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Research into Practice

The Benefits of Employing Visual Learning Practices in Early Childhood Education

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Our children are natural visual learners. They are able to assimilate visual information long before they have learned to read and write. They readily find meaning in images. Young children relate to visual models and illustrations, regardless of their language backgrounds, learning styles, and cultural experiences.

It therefore makes sense that visuals have become an important part of non-fiction and informational texts. However, while there is much ongoing research regarding how our reading habits have changed, we continue to teach our children assuming they will acquire most of their information through reading. Many prominent educators, such as professor and author Thomas G. West, feel that it may be time for us to rethink how we deliver instruction to our students.

> "I believe we are now at the early stages of a major transition—moving from an old world of education and work largely based on words and numbers to a new world largely based on images that are rich in content and information."
>
> (West, 2004, p. 16)

As we progress further into the digital age, we are acquiring a new universal "language" that is increasingly more visual. This has led to new methods of communication that can be more effective and help us reach a broader range of students.

BENEFITS OF VISUAL LEARNING PRACTICES

The benefits that derive from employing visual learning practices when teaching young students are many. Consistently constructing lessons that include visualizations and encouraging visual responses from our students is well worth the effort. The payoff can be huge.

Student Engagement Visual models interest and engage students. Students are able to "see" the information. Illustrations and models provide easy entry to new concepts and invite thinking and exploration. Visualizations can also help reduce anxiety and promote positive attitudes toward learning.

Comprehension Visualizations help students recognize patterns and relationships. They see what is going on and how it works. Visualizations can help students better understand complex information and solve problems.

Communication Visuals provide ways for students to communicate their thinking. They can show what they know. They can spot their own errors. Based on their observations, they are able to manipulate and correct their models.

Connections Visuals help students make connections to other areas of learning, and to their own real-life experiences.

Assessment Visual models created by students provide opportunities for assessment. Teachers are able to see what the student is thinking and how they got to where they are, ensuring that assessment is an integral part of their instruction.

Creativity The making of visual models encourages creative thinking. They help us infuse creativity—artistic expression and inventive thinking—into our everyday instruction. Young students need to be fully engaged in creating models, dictating and writing stories, doodling and sketching, and using multiple means of expression and representation. As we consider the importance of instilling science, technology, engineering and mathematical thinking in our teaching (STEM), we must remember that our children need the arts, too. (STEAM)

STEM → to → STE**A**M

Science
Technology
Engineering
Mathematics

Our students need the **A**rts, too.

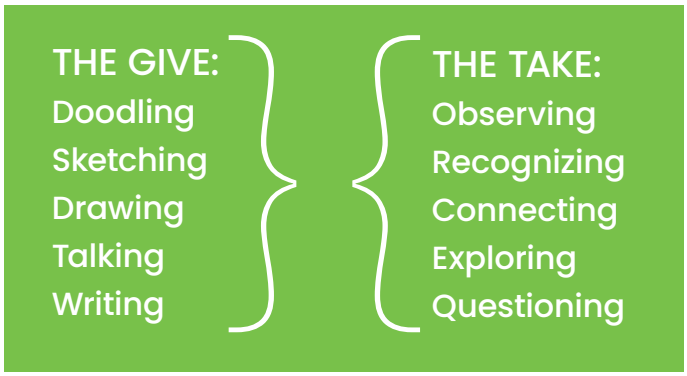
VISUAL THINKING AND LEARNING STYLES

As we work to develop a new visual learning environment, we also need to consider the relationships between visual learning and visual thinking, and between visual learning and other learning styles.

In 1916, Albert Einstein stated, "I very rarely think in words at all." Much has been written about Einstein's tendency to think visually and to work on problems from a totally visual perspective. The very title of Thomas West's book, *Thinking Like Einstein,* suggests that we promote in our children the ability to think visually. (West, 2004)

Kinesthetic learning and experiential learning are by nature very visual. The use of games, toys and manipulatives is crucial in early childhood education. These involve learning by doing and seeing.

