BABO News

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BUILDING A SPACE BOARD
Robert Hohendorf, BABO Instructor

I used a 16" X 28" piece of 1/4" plastic. It is 16" wide. The 28" length places the edge against the wall and the other 28" from the wall. I used the longest shelf brackets (101/2") I could find to support the 28" from the "wall end." I left enough of the "room end" so the braces won't interfere with the hands (used to mark the pins) below. (See figure 1).

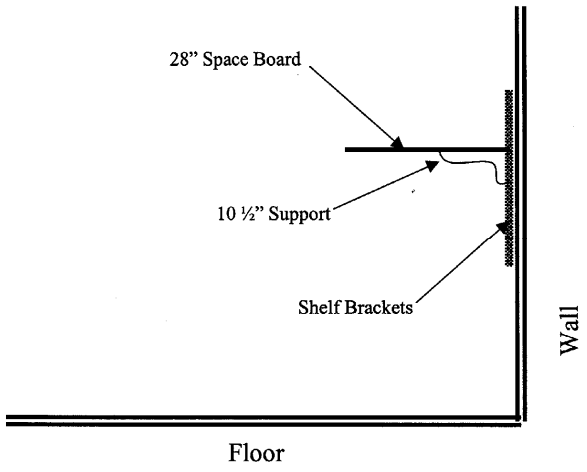

Figure 1
Space board from the side.

I then cut a nose "V" seven to eight inches from the "room end", depending on the office wall you are going to use. Remember to give the patient the most spacious view you can when positioned properly. I leave the paper coating on the plastic. You want the board to be opaque. So the patients cannot see their hands. In other words, don't have them face a nearby wall.

Next I drilled the "pin" holes (see diagram). I drilled slightly larger than the pin diameter. the paper (11" X 17"), the patient will mark on, is clipped onto the bottom of the space board using four (4) standard office supply black clips. The pins are placed into the holes drilled into the plastic on top of the paper during the testing. After testing you push the pins through the paper to mark their actual location physically on the paper.

When testing use any marker that has a good point and leaves a nice mark. After removing the paper, mark the pinholes. I suggest a different color. Connect the pin hole dots with the new color. Connect the patient

response marks with the initial color or a third color. When you flip it over to mark the patient right and left (remember it will be opposite when turned upside down).

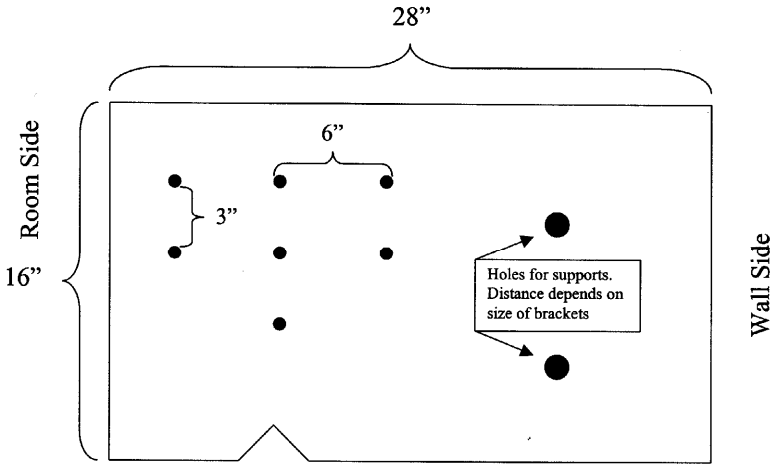

Figure 2
This is a top view of the space board to give you an idea of the spacing of the pins and the notch for the nose.

A PATIENT DEMONSTRATION

Tom Poswilko, BABO Attendee

One concept that I explain to parents and teachers when I give talks, is the concept of ocular/visual adaptations that occur from near-point stress associated with reading and the school environment. I tell them in this way:

When a susceptible child is put into a school environment with all the visual stress that accompanies it, the body (eyes) make one of two anatomical/physiological changes to handle this stress if the child does not choose avoidance.

CHANGE #1: A loss of 20/20 vision and the development of myopia and astigmatism may occur. These are the children that you see get glasses and fail school screenings. These children generally do not have learning problems. As an example of this, count the number of children in each class from grades K - 6 who are wearing glasses. In almost all cases you will see the number of children with glasses going up in each successive grade. This is because of increased demands and stress on their fragile systems. All eye doctors easily find these children examinations.

CHANGE # 2: These children retain 20/20 vision, but develop other types of vision problems such as suppressions, small misalignments and decreases in focusing strength, speed and endurance. School screenings or eye exams do not find these children by doctors that don't do functional visual analysis. These children often practice avoidance behaviors in the classroom, develop behavior problems, have trouble

concentrating or are labeled attention deficit and learning disabled. These are the children in the bottom half of their classrooms and the ones getting special services. As an example of this, refer to the handout "Incidence of Visual Problems in School Children." Often this also correlates with juvenile delinquency studies.

After this explanation, I do some demonstrations on non-presbyopic teachers of push-up amplitudes, flipper facilities and prism bar vergences. In most cases, they admit they have never seen testing like this before.

One especially good technique for demonstration is having a volunteer wear an Rx with OD Plano sphere and OD plano sphere with 4 prism slab-off with the slab line set at ½ the "B" measurement of the frame. I have them occlude one eye at a time at distance and near and they admit that there is no eye strain or acuity change. Then they are asked to read with both eyes. Most people fuse or are not aware of diplopia. They all admit to a reading comprehension drop and a desire to look away (across the room) from the printed reading material. I explain that this is similar to the struggle that a child with a binocular vision disorder experiences.

