

Everything I Needed to Know about Vision Therapy I Learned as an Optometric Educator

Rochelle Mozlin, O.D.

Scene one was the Pediatric Primary Care Service at SUNY State College of Optometry. Doreen, a fourth-year student, looked quite frustrated as she emerged from her exam room holding her patient's chart. She remarked that she was having great difficulty refracting her patient: a 9-year-old female. No matter what she did, Doreen could not get the young patient past the 20/80 line with either eye. When I examined the chart, the reason for this "impasse" was very clear to me. My job was to help Doreen understand this clinical presentation. I asked her for a list of possible explanations for bilaterally reduced vision and she very efficiently offered the textbook list of differentials.

Starting at the top, we systematically eliminated every condition on that list, based on the clinical data Doreen had obtained. By this time, Doreen was sweating. She realized that either she had omitted the "big one" from her list or her clinical findings were awry. Neither alternative is comfortable for a fourth-year student.

Sensing her anxiety, I stressed her competence in dealing with the medical model approach to bilateral vision loss and suggested changing gears in order to look at the child more globally, rather than merely considering the visual pathways. Starting with the case history, we identified a series of findings which seemed to create a pattern. Suddenly, it all made sense to Doreen, as she exclaimed, "Wow! She's lying"! Doreen had never had any previous experience with a malingerer. I made a few suggestions on how to work with such a patient, stressing the concept that we needed to be sure that the patient is malingering. She returned to her patient and emerged from the exam room again five

minutes later. "Dr. Mozlin, you were right. I did what you told me and it worked." I reminded her that she had deduced that the patient was malingering and that, in fact, she was the one who had made it work. I then slipped out of my role as "teacher" and into my alter ego of "supervisor" and reminded Doreen that she still had to finish the exam in a timely fashion.

The next week, Doreen presented her case of the 9-year-old malingerer during Pediatric Grand Rounds. She included a discussion of the limitations of the medical model in patient care and her own thoughts on how the non-confrontational approach to working with this patient had enabled her to obtain valid findings.

Scene two was the Vision Therapy Clinic. Mike, a fourth-year student, was working with Jake, a 9-year-old boy with a significant learning-related vision problem. Mike remarked that Jake couldn't get SILO on Topper. I decided to make the stimulus less complex and switched to Quoits. I asked Jake a series of questions to help him appreciate SILO. Suddenly, he jumped out of his chair and said, "How did you do that"?

"How did I do what, Jake"?

"How did you make it come closer"?

My job was to help Jake understand that he was responsible for the changes he was perceiving, which was no easy task. At the same time, I used this opportunity to help Mike understand the difference between a therapist and a technician. I asked him to read Birnbaum's article, "The Role of the Trainer in Visual Training."¹ The next week, Mike's interactions with Jake had an entirely new emphasis. After using the vectogram at near to help Jake understand the feeling of converging his eyes, Mike

projected the vectogram and began to swing a Marsden ball through it. Jake was able to apply the association between convergence and "IN" to an awareness of three-dimensional space and z-axis.

It was not until several weeks later that I was struck by the similarities between my students and my vision therapy patient. I am not sure what precipitated this analysis, but sensing that I could improve my skill as a teacher and a therapist in one shot, I was willing to invest a few hours in library research time. The most enlightening article I found identified these five instructional characteristics of effective clinical teaching:²

1. Anchor instruction in cases. This method helps students interpret and generalize their experiences.
2. Actively involve learners. Provide opportunities for the student to gain insight by asking questions and structuring problem solving.
3. Model professional thinking and action. Students often improve their clinical thinking after exposure to the reasoning of an expert.
4. Provide direction and feedback. Effective teachers provide assistance to learners which enables them to accomplish tasks they would not be able to perform alone.
5. Provide a collaborative learning environment. Establish a working relationship which is conducive to learning.

What struck me was that if you change "student" to "patient" and "teacher" to "therapist," you have five characteristics of effective vision therapy.

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Bordage³ describes different types of knowledge organization in memory and their effects on diagnostic thinking. Dispersed knowledge structures are characterized by long lists of static information obtained through memorization and often unrelated to clinical presentations. Effective clinical teaching provides opportunities for the student to organize, expand and connect these knowledge structures; to create horizontal bridges between vertical columns of knowledge. Doreen built a bridge between bilateral vision loss and malingering. Mike built a bridge between "getting SILO" and using SILO to guide his patient toward a goal. Jake built a bridge between convergence and three-dimensional space. WOW! I built a bridge between optometric education and vision therapy. I have a new occupation: optometric engineer.

References

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Guest editor:

Rochelle Mozlin, O.D.
SUNY State College of Optometry
100 East 24th Street
New York, NY 10010