of knowledge, hone their confidence and ability to learn, and provide them with the deep pleasure and imaginative stimulation that experts feel in their field (Egan, 2010). “It is, indeed, based on the belief that learning about the world around us is intrinsically interesting to everyone. The more we know, the more interesting it becomes. It is boring only to be ignorant. That’s just how our minds are. This project is an attempt to strike at the heart of ignorance.” (Egan, 2010, p.34)

Learning in Depth happens in a community of learners, a group of students who all have their own topic and who work to encourage and support each other. Linda Holmes often refers to this as the quality of generosity. She refers to the culmination of respect and admiration that learners develop for others experiencing the same struggles and successes. During my experiences in class, students greatly appreciated and supported the evidence of learning that other students present. Although students are not directly working together on the same topic, their common journey brings together a parallel experience. In fact, the

nature of individual work removes the element of competition and students seem (in my experience) less judgmental and more supportive of each other's success.

### **The Ceremony and Topic Selection**

The Topic Selection Ceremony is an essential commencement of the LiD experience. It sets a tone of excitement, anticipation and commitment. LiD is designed to supplement the education system with deep, independent discovery. It needs to have a different tone and be introduced to the students with the feeling of importance and wonder. Like the christening of a new ship as the crew prepares to embark on a trip of exploration and adventure. "The importance of the ceremony is to emphasize the importance of what the students are taking on and also to engage the students' commitment to their special topic." (Egan, 2010, p26)

Weeks before our ceremony, I had to bestow upon my students confidence in the quality of the selected topics. I very carefully shared a few examples of possible topics, and made sure to explain how wonderful and vast these subjects were. In preparing my students for the ceremony, I wanted them to be open, interested and excited. Not having pre-decided which topics they liked. I wanted them to be open to many possibilities.

In anticipation of our LiD ceremony, there were certain parents that I needed to connect with. One student in my class, Dylan, has Asperger's Autism. He is very inquisitive and curious about learning. His mother is a very supportive influence on his life and we work very well as a team to provide consistency between school and home. Dylan is very anxious about new experiences. He often refuses to participate in activities that are new. Usually, with time and the risk of staying late to have extra help, he comes around and eventually participates in the lesson activity. My fear was that he would select a topic that

would not be immediately engaging to him and despite my carefully planned environment of openness and faith in the wonder of the topics a meltdown would ensue. In discussions with his mother, I supplied her with a list of the topics, encouraged her to instill openness while talking to her son and asked her if she thought we should fix his topic to ensure success.

One of the controversial elements of LiD is the suggested process of topic selection. Kieran Egan proposes that students select their topics randomly. Initially, this idea seems to be opposite to the widely held belief of progressively minded educators, that students should be given choice, especially it seems, when working on a student directed project. At first, when considering the implementation of LiD, I was also concerned that students would not like learning about a topic they did not choose themselves. While attending Imaginative Education workshops, I casually interviewed other teachers who were successfully using LiD in their classrooms. Many shared that although they too struggled with the idea of selected topics, over time they realized that students were most successful and seemed to persist longer when they randomly selected their topic.

The morning of the ceremony, I quickly met with Dylan's mother and solicited her advice about Dylan's topic. Her decision was to have him select a topic like everyone else. Part of me was relieved that I would not need to slyly fix his 'random' selection and the other part was very anxious about the topic he would select.

Two other parents I needed to connect with were also teachers. A grade 6 girl, **Alice**, and a grade 6 boy **Sam** both teachers from another school. My fellow teachers have been some of the most supportive and critical observers of the LiD program. Both parents are wonderful teachers and very carefully distinguish between their roles as teacher and

parent. As a professional and teacher-parent courtesy, I met with each parent to discuss the program and in particular, explained the arbitrariness of the topic selection process. Alice's mother loved the program but had reservations about her daughter's lack of choice. Sam's mother and I met after school. Sam has a learning disability and his mother is very supportive, providing enriched opportunities at home for Sam to be successful in school. Sam's mom was completely supportive of the whole program.

