The Meribela Report

Art is a universal language, most children and adults "speak" it. When traveling the world symbols or art are commonly used to convey necessary thoughts and directions. Pictures are used to represent what the written word often cannot convey, they are universally understood by all. Art and drawings are our first and most basic understanding of written communication and the world around us.

Children like to draw and they know they can do it. Drawing is a natural activity that young children use for mark making. When requested, most young children will draw a picture for you, and will happily comply with your request. They are confident in their drawing and often use rich descriptive vocabulary and conversation when explaining their drawings. Children often become very competent at drawing based on their own natural interest. However when writing is introduced, this seems to be a less natural activity for children. More and more children fail to connect with writing, yet these same students can draw. Can drawing be used to connect these same students to writing and thinking? Is it possible that drawing and writing are two equally potential skills and that the two are intimately related and socially driven (Oken-Wright 98). Can it be possible that the loss of connections between the first drawings/markings of children and the later introduction of letters and words can be connected to the problems that some children have with writing?

Art and drawing activities are thought of as appropriate in the school environment, but not a substantive part of the education process. Somehow the use of art in education and it's usefulness have not gained significance with professional education advocates. Often art is viewed as a supplement, not as a tool that is engaging, relevant, and integral to the learning process. Most young children use drawing as a skill they like to think with. Unfortunately drawing in the classroom is often thought of as a time filler and not of substance in a child's education. This researcher would suggest that drawing and writing has a broad usefulness in many areas of learning and cross-curriculum education.

The way children learn in schools is often "dissociated" (Papert, 1980, p. 47). School often fails to connect with children's lives in meaningful ways. Every day children are reading other people's writing and looking at other people's drawings in the world surrounding them. It is part of their natural environment and the way they learn. Ask any child in America what the giant M at McDonalds means and they can tell you what is "says". Can curriculum combine the ways children appear to learn in their natural environments with what the educational demands of society expect them to do? Would the use of drawing and writing together allow a broader range of children to flow more naturally into the use and assimilation of our written language? Young children best understand and appreciate writing when it is part of a meaningful social context (Burns, Griffen, & Snow, 1999). For example the children make a stop sign and post it on the road they are building in the block area. This is a meaningful and natural literacy

extension of their world, something they see every day, and have begun to understand the significance of. Incorporating art in conjunction with writing into the natural surroundings and work of children can be seen as more conducive to the child's natural learning process.
Many children have trouble mastering writing and the written language. The problem may have to do with the children's acquisition and use of increasingly abstract symbols associated with our written language. In the writing acquisition process, drawing is developmentally accessible before writing. Drawing often serves as a rehearsal for text (Zalusky 1982). When researcher Lucy Calkins asks five-year-old Chris what he will write, he responds, "How should I know? I haven't drawed it yet" (Calkins,, 1986, 50). Children see and hear before they speak. Then children use language before they write and read. It comes to reason then that children draw as a precursor to writing meaningful symbols, which then leads to reading the symbols they have drawn. Children draw pictures and write to organize ideas and construct meaning from their experiences. They read their pictures and writing in order to understand their experiences (Temple, Nathan, & Burris 1982). Research abounds on children's writing and literacy development, but it seems that the necessary role of drawing in writing acquisition was overlooked or not emphasized. Drawing provides people and object that need labels, motivating the children to learn the vocabulary with which to write (Baghban 2007). Thus a hypothesis can be made that a cross-modal activity that combines drawing and writing will further develop descriptive analytical and thinking skills more effectively than a classroom that is just writing, though it's deeper connection to the child's innate way of learning.

Brain research may suggest that drawing and pictures are closely linked to a child's learning process as well. The fact that children have powerful and complex thought processes is commonly agreed upon by brain researchers (Sousa 2001). Humans are intensely visual animals. The eyes contain nearly 70 percent of the body's sensory receptors and send millions of signals from the optic nerves to the brain (Wolfe 2001). It has been demonstrated that seeing and hearing in combination with drawing and writing engages many components of a child's brain, much more than if a child is just writing.

Research in vision suggest many systems are growing at once in the human brain. Vision system growth is influenced by experience, therefore visual experiences can directly impact other brain system's development as well. Visuals are powerful retention aids which greatly increase understanding in new topics. Imagine trying to construct a child's play set with only written instructions and no picture of how the finished product would appear. That would make the task nearly impossible! The ability to transform thoughts into an image is often looked at as a way to test a person's true understanding of a topic. Some people appear to process information mostly in images, rather than in words, either written or spoken. One person who acknowledges thinking this way is Temple Grandin, a professor of Animal Science at Colorado State University. Temple is autistic and also known as being an expert in the design of livestock handling facilities. In her autobiography, Thinking in Pictures. Temple explains that the only way she can understand abstract concepts is to picture them

(Grandin 1995). Therefore why not capitalize on a child's thought process, that begins with a picture then develops into words that describe and define as the child's ability to use these tools increases.

