

Modelling without Mathematics – Using JlinkIt modelling tool in educational settings

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Description

For many years our research group on IT in Education (www.nce.ufrj.br/ginape) has been working with modelling in education. As part of this research we have developed a computer modelling tool called JlinkIt that allows us to construct and simulate causal dynamic models - from a System Dynamics approach - without the necessity of knowing the mathematics that are normally used in analytical models (mainly calculus and differential equations). This modelling tool was developed in Java and runs in any browser (http://www.nce.ufrj.br/ginape/jlinkit/executa_jlinkit.htm). It also has a stand-alone version that can be run on computers not connected to the Internet. The software is free and can be downloaded from its website (<http://www.nce.ufrj.br/ginape/jlinkit/download.htm>).

Method

During the workshop we will present the software and develop some ideas on how to use it in educational settings based on our experience with Science teachers and secondary schools in Brazil.

Expected outcomes

Attendees will develop an idea about modelling from a System Dynamics approach and possible uses in educational settings.

We are setting up a discussion group on the internet where participants (and others) could discuss further some ideas related to modelling in education and share models.

Keywords

Modelling in education, computer modelling literacy, computers in education.