

questions to ask your LMS vendor about

Somebody told you that your LMS RFP needs to include a requirement for SCORM conformance. But you need more than just a yes/no checkbox if you want to take full advantage of having SCORM in your system. You need to ensure the vendor goes beyond the minimum requirements of the specification and develops a supporting infrastructure that fully capitalizes on the power of the specification.

So here are at least 27 things to ask an LMS vendor about SCORM. In all this, remember that it's up to the vendor not to just say they're SCORM compliant, but to specifically explain just what they mean by that. You want to ensure you're getting not just what you're paying for, but what you need and expect.

### INTEROPERABILITY: STANDARDS SUPPORT

Understand exactly what a vendor means when they claim they "support SCORM".

What versions of SCORM do you support? There are five now: SCORM 1.1, SCORM 1.2, SCORM 2004 2nd Edition, SCORM 2004 3rd Edition, SCORM 2004 4th Edition.

#### Do you support AICC HACP?

This is related standard still in broad use and should be supported to ensure broad content compatibility. Are you SCORM certified by ADL? If so, for what versions? If not, please provide test suite logs showing your conformance. Certification ensures that the system meets the letter of the specification, but not necessarily that it is a functional system that meets all of your needs. If not certified, there is still a way to ensure that their claim of

SCORM conformance is legitimate -- ask them for their test suite logs. A product that can not pass the full set of conformance tests is MOST DEFINITE-LY NOT SCORM CONFORMANT.

What level of SCORM 1.2 conformance to you support? The levels have to do with how much of the runtime data model the LMS

supports, from bare minimum to full support.

What is your policy regarding adopting new versions of standards?

How much experience have you had delivering SCORM conformant content?

#### INTEROPERABILITY: DEBUGGING, DIAGNOSTICS AND DEVELOPMENT

The process for getting new content into a LMS and ensuring that it works properly. This can be time consuming and frustrating if your vendor doesn't provide adequate resources, tools and access to information.

How is content imported into the LMS? Ask for a demonstration and ensure it meets your expectations for time, course size, updating, registration and so forth.

How is content updated and how are new versions deployed? You want to ensure the LMS provides a way to easily import updates and create new versions of content without interrupting learners.

What tools are available to the LMS user and content developer when creating / importing content? A sandbox to play and test content that precisely replicates the production environment is what you're looking for.

What kind of diagnostic

information is available to troubleshoot problematic

content? You want some tools that deliver diagnostic information to assist with debugging. They need to be available to test potential problems with content packaging, run-time and sequencing.

What kind of error messages does the LMS provide? Find

the balance between messages that are too generic and those that are overly technical, as well as ensuring the right kind is seen by the right person in the right place.

What is your process for resolving interoperability issues? Basically – what are you going to do when the inevitable happens.

#### LEARNER EXPERIENCE / USABILITY

Ensure that the process for actually delivering training is robust and usable.

SCORM provides only minimal guidance about how the LMS should present a SCORM course to the user. Play with the LMS yourself to see how it works for the user.

**How many windows does** 

**the LMS open?** Can you mess things up by closing some?

Can the user interface be customized for each course?

No two courses are the same and might benefit from options in the interface. Does the LMS provide any indication of progress and status to the learner? You'd like to know, right?

Is there an easy to use course menu? SCORM often uses hierarchically structured

activities, so there should be a menu to select from those activities.

How does the SCORM player respond to large courses?
Look for speed and responsiveness.

#### SYSTEM LOGIC

Some LMS functions to consider that are "outside the scope" of SCORM, but can dramatically impact SCORM's usefulness.

What reports are available to extract SCORM data? SCORM can provide a wealth of data about what a learner does in a course, but it's up to the LMS to keep the data and use it. You'll want to know what kind of reports there are, how data is tracked and what the learner sees at a minimum.

How does data reported via SCORM feed into the rest of the system? You want to ensure the system does more than just mark things as completed; you want it to put the data where you expect it to go.

What options are available for launching a SCORM

course? Again, you're checking to ensure the LMS actually does what you're expecting it to do with the SCORM course you launch and the data that results.

What does the LMS do with SCORM metadata? SCORM allows content to specify tremendous amounts of metadata describing the courseware. You want to make sure it's being used and stored the way you want.

#### TECHNICAL IMPLEMENTATION

SCORM specifies a technical interface, or what should be done, but SCORM does not specify how to create that interface. There are many technical implementation decisions that can significant impact the usability of SCORM.

# Does the LMS require Java applets or other plug-ins be be available in the browser?

These can create huge support headaches and are notorious for causing compatibility problems. SCORM requires JavaScript, not Java.

How does it scale? For SCORM, you want the LMS to handle courses that report a lot of data and large courses with many SCOs and large file sizes.

## Where is the SCORM API

**located?** Your best bet is for the LMS to provide the SCORM API in a parent window or provide an option to locate the API there when content misbehaves.

How often is SCORM 2004 sequencing logic reevaluat-

ed? A robust LMS will do this periodically so the learner's data is updated without having to exit in order to move to the next part of the sequence.

How is data sent from the client to the server? You

don't want the system to use a Java applet or other plug-in to handle this communication. There are a few ways to handle this, the best being to cache data locally in the browser rather than use synchronous process and SCORM API calls.

Do you allow content to be hosted in different domains? If so, how do you enable this configuration? There are many workarounds to the browser security restriction that says SCORM content must be hosted in the same domain as the LMS.

#### WANT TO KNOW MORE?

This paper just touches on the many things you need to consider when putting out a RFP for a learning management system that includes SCORM. For a more complete discussion of these issues, get the full paper at our website - <a href="mailto:scorm.com">scorm.com</a>.