The time had come to select topics. At the front of the room I reached my hand into a glass jar, where 28 popsicle sticks with the student's names on them were randomly arranged. The student's were excited and nervous. As I pulled out each name, the students came to the front of the room, placed their hand into the red lunch bag and read out their topic. Everyone clapped, I gave the students their very special unique portfolios, with a sewn notebooks and courier style zip up nylon bags. One after the other the students selected their topic and the class erupted in celebration. Kieran Egan explains in his book, Learning in Depth: A Simple Innovation that can Transform Schooling that "This ceremony marks as initiation into the great human adventure of coming to know the world in symbolic terms." (Egan, 2010, p. 26). In reflection it was very successful. Though at the time, I was just hoping the momentum would continue.

The moment had arrived and Dylan's name was called. Very excitedly he came up and put his hand into the container. His topic was... GOATS. He accepted the portfolio walked over to his desk, put his folder down and briskly left the classroom. Our Learning Assistance Teacher, quietly left behind and found him sitting on a couch quietly upset. I had hoped Dylan might have selected rocks or trees, anything that he might already find interesting. 'Goats' was a hard sell.

After the ceremony we drank sparkling juice and ate Mrs. Hughes' apple turnovers. Students were still excited, though some more than others. As you might imagine, students could be seen in three different categories of thought. Some received topics that they could easily relate to, such as: volcanoes, bridges, universe, and trains. At the other end some of the students received topics they struggled to initially relate to. These included: leaves, simple machines, metal, dogs wood and birds. In the middle, many students were optimistic that they would be able to learn more about their topic.

On Monday morning before school started, Alice's mother came into the school concerned. Alice had received the topic 'Wood' and was quite upset. She didn't know anything about wood. Her mother was concerned because she felt that if Alice had the opportunity to select her own topic, she would not have spent the whole weekend upset and worried about her boring topic. Panic set in. Using my confident teacher voice, I assured her that we needed to help Alice find her own connection to the topic. I directed Alice's mother to the LiD website and tried to help her find some connections that Alice might be interested in. As she left, I felt a sense of terror.

Back in my classroom, students began to trickle for the morning. I asked some of them if they had looked up information about their topic. One of my students, Jessica, looked at me with despair and said "Mr. Hughes, why did I have to get tools and simple machines? I hate simple machines! We did them last year in Science and I did not like them." My heart dropped. Jessica is an excellent reader and writer. She regularly read extra Literature Circle novels and is always looking for another good book. She did however struggle in Social Studies and Science. On her own she never would have picked tools and simple machines. Some of my students were very excited about their topics. Logan selected Space and the

Universe and had spent the whole weekend looking at websites. Terry had bridges as his topic. Flipping through his LiD notebook, handwritten notes with sketches and pictures covered the first five pages. For every excited student, there was a disappointed student and many were somewhere in between. That afternoon, I pulled out many boxes of National Geographic magazines and we looked for pictures that were connected to our topics. At first Jessica was completely lost. She grumbled, "There are no simple machines in the magazines. I looked!" I had to find a way of guiding her, without being too directive. I felt my role as a teacher shifting, though I did not know how to be supportive without directing. That day I questioned the topic selection process.

Kieran Egan acknowledges that the strongly held belief that students must be allowed to choose the content of their own education is problematic. In fact, the ability to choose is an important element of Learning in Depth. Students need to be able to choose how they will access their topic. They need to be able to make the topic their own so the knowledge they learn becomes a part of them (Egan, 2010). A teacher friend of mine, stopped by after school one day with great concern. At staff meetings I had given brief preview of Learning in Depth and she was unclear about the 'prescribed' nature of topic selection. She believed that, "Children should choose their topics. The personal nature of inquiry required children to be passionate about their study. How could the students be engaged in learning if they were not connected to the topic?" Egan is not arguing that choice is bad. He questions the nature of our belief in choice and thinks that to always give choice sends the message that the only topics worth studying are those with which we are already connected.

