The Intergeo Project

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Workshop Proposal for the ACDCA strand

ABSTRACT

Dynamic geometry software allows one to construct geometrical figures where some objects (free points, lines, etc.) may be dragged with the mouse, while some relations, such as perpendicularity, for instance, are defined to hold. Thus, one can observe and deduce properties that may be found at each of the diverse placements of the same construction. In this way each construction is not just one figure but a potentially infinite number of figures. Therefore, interactive geometry software is a powerful tool for teaching mathematics, far beyond a mere technological compass and ruler transposition.

Interactive geometry programmes have been available for more than twenty years. In spite of the large and diverse amount of constructions and teaching materials for interactive geometry available from different sites, the use of interactive geometry in the classrooms is far from desirable.

Intergeo (http://i2geo.net) is an EU-co-funded econtentplus project, with the participation of academic institutions and software developers from six European countries, which gives access to more than 2000 existing resources related to Dynamic Geometry, and it helps users to create new ones. Of special relevance in the project is the creation of an Internet portal Intergeo, in ten languages, which collects all the information related to it, and makes it available to the user. Resources are suitably classified and the portal has a search engine which allows the fast finding of good quality material related to a particular classroom theme. The materials are created using programs such as Cinderella, Cabri, GeoGebra, Geonext, Geoplane/Geospace, TracenPoche, Wiris, and the like. All of the explicitly mentioned programs –some of them are open source, some are commercial-- are members of the Intergeo consortium. The quality of the resources is voluntarily evaluated by the education community. This has a twofold purpose: to provide teachers with information about the resources, so that they can be used in their classrooms with reliability, and to suggest the authors the possible ways to improve the resources.

The aim of the workshop is to present the Intergeo project, comment on its objectives, and to explain the audience how to become active users of the Intergeo web portal, how to submit new resources, how to search for content and how to collaborate in the quality testing of the available resources. Those attending the workshop will be able to practice searching and evaluation of resources with real cases.

Keywords

Interactive geometry, dynamic geometry, teaching resources.