

Business Requirements for SCORM 2.0

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The previous SCORM effort was driven only by concepts (the "ilities"). These were good concepts but led to a flawed implementation in my view.

Here are my ideas for business requirements:

1. There should be **NO** limitations on the functionality of the course. The course developer should be able to select the best learning model, navigation, roll-up, interactivity, media, etc for the learner. No other business requirement is important enough to undermine the learning effectiveness of a course.
2. Administrators, LMS vendors and course developers need to eliminate the time and cost associated with the launch and tracking of a SCORM course.
 - a. A SCORM compliant LMS and a SCORM compliant course should always interoperate with no additional work or human intervention.
 - b. The course should work exactly the same in every LMS.
 - c. SCORM compliance should be easy and inexpensive to measure.
3. Users with the proper privileges should be able to use the LMS to measure the training level of the learner. The information should include:
 - a. Course progress (percent complete)
 - b. Completion status (not started, incomplete, complete)
 - c. Success status (pass/fail)
 - d. Score
4. Course developers need to use the LMS to measure learning effectiveness of a course at every level of the granularity (SCO) built into the course by the course developer. The course developer will be interested in:
 - a. All items from #2
 - b. Completion of objectives
 - c. Interactions (responses to questions)
 - d. Time
 - e. Other SCORM data defined in SCORM 2004 RTE
 - f. Examples:
 - i. The course developer should be able to find out the time taken for a the post test and the responses to each question in the post test
 - ii. The course developer should be able to find out which objectives have been passed within a simulation
5. Course developers should have the ability to create a course containing multiple SCOs for these reasons:
 - a. Measure the learning effectiveness of a course on a granular basis
 - b. Repackage courses to meet the needs of different audiences
 - c. Use the best mix of tools to create the individual SCOs of a course
 - d. Using multiple SCOs should not undermine any of the other business requirements

Some people may say that SCORM 1.2 or 2004 meet these business requirements. Here is where they fall short:

SCORM 1.2

1. No limits on a single SCO course. Significant limits on a multi-SCO course
2. Problems with multi-SCO course (no roll-up and sequencing) and allowing LMSs to support less than RTE level 3
3. No course progress within a SCO
4. No standard for roll-up for multi-SCO courses
5. No problem

SCORM 2004

1. No limits on a single SCO course. Significant limits on a multi-SCO course
2. Too many SCORM 2004 editions. Extremely difficult to measure compliance.
3. A multi-SCO course cannot report course progress
4. No problem
5. Most course developers cannot create sequencing and roll-up rules which makes multi-SCO course impractical. There is a lack of tools to create multi-SCO courses because the sequencing model is too difficult to understand for most course developers.

I think my **SCO-based sequencing** model provides the best solution to every business requirement:

1. No limits – the LMS plays NO role in the user interface or functionality of a course (no LMS-based sequencing or roll-up)
2. Compliance is as easy as single-SCO SCORM 1.2 courses
3. No problem
4. No problem – the rich SCORM 2004 RTE data model is available
5. It will be very easy for authoring tool vendors morph their single-SCO authoring tools into multi-SCO authoring tools so course developers will finally be able to get the benefit of a multi-SCO course