In his book, Getting it Wrong from the Beginning: Our Progressivist Inheritance from Herbert Spencer, John Dewey, and Jean Piaget, Egan argues that many of the theories the

progressive movement beliefs, originated in the mind of Herbert Spencer, a 19<sup>th</sup> Century scholar who has been discredited as having inaccurate beliefs in every other field he studied. It is important to note that Egan does disagree with the progressive belief that learning needs to be natural and tied to childrens' daily lives. He also agrees that education needs to be "active" and "meaningful". Egan does not think that the work of Herbert Spencer and others that followed in his lines of thought properly explain the roots of meaningful, active learning (Egan, 2002). (please refer to Egan, 2002 for a more in-depth analysis of this argument). When topics are randomly selected, we have the best of both situations. The teacher is not assigning topics to children, and they are having the opportunity to learn about a given topic in their own way. "Given a choice we go to what is comfortable and familiar. One aim of education is to enlarge student's interests. We won't achieve that by allowing them constantly to choose what they are familiar with." (Egan, 2010, p.37) There is also a concern that students, who pick a topic, will not be robust and dedicated to finding its wonder. If the topic does not seem as exciting as the first thought, they could be inclined to blame their experience on a bad decision and wish to pick again (Egan, 2010).

For Jessica, the situation seemed hopeless. She was going to be asked to study a topic that she had already decided was repulsive. Over the following LiD sessions, her and I looked through magazines to find pictures of tools and simple machines. I started by clipping out pictures of tools and she had to explain how the object was a tool. This exposed her lack of understanding about knowledge and the nature of tools. Once she understood that a tool was anything we use to do a task or purpose, the world began to open up. This understanding did not happen in an instant or even overnight. Jessica's struggle to connect

to her topic for a long while. To help guide students (as suggested by Linda Holmes), I gave small challenges for students to complete. These were not assignments, however they provided something defined for students to accomplish.

Jessica regularly did these activities and with class enthusiasm and encouragement, she took ownership of her topic. One day she came into class with pages of information and drawings she had compiled about the simple machines in her house. At some point her topic became internalized and she began seeing simple machines all around. Jessica's story is an example of one journey that is still unfolding. The other children in my class are all at different places in their own journey, some still struggling to find their connection and others finding new and different ways to learn about their topic.

It is also important to note that many of us find it difficult to believe children will become engaged in randomly selected topics because we, ourselves, define topics we are, and are not interested in. We do not see everything as being wonderful and interesting and therefore struggle to see the potential of this program in our students. Even in areas we consider ourselves to be experts, we have not truly investigated the breadth and depth in great detail. Every topic has multiple access points, and yet when we define something as being interesting and boring, we fail to fully see the potential. A few months after starting LiD I noticed that I was quite knowledgeable in the topics my students had selected. Then I realized that I had inadvertently picked topics that I found interesting and left ones that did not appeal to me. For example, I did not include 'headwear and footwear' or 'money'. To me these topics are not appealing. Now, in retrospect, if I received 'money', I would probably look at the history of how money has been used and the future of digital currency, like Bit coins. I am interested in cultural-historic topics and the breadth and depth of 'Money'

allows me to access it in my own way. I can also make some real personal, humanistic connections between money and my own personal life. My lack of experience learning in depth significantly affects my belief in the success of this program.

Along with topic selection, there are some elements of LiD that need to be considered to get the claimed benefits of the program.

### **1. LiD is a long-term program**

Commonly teachers use, such as evaluation, assignment due dates, required structures and forced inquiry work, to meet shallow short term ends. In order to allow children to truly take control of their topic they need to be allowed to work through their own challenges without judgment or coercion. Your LiD topic is like a spouse. You appreciate and love each other and most of the time you get along. Sometimes you disagree, but over the long haul you are committed to each other. The benefits of LiD are ultimately experienced when you have spent a long time together. This does not mean students are completely left without any guidance. The teachers role is changed from enforcer to encourager. Through interviews and portfolio sharing, teachers help students find a path and connection to their topic. (Egan, 2010)

### **2. Breadth, Depth and Emotional connection.**

Topics need to "...have the richness and complexity to sustain multidimensional exploration..." (Egan, 2010, p.95) for the long term. The topics need to meet three important criteria:

- a. **Breadth** – Topics need to have many multidisciplinary materials. In his book, Kieran Egan, uses the topic 'apple' as an example. The topic of apples can be accessed biologically, historically, culturally, nutritionally, economically, artistically and

linguistically. This gives the students options to choose their connection to the topic and provides many different dimensions that keep their interest into the future.

