

---

October – 2003

## **Authors' Response to Fredric Litto by José Bidarra and Ana Dias**

**José Bidarra**

Universidade Aberta, Portugal

**Ana Dias**

Interface da Universidade do Minho, Portugal

**Editor's Note:** *This is José Biddara and Ana Dias' response to the review by Fredric Michael Litto, The University of São Paulo, Brazil. All correspondence between the authors and reviewers, until date of publication, has been blind.*

Our article starts with the sentence "Learner variables are often neglected in the development of educational products and systems." We do not affirm bluntly that: "nobody is concerned with pedagogy." Instead, we say that the hype today is digital technology, and this has pushed aside other important considerations such as pedagogy related to learners' cognitive profiles. Nevertheless, most Web delivery platforms use pedagogy as a strong selling point (this, of course, has to be verified for each specific case). We believe that it is not a waste of time to think about some "old stuff," especially when the way we teach and learn in schools has been around for some thousands of years.

New standards are usually an effective way of assuring that commercial products are compatible with each other and can be distributed widely with fewer problems. This works fine at the level of engineering and deployment of technology, but encounters problems when we focus on the level of individual learners, specifically their cognition variables that entail added levels of complexity. Recent studies concerning learning object languages point us in the right direction, and the educational modeling language (EML) is definitely a serious attempt. Although this was not the object of the article, it is worth mentioning here the work of The Valkenburg Group, set up in March 2002 around a three-day conference in Valkenburg, the Netherlands, on the topic of "Developing an EML authoring and content management environment." Participants included representatives from research and development institutions in the field of e-Learning technologies, users and private sector parties from various countries in Europe, the USA, Canada, and South Africa. The focus on design-time tooling for EML was broadened to e-Learning technologies in general, but still with a focus on the application of EML to model and implement learning opportunities.

The tremendous work done by many of the e-Learning Standard Committees is important and most appreciated by the authors of the article. Nevertheless, we understand that more efforts should be directed towards integration of pedagogical and cognition variables into standardization processes. From our point of view, all technologies should be considered just as tools used for distance learning, rather than seemingly essential factors involved in the learning process. The development of pedagogically sound materials implies much more than just using intensively a given technology or communication facility: it comprises all the (creative) human factors and

qualified work involved in conceiving appropriate learning materials, devising a sound pedagogical strategy, providing individual students with efficient support mechanisms, assessing their progress, and certifying their results. Eventually, standards like EML will help us realize these objectives. We conclude with some food for thought. How do we design standards for solving computer games, especially when individual strategies may come out of the blue? How do we reach a solution in a case study, one that often involves complex human factors?

