

## Research and Evidence

### Supporting VizZle Visual Learning Software

As VizZle is a new product, researchers conducting longitudinal studies on its efficacy (including Kevin Kearns, Ph. D.) have not yet released their findings. However there is a wealth of research and evidence in support of both the efficacy of a visual language approach to educating children with autism, and the effectiveness of materials presented interactively (on a computer or electronic whiteboard). VizZle is designed to capitalize on both the child with ASD's stronger visual processing skills for interpreting visually based information (Althaus, de Sonnevile, Minderaa, Hensen & Til, 1996; Mottron, Burack, Stauder & Robaey, 1999; Shah & Frith, 1993; Thaut, 1987), and their inherent interest in multimedia (Shane & Albert, 2008).

The foremost reason why parents of children diagnosed with ASD seek help is a delay in language (DeGiacomo & Fombonne, 1998). Inadequate language is a defining feature of the ASD diagnosis (DSM IV-TR), so it follows logically that language-based instruction is problematic for this population. Children on the ASD spectrum tend to use visual processing as their dominant information processing mode (ibid). Because of that strength they usually possess a heightened interest in visual materials (Furth, 1981). Due to this strong interest and their stronger visual processing capabilities, most individuals with autism benefit from the use of visual content to enhance communication, help organize daily experiences and improve school performance (Shane, Weiss-Kapp 2007; Cafiero, 2001; Grandin, 1995). VizZle is designed to enable educators and parents to provide this content, with both the creation tools necessary for individualization and a deep library of ready-made content created by educators using VizZle in the classroom daily.

The most thorough documentation of the efficacy of the Visual Language Model that VizZle developers used as the basis of the program is in *Visual Language in Autism* by Howard Shane, Ph. D. The book fully describes the meticulous protocols and evidence generated by a research study currently entering its ninth year at the Monarch School for Children with Autism in Shaker Heights, OH by Dr. Shane and his team from Children's Hospital Boston. The Visual Language Programming developed as part of what is now known as The Monarch Model was proven to be highly effective in both engaging and educating children on the autism spectrum, with 66 to 88% of all goals across all domains achieving significant progress (Goals "Mastered" plus "Adequate Progress") across the student population since 2005 (Kearns, 2008).

Designed to be used interactively, either on a computer or on an electronic whiteboard, VizZle instructional materials take advantage of the inherent interest children with ASD have for electronic media. That these children have extensive interest in computers, television and video has been well documented. The majority choose to spend more time with electronic media than with all other forms of play combined (Shane & Albert, 2008). In one of the many studies available, students with ASD were attentive to a computer-generated lesson 97% of the time (learning 74% of the targeted nouns) but attentive to a teacher-directed lesson only 62% of the time (learning 41% of the targeted nouns)(Moore & Calvert, 2000). Those numbers represent the difference between success and failure.

As VizZle is designed to create and provide visually supported educational content used interactively on computers or electronic whiteboards, VizZle capitalizes on these students' documented strengths to help them succeed and achieve.



## References:

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