(Egan, 2010)

- b. **Depth** - There needs to be an increasing level of details to explore within the topic. For example, the study of apple biology can be infinitely complex to explore. You could learn about plant DNA, breeding, pest control, impacts of spray on the environment, cultivation ... the list is almost endless. The hope is that, digging deep into a focus allows students to know their topic from the inside. "As our understanding becomes deeper, so our sense of the nature of knowledge becomes more complex and subtle. Each topic will have to have the complexity to allow this."  
(Egan, 2010, p.95)

- c. **Cultural Connection** – This criterion is difficult to explain and best left for Egan to describe himself. "...the topic must yield something other than simply accumulation of knowledge in breadth and depth, and must offer opportunities for cultural and personal engagement." (Egan, 2010, p.95) "...the topic must have the potential for our emotions to become entangled with it. Not simply in the sense that we grow to love or hate it, but that we become a part of what we have learned so much about and it becomes a part of us. The topic will invade our thinking. In the odd way the mind engages with knowledge in depth, it isn't simply that we learn about something that remains external to us, but that...it becomes a part of us; we participate in it." (Egan, 2010, p.95) The careful criterion by which each topic is selected becomes one of the reasons why students should not choose their topics. Not all fields provide the same opportunity for breadth, depth or participation.

3. **LiD should not be evaluated.** As teachers we are responsible for communicating our student learning. Many of us are so accustomed to integrating our assessment practice into everything we do, that we fail to see how the act of judgment steals part of the ownership from our students. I have heard the argument from colleagues, that students would not put as much effort into work that is not being marked. I believe this to be the case because a good mark becomes 'payment' for an assignment that has good effort and shows good understanding. The act of completing the task is solely to fulfill the role of being a student. It is done for the sake of the teacher and the student only owns the work as defined by the teacher.

...nearly all learning in schools is coerced in some way – no teaching without evaluation or assessment of some kind. It's as though we assume students will learn only if they know "it will be on the test later.": The very structure of schooling today seems to militate against students developing the accumulating pleasure of learning for its own sake. (Egan, 2010, p.10)

This is not to say that we let students 'free range' without guidance or direction.

Linda Holmes, Learning in Depth expert, refers to the teacher's role as the 'encourager'. With great skill she, subtly but deliberately, nudges students with enthusiasm and modeling. She genuinely asks them questions to help them find interest and move forward in their own direction. Students feel ownership of their ideas and without fear of meeting teacher criteria, are more confident to learn.

Every Wednesday, we set aside a block in the afternoon to work on LiD.

Linda Holmes comes by every second week to circulate throughout the classroom, encouraging the students to stretch their thinking and approach their topics from alternate perspectives. My experiences with LiD began to take on two multiple

personalities. On days that Linda was visiting, students would be more inclined to find a quiet place to work. There would be some wondering and talking but mostly students were working. The days that Linda was not present were almost opposite. Students would not settle easily. I would have to (so I felt) set boundaries, assign alternative seating and be coercive.

One day after the class was dismissed, I asked Linda why my students worked differently for her than for me? She said, “Because you are being their teacher. You are giving directions, setting specific boundaries and not allowing for them to make good decisions on their own.” In my compulsion to manage and assess their work environment, I robbed my students of the ability to make the good decisions on their own. This did not mean that Linda left them to do as they pleased. She gently and carefully, gave them opportunities to make better decisions. She also created an environment where she was so interesting and encouraging that students desperately wished to talk with her. As she made her way around the room her wholehearted interest in their work strengthened their resolve to be more focused.

4. **Learning needs to be Celebrated** – Creating a time for students to share their learning and understanding creates a community of learners that respect each others journey. Although the inquiry is independent, the act of sharing and connecting with each other makes the process social, allowing everyone to participate and appreciate other student’s knowledge.

