

## **The Future Hope Project: An After School Intervention Program for K-12 at risk learners**

**The Future Hope Project**, under the direction of Milwaukee psychologist Dr. Raymond Lueck as the P.I. and AVE trainer and education researcher Steve Taylor as the project manager, engaged in a 10 week (36 session), after school demonstration project to assess the strength of intervention of audio visual entrainment in the lives of at-risk learners in 1<sup>st</sup> through 12<sup>th</sup> grade. Previous research studies investigating the efficacy of AVE have taken place in Minneapolis in 2005, Yonkers N.Y in 2001, and multiple sites in Minnesota in 1997, and 2000-2001. Research for the Future Hope Project took place at Wings Academy, a Milwaukee charter school for children that learn differently.

The Future Hope Project is the 3<sup>rd</sup> after school program to be developed and managed by Mr. Taylor and to receive grant funded support.

Ten students participated in the project with twelve enrolling. Two students dropped out. All students had I.E.P.'s with diagnosis ranging from autistic spectrum to self injurious behavior. Providing AVE as a form of non prescription intervention can be especially beneficial to children living in poverty. Few students have health insurance or access to psychological services. In many cases basic insurance does not provide coverage for alternative treatments of behavior disorders.

### **What is Audio Visual Entrainment**

Audio visual entrainment uses coordinated pulses of light and sound delivered through a patented viewing and listening device, called the DAVID Alert, to stimulate the auditory and visual cortex, improve cerebral blood flow and improve the production of neurotransmitters that improve mood, attention and reduce impulsivity. The primary brain waves include Alpha, Delta, Beta and Theta and each have a corresponding behavior associated with them. The control device for the DAVID Alert can be programmed to increase or decrease each of these brainwave frequencies and hence over a period of time, influence the behaviors of the user. The devices are commercially available at: [www.ourlifedesigns.com](http://www.ourlifedesigns.com).

### **Student Assessment**

School staff selected the student participants. Student cumulative folders and IEP's were reviewed by the research team. Each parent and teacher was interviewed by Dr. Lueck and Mr. Taylor to gain a better understanding of student's behavior dynamics. A battery of assessment questionnaires were completed by the parents and teachers that included:

- the Pace Learning and Behavior Scale for parent and teacher,
- the Coopersmith self esteem inventory,
- and the AVE symptom scale. The AVE symptom scale provided a guide for the researcher to establish the settings for the training protocols.
- Woodcock Johnson

Students participate in the 25 minute AVE training protocol four times per week in a controlled setting. La Fuma zero gravity chairs were used to provide comfort, and each student was asked to consume twelve to twenty ounces of water an hour prior to the training session.

### **Preliminary observations**

In the first four weeks of the project, parents reported that sleep patterns of all students have improved. The mood of the students had improved as well. Of particular interest, all three children with autistic spectrum disorders showed marked improvement in sociability and cooperation.

### **Post AVE demonstration project results**

Students realized significant improvement in self esteem and sleep patterns as reported by parents, teachers and students and recorded on the Coopersmith assessment. One third of the students showed marked improvements in reading while the other 2/3 students remained the same. All of the children in the autistic spectrum showed improvements in social behaviors and sleep patterns. The four children who were low birth weight, with systemic cocaine and fetal alcohol improved their social behaviors, on task focus and sleep patterns.

### **Turnkey After-School intervention model**

There is great value in providing after school intervention models that can facilitate improvements in student performance and enhance the effectiveness of the organization as well. The many benefits to the student and their family include but are not limited to access to a service that might be out of their realm of access due to the impact of poverty, access to health care, insurance issues. Schools benefit because it can reduce costs for special needs staffing yet improve the ability of the organization to meet the needs of at risk learners.

The template that the Future Hope Project manifests, allows schools in any location to start the intervention process within a week to ten days of, securing the training equipment, identifying the student participants, securing parent permission, and establishing a date to train staff.

### **Next Steps- Two new strategies for multi-year study**

There are two new strategies that the Future Hope Project will implement that will add value to the project. The first strategy is to provide a model that satisfies the needs of high school students. This approach is presented as a longitudinal study attempting to respond to the following needs. How can we apply the value of the Future Hope Project after school program to improve the social and academic outcomes for at risk students? Can the Future Hope Project after school program help schools reduce student suspensions and reduce drop out rates? How do we measure school climate and what strategies should the Future Hope Project engage in to measure its potential to create the proposed changes? The Future Hope Project 2 will be a brain centered after school program serving at-risk learners that uses innovative methods to create the positive changes identified above. The second strategy to be implemented is the inclusion of vitamin supplements to support improved outcomes of the student participants. Current research suggests that schools could enjoy a significant reduction in the rate of suspensions and drop out rates.

### **A Book is in the Works**

Mr. Taylor is completing a book for parents and teachers that discuss a variety of methods to improve the symptoms of ADD/ADHD with non pharmacologic approaches. The book also leverages Mr. Taylor's experience in developing after school enrichment programs direction to learning communities on how to develop and launch specific after-school projects. It is now ready and is titled: When Innovation Meets Spirituality. The book is available on LULU.com and from, [www.ourlifedesigns.com](http://www.ourlifedesigns.com)

### **Sponsoring Organizations of the Future Hope Project outreach effort**

Family Care Psychological Services	<a href="http://www.familycare4u.com">http://www.familycare4u.com</a>
Extreme Thought Makeover	<a href="http://www.extremethoughtmakeover.com">www.extremethoughtmakeover.com</a>
The Cash Coupon.com	<a href="http://www.thecashcoupon.com/greatvalue">www.thecashcoupon.com/greatvalue</a>
Dr. Gael Riverz	<a href="http://www.drgaelriverz.com">www.drgaelriverz.com</a>
Wings Academy	<a href="http://www.greatschools.net/modperl/browse_school/wi/3285">http://www.greatschools.net/modperl/browse_school/wi/3285</a>
Mind Alive, Inc.	<a href="http://www.mindalive.ca">www.mindalive.ca</a>

# The Future Hope Project

## An after school behavioral intervention program

Using a brain wave training protocol called audio visual entrainment (AVE), to improve the academic performance (reading), sleep patterns and social behaviors of at-risk learners affected by ADD/ADHD in an urban environment. Improving student self esteem and school climate is also a desired outcome.

**Dr. Raymond Lueck- Project P.I.**

**Steve Taylor: Future Hope Project Manager**

<b>Contact Information for Future Hope Project and AVE</b>	<b>Supporting Websites for Future Hope Project</b>
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