# **Testimonials**

#### Schools for the Blind

I had the great opportunity to attend the workshop entitled "Exciting and Exotic 3-D Geometry" at the 2009 NCTM conference in Minneapolis, MN. I found Aniceta Skowron's session to be enjoyable and full of great thought-provoking activities to help students get their hands on the geometry they are learning about. As a math consultant for the Iowa Statewide Vision Services, I have found the Geometro products to be invaluable to our students with visual impairments. They find it so much easier to understand the concepts of 3-dimensional geometry and many Geometry teachers are excited about how it helps all of their students, not just the ones with visual impairments. I have even had adults with visual impairments say, "If I had tools like these when I took geometry, it would have made so much more sense. Now I actually get it."

I look forward to learning more from you. Thanks for all you have done to make learning geometry easier for our students.

Sara Larkin Math Consultant Iowa Statewide Vision Services Vinton, IA 52349

# Hello Aniceta.

Taking your workshop with Geometro was absolutely wonderful! It gave me another perspective to look at when teaching the visually impaired and it gave me new ideas and ways to teach them concepts that are very difficult for them to grasp. I would recommend it to anyone teaching the visually impaired and even other disabilities. So many students with varying disabilities would benefit from working with these hands-on materials.

Sincerely,

Linda Peters Spec. Ed. Teacher DOCS

#### Dear Aniceta,

I wanted to thank you for your informative session on December 5, 2008. The opportunity for all participants to actually engage in hands on learning was a powerful tool. Your sequential approach seemed to model the importance of the approach we would employ with our students and children. Geometro manipulatives are a natural fit for blind and low vision students. Your passion for mathematics motivates us all to pursue our teaching with renewed and informed purpose. Thank you very much!

Elizabeth Dunton
Principal - Resource Services and Short Term Placements
W. Ross Macdonald School for the Blind
Brantford Ontario

On December 5th, 2008 I attended a Geometro workshop given by Aniceta Skowron at the W. Ross School for the Blind in Brantford Ontario. The workshop gave me an excellent chance to use the manipulatives myself and offered me insight into what a student would experience. The manipulatives allow students an opportunity to discover 3D shapes in a tactile fashion and are perfect for visually impaired children. The ability to create 3D shapes from cubes to dodecahedrons is at your fingertips. I highly recommend attending workshop anytime it is offered in your area.

Michael Mancini?
Vision Resource Teacher?
Hamilton-Wentworth Catholic District School Board

\_\_\_\_\_

#### Hi Aniceta,

I enjoyed your workshop very much. Not only did your workshop provide me the opportunity to use the Geometro materials myself but it gave me ideas on how a student would use them.? In most cases when a student is visually impaired they are given a set of manipulatives different from the other students. Only they can use them. I have discovered that the Geometro is great for all students. Now you can have a visually impaired student working beside a sighted student. The kit makes learning two and three dimensional shapes fun and much easier. Best regards,

Joe DiFazio
Specialist Teacher of the Blind and Low Vision
Hamilton-Wentworth Catholic District School Board

\_\_\_\_\_

The Geometro workshop presented by Dr. Aniceta Skowron provided valuable insights into how the hands-on subject of geometry can be adapted to meet the needs of blind or visually-impaired learners. By providing workshop participants with a solid understanding of some basic geometric concepts, Dr. Skowron has enabled us to confidently present this material in the classroom. The introduction to real-life implications of geometric concepts (e.g. crystallography, construction) convinced us that geometry has an important and necessary place in any mathematics curriculum. Through her presentation, Dr. Skowron has succeeded in empowering teachers of the blind and visually-impaired to tackle this important topic with their students.

Amanda McKerracher student teacher

I attended the Geometro workshop at the W. Ross Macdonald School for the Blind in December 2008. I found the session to be educational and informative. It provides parents with insights into how best to aid their vision impaired children in learning mathematical concepts and would recommend the workshop to any parent or educator with an interest in developing learning strategies for the vision impaired.

Peter Burke
Parent of Molly, a grade 9 student at W. Ross Macdonald

The workshop was a great resource for tactual presentation of 3D shapes. I've ordered the shapes from APH and can't wait to use them with my blind students. The concepts of perpendicular and parallel lines can now be more easily demonstrated. Thanks so much for your ideas.

