Systems of mediation in the construction of meaning for symmetry by visually impaired students

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This poster will present a study investigating how visually impaired students appropriate the mathematics of reflective symmetry. We are interested in the forms by which blind learners, during instructional events, incorporate into their own vocabulary a mathematical voice, as well as how this, along with the tools they are using, might provoke them to extend their understanding of the mathematics involved.

Using Vygotsky's method of double stimulation (Vygotsky, 1998), we developed a series of task-based interviews, which were realised with two visually impaired learners in São Paulo, Brazil. One was blind since birth and the other had lost his sight between the ages of 4 and 15 years. To illustrate the role of the different systems of mediation involved in the activities, we will present examples from our analyses of the interactions of both subjects as they worked on tasks involving symmetrical figures.

References