This overlap in learning styles suggests that we must be careful to not overly categorize learners. Columnist Laura Otis makes this point in her blog post, "A New Look at Visual Thinking: Creative Ideas Emerge When Visual Thinking Meets Verbal Communication." Otis observes, "New research indicates that we need to move beyond categorizing people as 'visual' or 'verbal' and consider the many different mental processes that visual thinking involves." (Otis, 2016, p. 1)

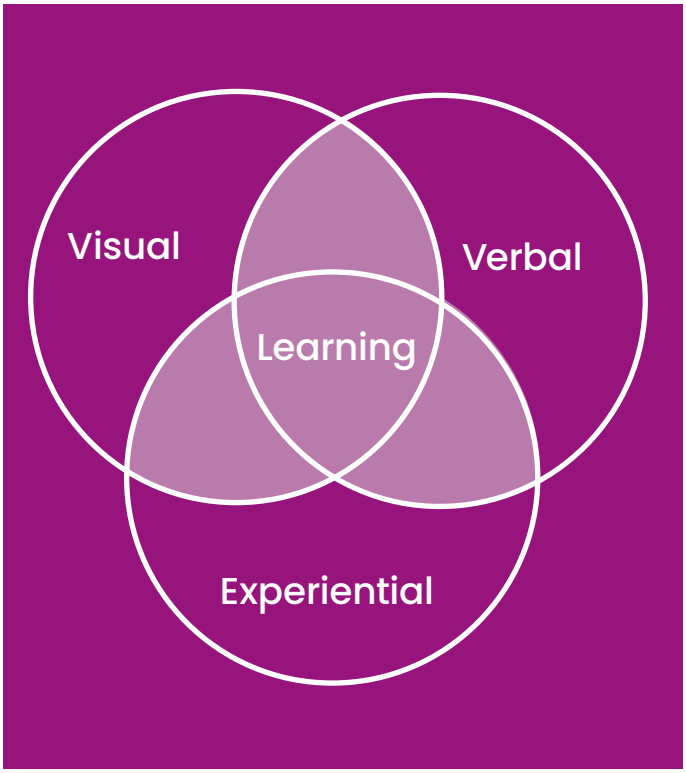


The Give and the Take As we consider what visual learning entails, we need to remember that it isn't just a one-way communications process. It is a give and take. It's about communicating ideas to others through visuals – the give. And, it is about analyzing and understanding visual models – the take. It is about making sense of complex information using visual representations.

In her important book, *The Intentional Teacher: Choosing the Best Strategies for Young Children's Learning,* Dr. Ann Epstein (2007) promotes the employment of visual learning strategies to achieve these goals should be fully considered. Doing so may be the best way to reach your students and inspire their thinking. And this must be carefully and thoroughly planned. As Epstein notes, "To be intentional is to act purposefully, with a goal in mind and a plan for accomplishing it." She remarks elsewhere, "Intentional teaching does not happen by chance." (Epstein, 2007, pp. 1, 5)

Thus, an effective way to effectively employ visual learning strategies is to carefully plan to do so from the very start. Epstein states, "Intentional teachers use their knowledge, judgment, and expertise to organize learning experiences for children." (2007, p. 1) We also must consider the power of creating projects to develop thinking. Projects are typically multi-disciplinary. They often involve researching, planning, thinking, problem solving, representing, and presenting ideas. They typically relate to how we use what we learn in real-life situations. And, they can be constructed as individual or group activities that can be done at home or in school.

In "It's a Project-Based World," John Larmer of the Buck Institute of Education makes this point: "When students engage in project-based learning over the course of their time in school, there's an accumulating effect. They feel empowered. They see that they can make a difference." (Larmer, 2016)



CONCLUSION

The case has been made. Countless research studies and opinion papers have been published on the topic of visual learning methodologies and practices. Cognitive researchers Eliza Bobek and Barbara Tversky point out that, "Creating visual representations has clear benefits to students, both specific and potentially general. There are also benefits to teachers, specifically revealing misunderstandings and gaps in knowledge." (Bobek and Tversky, 2016)

The evidence is clear. In order to fully address students today, to engage and inspire them, to help them succeed, and to prepare them for higher levels of schooling, we must aggressively adopt a more visual approach to teaching.

We need to understand the value of visual instruction, consider its many benefits, understand the relationships between visual learning and other learning styles, and systematically plan to employ visual learning practices in our work. The need has been identified. It is now our job to make it happen.

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