Beverly Maida New York State School for the Blind Batavia, NY 14020

Geometro workshop was completely hands-on and fully interactive, making the content easier to understand. Aniceta went to each person to make sure he or she understood the concept, which does not always occur during workshops. I can honestly say that the knowledge I gained from the workshop has been applied already in my classroom to blind and visually impaired students. I have never been to a workshop that was so interactive!

Jamie Wallace, Instructor New York State School for the Blind Batavia, NY 14020

# Do you have a favorite math manipulative?

**Susan Osterhaus** answers in "Sharing Visions" Newsletter of Vision Educators' Network of Ontario

This is a tough question, as I REALLY love all of my various math manipulatives the more the better. However, my current favorite has to be the Hands-On System for Learning Three-Dimensional Geometry from Geometro. These Velcro-edged polygons, which can be formed into nets and then into various 3-D models, have really captured the imagination of my students. I had previously used various hand-made paper and commercially available plastic nets to illustrate various 3-D models. My students really had little difficulty creating a tetrahedron, cube, and even an octahedron, but the remaining platonic solids dodecahedron and icosahedron – and even higher-level 3-D solids seemed beyond their "grasp." However, once exposed to these "easily-manipulated" geometro polygons, the easy platonic solids became too simple and "boring" and everyone was clamoring for more pentagons or more triangles, so that they could create their very own dodecahedron and icosahedron and have their picture taken with their creation. Since these geometro manipulatives can be quickly disassembled and used over and over again, they are always available for that teachable moment.

Susan A. Osterhaus Mathematics Consultant for Students with Visual Impairment Austin, Texas

### Aniceta,

I have been using your 3-D manipulatives extensively in my Geometry? class this year, and I placed your Geometro website on the vendors list on my? website. In addition, I have been praising them and including them in my? PowerPoints showing my favorite tools and technology for teaching math to blind and visually impaired students. ... I REALLY think your velcro? manipulatives are fantastic!! I've attached a slide from one of my recent PowerPoints showing off several of my students enjoying them - look at those smiles!

Susan Osterhaus Secondary Mathematic Teacher Texas School for the Blind and Visually Impaired Austin, Texas

\_\_\_\_\_

The Ministry of Educations curriculum in both mathematics and science today is very challenging for students, especially students who are visually impaired and blind. To meet these curriculum challenges students need to use "manipulatives" to help them understand certain concepts. Unfortunately commercially produced manipulatives are often very small and difficult to handle for students who do not have any sight. Boo Blocks help solve this issue with their size and functionality. The ability to create three dimension shapes that are a size that both low vision and totally bind students can tactually understand make these tools extremely valuable for classroom teachers. In addition these manipulatives are easy to construct are strong enough to be handled by a number of students. My classroom teachers have for years tried to make three dimensional shapes to teach concepts to visually impaired students and Geometro have solved this issue completely. As the only school for the visually impaired in Canada we are totally committed to using Geometro's Boo Blocks from grades 1 to 12 in both mathematics and science.

Don Neale Principal W. Ross Macdonald School Brantford, Ontario, Canada

# **Elementary Schools**

Hi Aniceta,

I really enjoyed your presentation at the NCTM conference in San Diego last week. I would like to review your presentation as I will be sharing with my district what I learned at NCTM. I liked how your presentation shows the progression of the platonic solids and other 3D solids that can be made as well as the connections you made between the math, art, science, and history. Thank you.

Sharon Klippert Math Coach Glenview Elementary North Little Rock, AR

\_\_\_\_\_

Aniceta.

Thanks again for your workshop with the students! The kids really enjoyed it and have many positive comments. THANK YOU so much!

Regards, Nina Cantelmi-Cicchi & Veronica Coady Resource Teachers Gifted Education Hamilton Wentworth Catholic District School Board

Having run various enrichment workshops for the gifted, it was evident that students thoroughly enjoyed working with Geometro and exploring 3D geometry. These hands on learning materials motivated the students to further explore math concepts and math origins. The delivery of the program affords the students opportunities to problem solve, create basic structures and then scaffold into larger creations. The program supports individual, small group and large group explorations that are highly motivating, challenging and reinforcing of the curriculum.

