APIP: States & Suppliers Collaborating to Revolutionize Assessment

Overview

APIP is an e-Assessment interoperability standard supported by the IMS Global Learning Consortium. APIP will reduce integration costs for assessment suppliers and enhance collaboration among assessment agencies, all while enhancing computer assessment for students with special needs.

APIP addresses two long-standing needs in electronic assessments. First, it allows for the transfer of assessment content (items [i.e., questions], tests) between vendors using a standardized XML format. Second, it supplies the necessary accessibility information in that content to support the needs of diverse students. Using Personal Needs and Preferences (PNP) profile information the assessment content can be tailored to meet the access needs of each student.

Flow of APIP Data

The basic idea of APIP is illustrated below. Authors create content (items, tests), providing extra information when needed to make that content accessible to all students. An assessment rostering system can provide PNP information that specifies the access features needed by individual students. An APIP certified delivery system takes the PNP information and ensures that the content is provided to the student with their needed access features.

APIP provides definition of expected system behavior for each question type and accessibility tag for delivery by APIP conformant systems. Therefore, items and tests are interoperable across authoring, banking & delivery systems.

APIP Leaders

• ETS
• McGraw-Hill CTB
• Measured Progress
• Pearson
• Florida
• Maryland
• Minnesota
• Montana
• New Hampshire
• North Carolina
• Rhode Island
• Utah
• Vermont

APIP Interoperability

• APIP Interoperability
• Items
• Tests
• Personal Needs Profile

APIP Item Types

• Multiple choice
• True/false
• Multiple response
• Short text
• Essay
• Expression match
• Ordering
• Hotspot
• Associate
Role in Race to the Top Assessment (RTTA)

APIP has been under evaluation by both SBAC and PARCC since December 2010. The recent SBAC architectural analysis has indicated a key role for APIP. PARCC is currently performing its architectural analysis. The U.S. Department of Education performed an extensive analysis of interoperability standards for assessment in early 2011 that highlighted APIP as a good fit for the needs of RTTA. IMS is currently collaborating with the SIF Association on the Assessment Interoperability Framework (AIF) to combine APIP with SIF data reporting.

Relationship to IMS Question & Test Interoperability

APIP has been under development for two years but is based on advanced IMS work with many years of prior investment. APIP is based on several IMS specifications, including IMS Question & Test Interoperability (QTI) v2.1, IMS Access for All, and IMS Common Cartridge. QTI has been in use since 1998 around the world. Suppliers of systems that implement IMS QTI should be well prepared to implement APIP. APIP provides a testable and extended implementation of QTI that results in high levels of interoperability.

APIP Conformance Certification

IMS is in the process of releasing conformance certification for products that produce or deliver APIP items and/or tests as well as the content itself. IMS provides an online validator for certification of APIP content. Systems receive IMS certification only after going through a set of prescribed tests. APIP certification will evolve over time. Therefore certification includes an APIP version number. Each product certification receives a unique registration number from IMS and is posted on the IMS web site.

Getting Involved in APIP

Development, evolution, and conformance of APIP is a non-profit collaboration supported by leading assessment organizations. There are several different ways to get involved, from a leadership role to a developer’s and certification support network to receiving procuring agency support. Contact Rob Abel to determine the best option for your organization: rabel@imsglobal.org

APIP Accessibility

- Composite
- Adaptive
- Custom types

APIP Test Types

- Formative
- Summative
- Non-adaptive
- Adaptive

APIP Products Certification

- Content (Items and tests)
- Content authoring systems
- Item banking systems
- Student rostering systems (PNP)
- Delivery systems

IMS Global Learning Consortium (IMS) is a nonprofit member organization that strives to enable the growth and impact of learning technology in higher education, K-12, and corporate education worldwide. IMS members are leading corporations, higher education institutions, school districts and government organizations worldwide that are enabling the future of education by collaborating on interoperability standards and major adoption projects for the digital support of education and learning. For more information visit www.imsglobal.org