## **Theory**

Learning in Depth is strongly rooted in the Imaginative Education paradigm. Which, for many educators makes the theoretical principles difficult to fully understand. It is not obviously different, though depending on your own philosophy of education you probably agree and disagree with some of the suggested practices set out in the program. Kieran Egan argues that there are three main ideas in education that form most of our beliefs about learning and what we see as 'best practice'. They are 1) Progressivism, 2) Traditionalism and 3) Socialization. (Egan, 2010)

The progressive movement, as earlier explained, is rooted in the idea that children advance through a set of biologically predetermined stages of cognitive development. In this theory, the brain and cognitive capacities are dominantly biological and the child is seen as a seed that already has the resources it needs to make sense of the world. Progressivists value the role of experience in shaping the mind and greatly believe that a student-centered approach is the best teaching practice. John Dewey was a major voice of progressive education, following the works of Jean Piaget and Herbert Spencer. Progressive theories seek to reproduce the natural learning of children, understanding that they learn best through social interaction and hands-on-experiences. (Egan, 2002)

Generally, progressivists agree or disagree with Learning in Depth, depending on which beliefs of the theory they think are most important. Those in favour often like the active engagement and pursuit of a topic in unconstrained learning environment. They like that children are given freedom to apply their own learning style and follow their own interests within the topic. Supporting progressivists appreciate the opportunity of students to build confidence through inquiry and success in self-direction. Those progressivists that

disagree with LiD often dislike randomly selected a topic. They believe that a child's own interests should determine what they learn. They also often have an issue with the independent nature of LiD. It contradicts the generally held belief that "...social interaction and unity of work and thought should be dominant..."(Egan, 2010, p201) components of quality education. Many elements of LiD appear to be progressive in nature, while others seem to oppose crucial tenets of this philosophic belief.

The second idea is a traditional approach to education. Traditionalists believe that our minds are shaped by knowledge. If we are taught the proper kinds of knowledge, our minds will fully develop. Evidence of traditional beliefs are still found throughout our current educational system, especially in High School. In my experience, the transition from Elementary to High School represents a shift in thinking; from progressive student centered to traditional knowledge centered focus. The upper grades become knowledge specific and teachers are more attached to conceptual understanding within the parameters of their discipline. For traditionalists, the mind is defined by the knowledge it learns. "...the aim of [traditional] education is to produce people who embody the most sophisticated cultural attainments who are profoundly knowledgeable about their world and the varieties of human experience." (Egan, 2010, p196, 197)

In fact, many traditionalists, like Hirst, do not believe in stages of cognitive development. "To acquire Knowledge is to learn to see, to experience the world in a way otherwise unknown, and thereby come to have a mind in a fuller sense. It is not that the mind is some kind of organ or muscle with its own inbuilt forms of operation, which if someone developed, naturally lead to different kinds of knowledge. It is not that the mind has predetermined patterns of functioning." (Hirst, 1974, p.40)

For traditionalists LiD also has its supporters and objectors. Those in favour appreciate that LiD encourages knowledge accumulation and supports the idea of concept mastery. They like that learning a topic in-depth expose students to many different disciplines and types of inquiry. Even though LiD looks very progressive, traditionalists see the strong focus on knowledge to be an opportunity for traditional values to be brought back to a heavily progressive, present day school system. Those opposed struggle with the peculiar approach LiD takes and dislike the loose instructional nature of LiD. They say that student centered exploration lacks the logical structures needed for good education. (Egan, 2010)

The third idea identifies education as a tool to provide good citizens who have the skills and values needed to contribute to the community. These voices often come from industry and businesses that do not see value in teaching students musical instruments or to follow their learning strengths. These tactics are not important, according to these thinkers, if they are not prepared with the skills they need for employment. Egan believes that in the long-term, LiD provides two social virtues that help contribute to good citizenship. First, after studying your topics for many years and establishing a feeling of expertise, you come to realize the enormous vastness and limitations of knowledge. There is so much that we do not understand about the world. Students that have spent years learning about their topics develop a sense of humility. The more they learn, the more they realize the vastness of knowledge. (Egan, 2010)

