This study aims to develop an instructional design for teaching electrical resistance to 6th grade visually impaired students. The visually impaired students’ needs for learning science were identified. By taking the needs into consideration an instruction material was designed and implemented.

The analogy developed was implemented with seven 6th grade students studying in a special school for visually impaired students in Erzurum city centre. The implementation carried out for 2 hours in the school. 3 participants were blind, while 4 of them were partially sighted. Students’ learning were tested with achievement test and individual interviews.

As a result, with the model used, firstly students’ perceptions that the resistance of the conductive wires may be different. After this model, students with conductive wires in different characteristics were made to conduct an experiment. The gain score controls for individual differences in pretest scores by measuring the posttest score relative to the each person’s pretest score. \[ \text{Gain Score} = \frac{\%\text{posttest} - \%\text{pretest}}{100 - \%\text{pretest}} \].

The results confirms that the lack of vision cannot be seen as a barrier for learning science if appropriate instructional adaptations are made. Moreover, anecdotal evidences indicate students interest are improving towards science through accessible materials and instructional settings. It is believed that this study will lead to further studies. In addition, it is also evident that these kind of instructional materials are not just helping visually impaired students but also beneficial for students with normal sight.

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