

## ACQUISITION OF THE MODEL OF PROPORTIONALITY SUPPORTED BY A HYPERMEDIA DOCUMENT

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Our study was based on three fundamental pillars — problem-solving, the model of direct proportionality and the 'new' information and communication technologies. The main objective of the study, which was carried out with 7th Grade students, was to develop and validate a hypermedia document which, designed according to a problem-solving methodology and a constructivist view of learning, might intervene in the acquisition of the model of Direct Proportionality (Alves de Oliveira & Cabrita, 1997 e Cabrita 1999).

We opted for an extra-curricular experimentation of our hypermedia programme for two main reasons: firstly, the use of computers in the classroom situation is not (yet) a systematic reality in Portuguese schools; and secondly, for several reasons which have to do essentially with the democratization of schooling, the classroom space is not the most suitable to cope with the individual rhythm of each student, or, cause and consequence of the above, to respect different browsing behaviours. Although we believe that this strategy could bring added advantages, we were conscious of the fact that it would certainly bring with it new responsibilities for teachers who will increasingly have to know how to negotiate the knowledge acquire in spaces other than the microcosm of the classroom, leading to a broadening of the horizons of their professional development

In this context, and following the conclusion of the research (Cabrita, 1998), which we propose to divulge in this paper, it was possible to offer indications in three directions: about how interactive teaching programmes should be designed and put into effect; about how, where and in what conditions they should be exploited and about the implications of this study for teacher education.

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