Constructivism is a kind of learning that allows the child to construct knowledge and has roots in the theories of Jean Piaget (Piaget 1955/1959). Essential characteristics of this theory are that learning comes through natural play and experimentation. Using drawing to learn falls in this category as the child educates himself through drawing, and writing that reflects on his drawing (Devries & Kohlbert 1987). As a child learns to produce accurate drawings and gains fine motor control, he is also learning to look and work carefully, as well as reflect thoughtfully. The child's growing ability to observe and reflect has implications for how drawing can increase interest and attention span while driving higher levels of thought.

Using drawing in the classroom incorporates in an authentic and meaningful way many of the principles necessary to literacy learning and acquisition. One of the first of these is that learning emerges from social interaction during joint participation of an authentic task (McGee & Richgels 2003). Children participating together in a class activity of drawing things from their world and background experience are using authentic tasks to develop their skills and understanding. This task further incorporates another important principle of literacy acquisition; that being that learning is accelerated when instruction is responsive to the needs of the individual and learning is refined through feedback (McGee & Richgels 2003). When children draw and share their pictures and "stories" with others they are participating in a language rich type of feedback from their peers and teacher. They are sharing and learning in a way that is authentic to their world and developmental level. The children's motivation to engage in literacy rich activities stemming from their beginning with drawings is an important component to keep in a mind as well. Children are not born motivated to engage in literacy activities such as learning to write the alphabet. Instead their motivation arises from their engagement with drawing and authentic correlations of subject matter to their world.

Thus is can be concluded that drawing is a natural bridge to the writing process based on the strong components of brain activity and authentic engagement it create with the young learner. When drawing is incorporated into the classroom, it creates a bond between drawing and writing, which may also increase the capacity for writing. It then stands to reason that if a child can attend to drawing, it may condition the child to attend to writing as well. Drawing and writing together incorporate a variety of attentional cues which engage the child and further their skills and comprehension in developing literacy skills. Drawing engages vision, a primary factor in the human brain's learning process, and thus teaches visual discrimination. With each step in the drawing process becoming more complicated the act of drawing is teaching the brain to order complex parts of a whole, a necessary skill to process writing letters, going next to combining letters to words, and on to sentences. Confident drawers and thinkers are on the path to becoming proficient in key areas of literacy acquisition.

Researching Project 64 has led me to believe that using art and drawing can have a significant impact on a student's learning and intelligence. Key components of effective literacy programs are incorporated into the lessons in ways that reinforce a variety of literacy skills, and at the same time make learning fun for the child. Lessons are highly engaging and have the effect of sustaining the child's attention span for periods of 60 minutes or more, along with increased attention to detail.

Authentic subject matter that is relevant to the student is widely viewed as a strategic link to success in literacy and Project 64 in an excellent example of incorporating this strategy into learning. I was especially impressed with the vocabulary and "educational talk" that Project 64 generated from the children while they were involved in the lessons. The children were often very excited about what they were drawing and used a variety of new vocabulary in talking about the crayon colors and many of the science related themes, such as the metamorphosis of the caterpillar to a butterfly. A casual observer may have thought the classroom was very noisy, but if you listened closely the children were discussing their drawings, techniques, line, form, new words and functions involved with the lessons, they were highly engaged in their tasks.

There was a significant improvement in the students' fine motor skills as well as more independence in performing fine motor tasks such as cutting, drawing, writing, and copying. The continued practice of specific fine motor skills helped the children to train their muscles and create brain connections during this important window of opportunity at the age when research has shown neural connections are especially significant for children. These skills carry over into all areas of curriculum in the classroom and especially so in the students' lessons in writers workshop. The students produced much more legible writing, a considerable amount of more detail in pictures, used more descriptive words in their sentences, and just wrote more in general. The students also took a lot more interest in what they were writing and drawing during writers workshop. The addition of drawing technique books and other small books in the literacy area resulted in the student choosing to spend an increased amount of their free choice time engaged in writing and creating stories. Students also paid more attention to details in books that were read by the teacher and themselves. I believe this attention to detail, along with an increased proficiency in letter-sound connection generated from Projector 64 lessons, improved their use of literacy cues important to de-coding when reading.

Project 64 created many cross-modal benefits in the classroom as well. Students gained knowledge in several math concepts such as : colors, shapes, sizes, measuring, directionality, addition, and introduction to fractions. Most lessons are nature and science based, in tune with seasonal changes, which created a strong connection to the environment for the children. I was especially impressed with the attention to skeletal composition incorporated within the people drawing lessons. These lessons greatly expanded the students' background knowledge in a way that I think does not occur in the average kindergarten classroom.

The students' increase in self-confidence and their abilities to draw, write, and be authors is another significant benefit that must be highlighted. Even the most hesitant of students made very visible strides in their confidence in their own abilities. The little books that went home along with encouraging the children to teach others at home how to draw is a noteworthy part of the program. It has the dual benefit of improving the child's self-confidence along with getting the family involved in the literacy process. Educators are constantly striving to find ways to involve and connect families with their child's education and this activity accomplishes that perfectly!

Project 64 research confirmed my original premise that using drawing to improve writing works because it's natural. Drawing skills develop through training and practice. Writing skills develop in the same way. Using Project 64 in the classroom has shown that drawing and writing can develop together in an educational classroom and leads to more confident writers and readers.

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