Nina Cantelmi-Cicchi & Veronica Coady Resource Teachers Gifted Education Hamilton Wentworth Catholic District School Board

I have used Dr. Skowron's geometric shapes a number of times in my Grade 4 and 5 classes. Math manipulatives are very powerful learning component in the Ontario math curriculum and these items contributed to building high interest in Math, self-motivation, self-direction and solid learning in the children. The Velcro edges allowed each piece to be student-friendly and easy to connect, as they facilitated the construction of both simple and more complex geometric shapes. Activities were grade appropriate, yet reaching the varied abilities of the students. Dr. Skowron's geometric shapes very much complemented the programs in my classroom.

Mrs. M.T. Stirling Teacher Holy Name of Mary School Ancaster

\_\_\_\_\_

As a classroom teacher who has worked with Aniceta Skowron on several occasions to promote interest and curiosity in Science, I highly recommend the Geometro program and activities available to classroom teachers and their students. During presentations by Mrs. Skowron, children were involved in activities which promoted creativity, learning and enthusiasm! Aniceta is knowledgeable, energetic and well aware of the fact that children internalize concepts and skills more successfully when they are involved in well-planned and structured hands-on activities.

Fern Giannotti Grade 3 Classroom teacher

#### Montessori Schools

During Dr. Skowron's workshop at the American Montessori Society (AMS/NCME) conference in Fall 2007, attending Montessori teachers were involved in hands-on activities to explore an alternative way of learning and teaching 2-Dimensional and 3-Dimensional geometry with fun and enthusiasm! Dr. Skowron's presentation showed her to be very knowledgeable, creative, enthusiastic, and experienced with students' needs and skills and the importance of a prepared environment and of hands-on learning.

As a University and a Montessori teacher who has worked with students from 2.5 to 70 years old, I highly recommend the Geometro set of materials for students of various learning styles, for use in classrooms from Kindergarten to University levels. This manipulative and visual set of materials follows the children's need of learning through their hands and senses. The students are able to experience the exploration and the creation of various geometric solids. 3-dimensional geometry can be quite abstract when represented on paper. This see-through set of materials allows better examination and understanding of the solids, their symmetries and characteristics.

The Geometro materials are not limited to use with young ages or to geometry classes. They can also be used with adults and in other disciplines such as mineralogy and crystallography. I would have loved to have such materials available when I taught Earth Sciences at the Universities of Aix-Marseille (France) a few years ago. It would have facilitated the illustration and the understanding of the various crystalline systems, their plane and axis symmetries. It can also help with the understanding of intracrystalline organization of the different molecules and atoms.

We are looking forward to spending some fun time teaching more or less advanced geometry with these Geometro materials to students of many ages, but also to teaching crystallography and mineralogy to Upper Elementary and Middle School students.

Dr. Sylvie G. Kacmarcik The Whole Earth Montessori School Bothell, Washington, USA

#### Dear Aniceta.

I attended your workshop at the American Montessori Conference in Boston. This was a very exciting and mind challenging workshop. This fall I worked with my 1-3rd grade class making 3D shapes. They were very interested but I didn't really know where else to go. Just to think, a simple question like how many different nets could they make from a square - how their brains would have worked from that simple question. Thank you for that workshop.

Peggy Ward Pittsburgh, PA 15202

\_\_\_\_\_

# **University**

\_\_\_\_\_

I would like you to thank you for your Geometro presentation on March 2, 2010. The presentation was very interesting and engaging for the faculty, staff and students. I would be very delighted if you can give a similar presentation in the undergraduate Solid State Chemistry course sometime in the future. Such presentation will fit ideally with the part of the course, which focuses on the crystal structures. I believe that the students will benefit enormously from the assembling the 3-dimensional objects from the 2-dimensional ones, from learning different shapes and mathematical rules that govern their geometry.

Yurij Mozharivskyj, Ph.D. Assistant Professor of Chemistry McMaster University Hamilton, Ontario, Canada

\_\_\_\_\_