Editorial

The Journal of the International GeoGebra Institute of São Paulo (IGISP), ISSN 2237-9657, of biannual regularity, is an electronic publication of the GeoGebra Institute of São Paulo based at the Faculty of Exact Sciences and Technology, Program of Post-Graduate Studies in Mathematics Education of the Pontifical Catholic University of São Paulo (PUC-SP), Brazil.

Free of charge, it aims to offer a space for the dissemination and circulation of researches and works developed with the use of the software GeoGebra, mainly in Latin America.

The second issue of the volume 10, 2021, presents eight articles seeking to encompass the different possibilities and paths with the GeoGebra can be investigated.

In the first article “Twenty unpublished sphere construction cases modelled with the help of GeoGebra”, the author Jorge Luis Calderón Salcedo professor at the Universidad de Los Andes, Venezuela, presents twenty unprecedented cases of determination of the center and radius of a sphere whose solutions were found and validated with the support of GeoGebra software, following a methodology developed and proposed by the author, in order to allow to build conjectures without intending, however, to present mathematical proofs.

The second article “Euler lines and the RGB additive scheme: dynamic constructions in GeoGebra” of the authors João Paulo Martins dos Santos, Alessandro Firmiano de Jesus and Juan López Linares present dynamic colors in rectangular regions can be obtained from basic concepts of Euclidean geometry and interesting images are revealed through the display of tracks added in an RGB additive system in a specific and dependent scheme of the cartesian position of the vertices of a given ABCD quadrilateral.

“Password game in GeoGebra and its exploratory activities in combinatorics” is the third article and the authors Luzia da Costa Tonon Martarelli, Fernando Grigorio da Silva, Brendow Pena de Mattos Souto and Ubyrajara Carvalho Tajima as an objective to present a step-by-step version of the password game algorithm and the resolution of a didactic sequence of combinatorics problems obtained through this game using the graphic feature of GeoGebra.

In the fourth article, “Financial Education with GeoGebra” the authors Dárida Maria Fernandes, Ana Rita Pereira Fernandes, João Pedro Meneses Ribeiro Monteiro, Mariana Cabral Lisboa Rego Bayam and Pedro Miguel Reis da Silva Lopes presents an exploratory work on Financial Education in an interdisciplinary, innovative and interactive perspective with children with three applets with didactic suggestions to explore in the classroom.
Alice Bohrer and Douglas da Silva Tinti are the authors of the fifth article “Analysis of the difficulties of Youth and Adult Education students” and present an excerpt from a completed research work and its main objective is to investigate the difficulties presented by 2nd year students of Youth and Adult Education when using GeoGebra on the Smartphone for the study of Quadratic Functions.

In the sixth article “Reconfiguration of polygons to determine the measurement of its area using GeoGebra software” the authors Melissa Denisse Castillo Medrano and Jesus Victoria Flores Salazar present a proposal to address the reconfiguration of two-dimensional figures by using GeoGebra software based on the reconfiguration operation that Raymond Duval proposes for the calculation of the area measurement of a figure.

Costa Mahula Bige Malundo, Kengana Sebastião André João, Kengana Sebastião André João and José Manuel Dos Santos Dos Santos are the authors of seventh article “The use of GeoGebra to ensure the enrichment of students’ mathematical communication: an experience in 7th grade in the Angolan context” aim to present a classroom experience, held with the seventh class students of a school located in Bengo province in Angola to promote reflective dialogue in the construction of concepts associated with the lines in the plan with GeoGebra, being explored their potentialities.

Finally, the eighth article “The use of GeoGebra for the composition and decomposition of geometric figures: an experience with 8th grade students in the Angolan context” by the authors José Makiadi Adão, Kengana Sebastião André João, Astrigilda Silveira and José Manuel Dos Santos Dos Santos present a classroom experience, conducted with eighth-class students from a school located in Bengo province in Angola in which a qualitative study was developed to analyze how students interact with GeoGebra in a first approach and to verify how the use of the software contributes to helping students in the composition and decomposition of polygons, as well as its classification as to the numbers of sides.

We express our gratitude to all who contributed to the realization of this volume of the issue and to the academic research of Mathematics Education.

Celina A. A. P. Abar - Editor