A RESPONSE TO A SURVEY

Robin Lewis, BABO Instructor

Two fourth year optometry school students were conducting a survey as part of their senior research project. The following letter accompanied my response:

Dear Monte and Joe,

Welcome to behavioral vision. When you ask why I do what I do in our survey, the answer is not as easy as your questions. The primary reason I'm a behavioral optometrist is that people come to me for help in living the best possible lives they can. I know this sounds a bit much, but it is the literal truth. I have the enormous responsibility to assure them of the best I have to offer.

To do this, I must make sure my patients have access to high quality vision therapy. I choose to offer this service myself rather than refer it. I like to have involvement with the therapy process. It is the hardest work I do, but is the most fun as well. Nothing in my experience beats the look of wonder on the faces of young people as they discover themselves. This is not to say we don't have adult therapy patients; just that the majority of those who embark on this journey of discovery are young people.

When you ask what kind of therapy is offered in my office, the answer is vision therapy. A person with a diagnosis you mention in your survey can be helped through the process of vision therapy, but I don't treat the diagnosis, I treat people. Bob Kraskin was one of the best therapists I ever knew. He had one curriculum of therapy for the human race. (I would highly recommend that you read his VT in Action series available as a bound volume from the OEP.) My approach is similar, although we track persons a bit differently based on their individual abilities at the time they begin the therapy process.

Vision is the deriving of meaning and direction of action as directed by light. Light in this sense may be illumination from within in terms of thought, memory and experience. Good (effective) VT is not instrument bound, but rather is the application of principle and experience to help patients have the set of necessary and meaningful experiences in order develop their own abilities to meet their own goals.

I would say that the chief success in a therapy practice is when patients meet their own goals. That's when they refer. They don't really care if they can fuse 20 BI, they care if they can read better, etc.

I hope this letter helps. You are welcome to call and/or visit us if you choose.

THE INFLUENCE OF TV, VIDEO-GAMES AND COMPUTERS ON CHILDREN

Paul Harris, BABO Instructor

The following was my response to the question asked from one of our attendees from Norway.

Question: I am having a meeting at my son's class on Feb. 17, we are talking about what influence TV, video-games, and computers have on our children. Could you give me some tips on this subject?

Answer: I am not aware of too much that I could point you to right away. There are several things that come to mind though. I would group the responses in the following way:

1. Visual stress factors and binocular challenges: Here the concerns are about the VDT work being a stimulus towards myopia and towards smaller perceptual fields. Additionally we have the problems that may result from viewing at a static working distance for so long. Lastly what long-term consequences might there be from fooling the visual system into thinking it is working in a three-dimensional environment when indeed it is looking at a flat screen. What does this teach in terms of depth perception? Is there any transference to the "real world?" Might it actually harm a person's ability to judge where things are in real space after dealing with two-dimensional representations of three-dimensional space for so long? What are the time and intensity thresholds involved in all these questions? These are all big questions.

2. Tracking: There is a fallacy here I think. Some say, "Well at least its good for tracking." I'm not sure. So many children can do well on these games and seem to be almost unable to track a real object in space. Developmentally we think of tracking a real object in space as being the foundation of all tracking through space be it two- or three-dimensional tracking. Normally the person then evolves the ability to track in the two-dimensional plane. That is why our approach in the Vision Therapy II curriculum first works on real objects in space and later, through the transition step of working with gross motor work on the chalkboard, works to the 8.5 X 11 or A4 type paper environment.

With the computer game addict they seem to be developing a specialized skill in a specialized environment that may not transfer to real life in a meaningful way. So instead of developing "tracking", the ability to shift through space where the person puts their visual attention, they are actually decreasing the amount of time interacting with read objects in three-dimensions and therefore decreasing the probability that they will develop that skill or ability on their own. It has also been noted that some of the very good game players develop almost a stare at the screen, a sort of soft focus, and they don't actually track anything, they just react.

3. Visualization and Imagery: Here the discussion has revolved around the fact that while doing this kind of thing the child does not have to make any real internal pictures but must passively receive the pictures from

the screen. To a large degree I agree with this. However, some of these games require the child to keep track of a huge map in his mind that he only sees a small bit of on the screen at once. To perform the task of the game they may have to remember that a particular thing is needed from a spot on the playing surface that is out of view and the pathway to which they must remember. To be successful in this type of game they must build these rather large and complex maps in their mind. In some games the sequencing of the actions taken is critical; you must pick up the lantern the first time you see it so that later when you get into the dark area, you can see where you are going. If you don't do this you can't go back and get the lantern because some monster will now be awake. He was asleep the first time you went through but now he is awake and you just can't get back that way. So, start over and remember that you must pick up the lantern! To some degree I see these things as excellent in developing long range planning and problem solving tasks.

4. Eye hand coordination: Another fallacy. Watching objects move through a fake three-dimensional world on a two-dimensional screen confined to a 14 or 15 inch world and then making pushes on arrow keys and other selected keys to perform actions or using a joystick where all the actions are fine motor and not gross motor seems like we are not really working eye hand coordination in the true sense of the words. It is a specialized skill that probably will have little transfer to everyday activities.

I hope these give you some things to talk about with your boy's class.