Numerical sets - didactic sequence for visually impaired students

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Abstract. From a bibliographic study and participation in Institutional Scientific Initiation Scholarship Program (PIBIC) and Institutional Scholarship Program for Initiation in Teaching (PIBID) projects, it was requested to elaborate a didactic sequence to visually impaired students, with the main objective the understanding and inclusion of these students in the classroom. At this point, when analyzing one of the papers presented, the idea was to create a pedagogical material inspired by the one presented, but with a different content. It was sought a content in which there were not many didactics materials already created, such as geometry, and that was important for the curriculum of the discipline of mathematics, therefore, it was chosen the content of numerical sets. Initially, in the development process of the sequence, two types of materials were created: Material 1/ common hula hoop and one with string around it that would be used in classes; Material 2/ a hose cut in several circles of different sizes and plates with numbers in Braille. In addition, five classes were elaborate which, according to the materials to be used, were divided in two groups: group A and group B. Group A has the sets as content and uses material 1 for classes 1 and 2. Group B, on the other hand, has the numerical sets as content and uses the material 2 for classes 3, 4 and 5. Group A: In view of the concepts to be present and using two hula hoops, it will be explained to the students the relations between the sets through the method of Venn-Euler diagram, in which the sets will be represented by the hula hoops and the students will be the elements belonging to it. Group B: Using the plates with numbers and the circles with different sizes, the difference between the sets of natural, integers, rationals, irrationals and reals numbers and the need for creating each of them will be presented, as well as the relation between them. After the application of the didactic sequence it was concluded that it is a very effective toll for teaching visually impaired students, as it also facilitates the understanding of the content, makes the students work in group, interacting with their classmates, thus obtaining inclusion of the student in the classroom.

References

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