Assessment Item Packaging Format Brief

The Smarter Balanced Assessment Consortium will package assessment items in two formats.

The open-source test delivery system will use a new format called the Smarter Balanced Assessment Item Packaging Format. This format has been developed by the American Institutes for Research (AIR) expressly to meet the requirements of the Smarter Balanced item specifications[1] and the Smarter Balanced Usability, Accessibility, and Accommodations Guidelines[2]. This format is also being used in the 2013–14 Smarter Balanced field test. A public specification of the format will be available in late 2013 and will be released under a Creative Commons license.

Smarter Balanced will also work with IMS Global to develop a Smarter Balanced Profile of IMS APIP[3]. This profile will have the enhancements needed to encode all Smarter Balanced assessment items. IMS APIP is the only format for accessible assessment items that is governed by a standards body. While APIP can encode a majority of Smarter Balanced items, it does not presently support some of the innovative item types in the Smarter Balanced item specifications; thus the need for the enhanced profile.

The Smarter Balanced assessment item banking tools will be capable of exporting items in both formats. In like manner, the test authoring tool will be capable of generating test packages with items in either format.

Smarter Balanced believes that this two-format approach is the best option for minimizing risk and developing a robust community of test delivery vendors.

Impact on Test Delivery Procurement

Figure 1 shows the components of the Smarter Balanced Assessment System. Smarter Balanced will host assessment item authoring, item banking, and test authoring services. Smarter Balanced will also operate a data warehouse and reporting service. Test delivery, which includes student registration, delivery of tests to the students, and scoring, is the responsibility of member states.
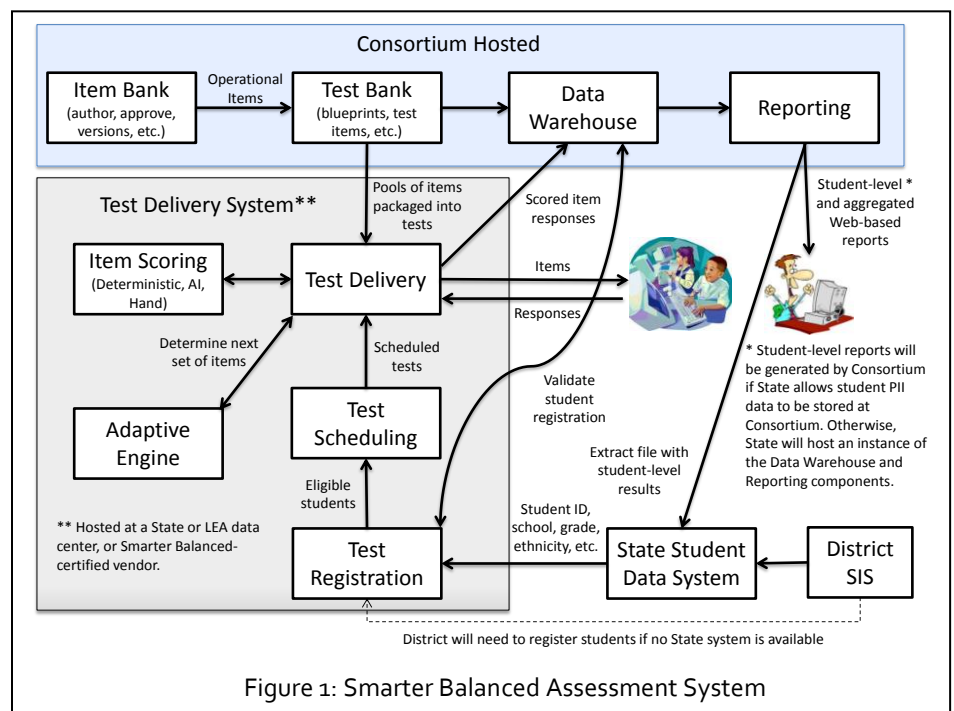

Figure 1: Smarter Balanced Assessment System

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[1] The item specifications are under development and are scheduled to be posted on the Smarter Balanced website by January 31, 2014.
[2] Smarter Balanced Assessment Consortium: Usability, Accessibility, and Accommodations Guidelines (http://www.smarterbalanced.org/wordpress/wp-content/uploads/2013/09/SmarterBalanced_Guidelines_091113.pdf)
[3] IMS Accessible Portable Item Protocol http://www.imsglobal.org/apip/index.html

In most cases, states will procure test delivery services from independent vendors who are certified to deliver Smarter Balanced assessments. Smarter Balanced expects that most test delivery vendors will choose one of the scenarios shown in Figure 2:

- **Scenario 1: Use the Smarter Balanced open-source system.** In this scenario, a vendor will deploy and support the open-source system developed by Smarter Balanced. The vendor may make small changes to meet unique state needs. In this scenario, they would use the **Smarter Balanced Assessment Item Packaging Format.**

- **Scenario 2: Adapt an existing test delivery system using Smarter Balanced components.** A vendor with an existing test delivery system may choose to incorporate key components from the Smarter Balanced system. These might include the formatting code, the browser-side JavaScript rendering system, the scoring engines, and the adaptive engine. In this scenario, it would be most convenient to use the **Smarter Balanced Assessment Item Packaging Format.**

- **Scenario 3: Tune an existing test delivery system to meet Smarter Balanced requirements.** A vendor with an existing test delivery system—especially one that uses IMS APIP–formatted items—may choose to tune its existing system to meet Smarter Balanced requirements for the adaptive engine and enhanced item types. In this scenario, the vendor is more likely to use the **Smarter Balanced Profile of the IMS APIP Format.**

Smarter Balanced is presently planning a program for releasing all of the specifications and support that vendors need in order to be certified to deliver Smarter Balanced assessments. Interested parties should watch for an announcement of this program in early 2014.

Figure 2: Test Delivery Scenarios