Secondly, Egan believes that students who have journeyed through facts and opinions begin to be discernable critics of truths and misinformation. They often withhold judgment until multiple, reliable sources can be verified. Students begin to appreciate

quality information and are less likely to be duped. Egan does not believe that these 'virtues' will necessarily convince people, who believe in education as a societal tool, to embrace LiD. He simply wants to assert that LiD can appeal to all three of these philosophies of education. (Egan, 2010)

There is a forth belief that is not dominant in our current system, but plays an important role in the Imaginative Education component of LiD. Lev Vygotsky was a 20<sup>th</sup> century Russian philosopher and psychologists. Vygotsky showed how learning is mediated through culturally significant tools that become internalized as thinking or cognitive tools. Vygotsky believed that culturally meaningful cognitive tools shape the mind. In Western society, literacy is a powerful cognitive tool that we use to expand our thinking. It begins externally through oral language and as we learn to read, becomes internalized forever changing the way we think. (Egan, 2010)

Although Imaginative Education is not specifically based on Vygotsky's theories, it does take a tools approach to learning and the imagination. Imaginative Education is based on the idea that we use cognitive tools to help connect to our cultural world. We use these thinking tools to become emotionally engaged with our environment and to help us understand our surroundings. Through our imagination, these cognitive tools create an emotional connection to the concepts or ideas we are experiencing. Egan believes that our imaginations change and shift. When we are born, we primarily use our bodies to sense the world (Somatic Understanding). Rhythm pattern, communication gesture and our sense are some on the tools we use to connect with the world. (Egan, 2010)

As we begin to communicate using language, our minds begin to associate with another set of tools based on oral language use (Mythic Understanding). We are fascinated

with stories, binary opposites, jokes and humor, gossip play and mystery. During this age we accept magic and fantasy without much explanation. Everything we know has been told to us, so we believe the limited explanation as truth. Children rarely question how Santa gets down the chimney; they just accept the story as it is told. (Egan, 2010)

With the use of literacy our thinking changes again and we start to be aware of the limits of reality (Romantic Understanding). The shift is evident when we compare early literate to fully literate text. The characters in books transition from being talking animals to more realistic humans with more heroic personalities. Literate people utilize a different set of cognitive tools in their interaction with the world. They are drawn to heroic qualities, extremes and limits, knowledge and human meaning, changing context and the capacities for revolt and idealism, to name a few. Evidence can be seen in children's fascination with The Guinness Book of World Records. This book expresses the very extremes of human possibility. It helps children define the imaginable and explain the realities of human potential. Even in fantasy type situations, an explanation is given to explain that a radioactive spider bit Peter Parker and turned him into Spiderman. (Egan, 2010)

As children use the cognitive tools of literacy, the ideas of reality organize into theories (Philosophic Understanding). We develop a sense of abstract reality and agency, searching for authority and truth. This is observed in teenagers and young adults who believe in fundamental truths, chaining themselves to trees or buildings in protest of violations of their philosophic belief. (Egan, 2010)

The Imagination is seen as being the key to true emotional engagement. Egan believes that through the cognitive tool kits used by each of these understandings, we learn to culturally engage with knowledge. And "...the imagination works only with what one

knows and can do nothing with all the knowledge students have “learned how to learn” or the knowledge they know how to access, but have never actually learned and don’t carry with them in memory.” (Egan, 2010, p. 209) For Egan, Learning in Depth brings knowledge and the imagination together. From an IE perspective, the engagement of students imagination through cognitive tools use, drives meaningful learning. He outlines one role of the teacher in LiD as bringing qualities of the pertinent cognitive tools into focus and helping students relate to their topics through imaginative engagement. (Egan, 2010)

As a teacher of LiD and an Imaginative Educator, it is difficult to articulate how Learning in Depth is different from other inquiry base programs. Teachers who see education through the progressive lens, are drawn to the idea of choice and see the process of inquiry as an act of learning a skills. Other educators who value a more traditional approach might struggle with the independent learning and lack of teacher directed instruction. The Imaginative Educator sees the value in imaginatively engaged learning, uncoerced and melded with the knowledge needed to fuel further engagement.

