

## Chapter 2.3

# Building a Framework for an English Language Course in an LMS with SCORM Compliant Learning Objects and Activities

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### ABSTRACT

*The human mind needs order to understand anything and, in this respect, standards are essential because they impose order on the world. More specifically, standards are bringing great new benefits to the e-learning realm. For instance, by adhering to standards, courseware builders can construct components completely independent of the management systems under which they are intended to run—that's interoperability. There is a tough struggle nowadays to find the most appropriate specification for learning content and to assure it is fully operative across the existing LMSs (Learning Management Systems) in the market. In that authors view, SCORM (Sharable Content Object Reference Model) is coming afloat, outplaying most—if not all—its competitors. For that reason, the authors have been using SCORM learning objects to manage their course in Moodle for their students of English at the University of Alicante, obtaining so far satisfactory results. The authors' purpose in this article is twofold: on the one hand, they give an account of the problems they have met using SCORM in Moodle and how they have solved them. On the other, they explain the guiding aims of their Language Blend, which broadly said are the following: to set up a standard in language learning by means of a framework, wherein e-learning and in-person lectures merge strategically so that the benefits of both are enhanced.*

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## INTRODUCTION

When we started building our course in Moodle, we had a wide range of goals in mind, high among which was our wish to make it last long and stand strong against the passing of time. It goes without saying there were other considerations along this process: for instance, we wanted to check whether our course fulfilled our expectancies in relation to learning; and, if so, to make it available to the rest of our colleagues, irrespective of their place of work or their preferred LMS. To that end, we had to put some order and logic into everything we were to do. The human mind needs order to understand anything; then, logic tells us what is feasible, what is superfluous and unnecessary, for the human mind to comprehend. (Arnheim, 1971).

In this light, turning to standards was the perfect solution to make our course available to anyone and to assure its functionality across any Course Management System. It is a fact that some people are against the use of standards (Friesen, 2003, p.70) claiming that in order to tackle the object of learning in a more proper way “it is necessary to look beyond systems, engineering techniques and standardization processes.” But, in our opinion, their many benefits admit no denying; where would we be without standards like the metric system, international distress signals, and TCP/IP? World travellers know how to deal with the absence of uniform electrical standards, which very often translate into unexpected problems and discomfort. In any case, the lack of interoperability had been the norm up until the first LMSs started to upsurge and improve. A great advantage of the position we are endorsing is that, by adhering to standards, courseware builders can construct components completely independent of the management systems under which they are intended to run. The latter is often referred to as interoperability, thanks to which the life expectancy of a courseware component is greatly increased because we know that we can upgrade a

management system and it still works, or because we reuse that component in a totally new course.

If we briefly stop now to consider the proprietary learning technologies of the past, we will soon realize that, while providing good service in their time, they did not provide the benefits available by adopting standards. In fact, some LMSs have had to build specific modules to import learning events built with authoring tools simply because there was no standard to export to. Thus, in our opinion, e-learning standards raise key questions about the future concerning interoperability, reusability, durability and accessibility. There is ample evidence in the literature that standards are transforming the latter from vague promises into reality. And the extraordinary advance we have seen in recent years is undoubtedly a collective achievement, the result of many small joined forces.

Let's now focus our attention on the mechanisms that facilitate the reuse of learning content and which allow course authors to increase the life span of the content they develop. As these are often expensive and time consuming, to build up the potential for any reuse should be maximized to obtain the best possible return on investment. Reusability was our first concern and in order to endow our system with it we needed to make use of a standard that allowed for granularity of content, effective and descriptive metadata and effective cross-platform packaging. SCORM (Sharable Content Object Reference Model) was the standard to adhere to ever since it met all our needs.

The fact that large collections of e-learning content are often lost when learning management systems are changed requires no explanation. Anybody who has been working in this field will understand why our first learning objects are now practically useless: simply because we employed an authoring tool which had no ADL (Advanced Distributed Learning) compliant module to export or save our activities into SCORM. Many of these difficulties share a common origin, which is that most learning management systems, such as

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