

I/ITSEC IEEE Learning Standards Special Event

Subject: Adaptive Instructional Systems (AISs) Interoperability Standards Special Event:

Author: Wink Bennett

Discussion Topic: Evaluate and critique how interoperability standards might influence AIS markets

- **Background:** “Standards” are often viewed as counter-innovation and inflexible. However, this doesn’t have to be the case. In the DoD, interoperability standards have substantially facilitated the integration of immersive environment across mission areas to improve integrated multi-domain training and rehearsal. In the case of AISs specifically, there are things such as SCORM or xAPI that have a great deal of “standards feel” to them. In fact, these two as examples of potential AIS standards have influenced the design and delivery of instructional content and training assessment and tracking around the globe.
- **Discussion:**
 - **Talking Point #1:** There is potential value in standards as a means of ensuring content sharing and reuse. Lessons drawn from M&S and Industry points to the value of standards and the efficiencies gained from their application and continued refinement.
 - **Talking Point #2:** Developers should take advantage of existing applicable standards. A number of content and interoperability standards exist. These should be leveraged. Today, I am not aware of a single source of potentially applicable standards for AIS development. This would be useful to have!
 - **Talking Point #3:** Evidence that common content approaches might have value comes from things like SCORM and electronic technical data for maintenance. There appears to be solid efficiency in using existing format ‘standards’ to build training content and curricula, and once developed content is shareable with other education and training applications using these same formats.
 - **Talking Point #4:** It might also be good for developers to try and post descriptions of expert and student models they have used or at the least provide detailed descriptions of their processes for others to consider.
- **Recommendations:**
 - **Recommendation #1:** Create a repository of potentially applicable existing standards and documents lessons learned from development efforts.
 - **Recommendation #2:** Explore creation of common content libraries for possible reuse or tailoring by others.
 - **Recommendation #3:** Explore whether common modeling approaches could be developed to allow more generalized applications.