Understanding this program as a long-term project releases the pressures of a timetable and expected reportable objectives. It allows me to view the potential journey over years and not what a child does in a term. It has allowed me the freedom of not evaluating the programs validity in the short term and realizes that those students who continue to find their topic in their everyday lives will see the benefits.

Presently, after four months of LiD for an hour each week, we are in an interesting place. Linda’s help and mentoring has allowed me to take a step back from my normal teacher persona and be the excited ‘encourager’ my students thrive from. Students are at varying stages of their journey. Dylan has come to appreciate goats in new ways. He still

relies mostly on teacher direction and my reluctance to tell him what to do has been met with extreme focus and aimlessly wandering. At home he built a model of goats climbing a dam and has learned about how goats are used by humans, the crazy fainting goat phenomenon and other goat related interests. Jessica is my Tools and Simple Machines expert. She has begun to internalize her knowledge and I believe is far more receptive to learning about new things. She always has an example to share about how her topic connects with others and is currently compiling a small scavenger hunt of simple machines from everyday life. Alice has been collecting a list of tree species and continues to talk to her Grandpa about woodworking (his hobby). I realize that my students all learn with varying degrees of confidence and appreciation of knowledge. During our LiD block, we are not always the perfect image of independent, focused learners and I do not define our success by those criteria. LiD is supposed to be long-term (just like learning) and some may not see the true benefits for some time. I can only provide the opportunity and encourage them to discovery more.

Through my journey, I have come to understand that implementing and supporting LiD requires a way of thinking and being. There are certain ideas that the teacher needs to understand and behaviors that they need to incorporate into their role as teacher.

1) Everything is wonderful. Teachers need to believe that everything in life can be seen in many ways: beautiful, wonderful, interesting and exciting. Egan says “The students, and the rest of us, need to recognize that an underlying principle of this proposal is that everything is wonderful, if only we learn enough about it. Well, maybe not everything is wonderful, but it is ignorance that leads to boredom and failure to engage with topics” (Egan, 2010, p.22)

Remaining open to new ways of looking about the world helps students be open to the

possibilities within their topic. It is necessary to help children see a topic in a new light, and realize its possibilities. "It is, indeed, based on the belief that learning about the world around us is intrinsically interesting to everyone. The more we know, the more interesting it becomes. It is boring only to be ignorant. That's just how our minds are. This project is an attempt to strike at the heart of ignorance." (Egan, 2010, p.34)

2) Teachers should have a grasp of the theories of Imaginative Education and how cognitive tools help connect emotional engagement with learning. In understanding the three major paradigms of education and reflecting on our own belief within these paradigms, it is easier to see the lens we use in establishing 'common sense' or 'best practice' principles. Better understanding the lens we look through, helps us to more closely understand the reason why a program like LiD suggests certain protocols and practices.

3) Struggling students is not always bad. So often as teachers we quickly jump in and try to solve problems. As their guide, teachers can make suggestion, become really excited by ideas and provide activities that students can use. We should not assign mandatory activities or other coercive tactics to 'motive' them. Some of my struggling students are those who do 'school' well because they know how to learn what the teacher wants them to learn. The struggle is a part of the journey.

4) Having presentations regularly and asking students to give at least one learning update a term, gives them a chance to be proud of what they learn and to see and appreciate other journeys. Students seem to become a community when they have an opportunity to collectively share their experiences.

5) Understand the potential of each topic. The depth, breadth and cultural connection criteria are important to fully understand because they allow the teacher to more fully understand how the topic can be accessed, sustainable over the long term and emotionally significant to our students. Appreciating these qualities gives teachers the ability to guide students when they become stuck or unsure of their direction. The topics are picked with these qualities to provide an engaging, diverse and deep learning experience.

6) To be the 'encourager'. A LiD topic does not belong to the teacher, it belongs to the students. In that sense, the teacher's role is to show students ways in which they could emotionally connect to their topics. Linda Holmes explains that the teacher needs to set the stage and guide the production but not be the performer.

The process of collecting, documenting and researching this Action Research project has forever changed the way I teach. It has fundamentally allowed me to learn deeply about Learning in Depth, Imaginative Education and inquiry-based programs.

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