How to assess the quality of interactive dynamic geometry resources? The Intergeo experience

C. Laborde, S. Soury-Lavergne

DIAM-LIG, University Joseph Fourier, Grenoble, France
EducTice, INRP,
Lyon, France

Colette.Laborde@imag.fr, sophie.soury-lavergne@inrp.fr

Workshop Proposal for the ACDCA strand

ABSTRACT

There is a great heterogeneity of available digital resources for teaching mathematics. As a result, it may be difficult for maths teachers to resort to explicit and objective criteria for analyzing a digital resource and estimating the value of using it in the classroom.

One of the aims of the Intergeo project (http://i2geo.net) is to gather all digital resources based on dynamic geometry in European languages and to make them available to teachers (see Fioravanti and Recio workshop). As more than 2000 resources are available, it was important to also make available comments and quality evaluation in order to help teachers in finding resources appropriate for their needs and aims. An evaluation tool was thus developed within the Intergeo project under the form of a questionnaire dealing with several aspects of a resource.

The workshop will discuss the theoretical foundations and the choice of the topics addressed by the questionnaire: metadata, technical aspect, mathematical dimension of the content, instrumental dimension of the content, potentialities of Dynamic Geometry, didactical implementation, pedagogical implementation, integration of the resource into a teaching sequence, ergonomics.

After an introduction to the questionnaire, the participants will experience themselves completing the questionnaire for one resource. Then in a collective phase, the relevance of the criteria will be discussed as well as the questions faced by the participants when completing the questionnaire. The contribution of the questionnaire to teacher education will also be addressed.

Keywords
Dynamic geometry, interactive geometry, digital resources, quality