

A stack of seven books of various colors (blue, red, white, purple, green, orange, blue) is placed on a wooden desk. A silver laptop is open to the right of the books, leaning against the stack. The background is a blurred office interior with large windows.

IMS Europe Technical Meeting 14 October 2020

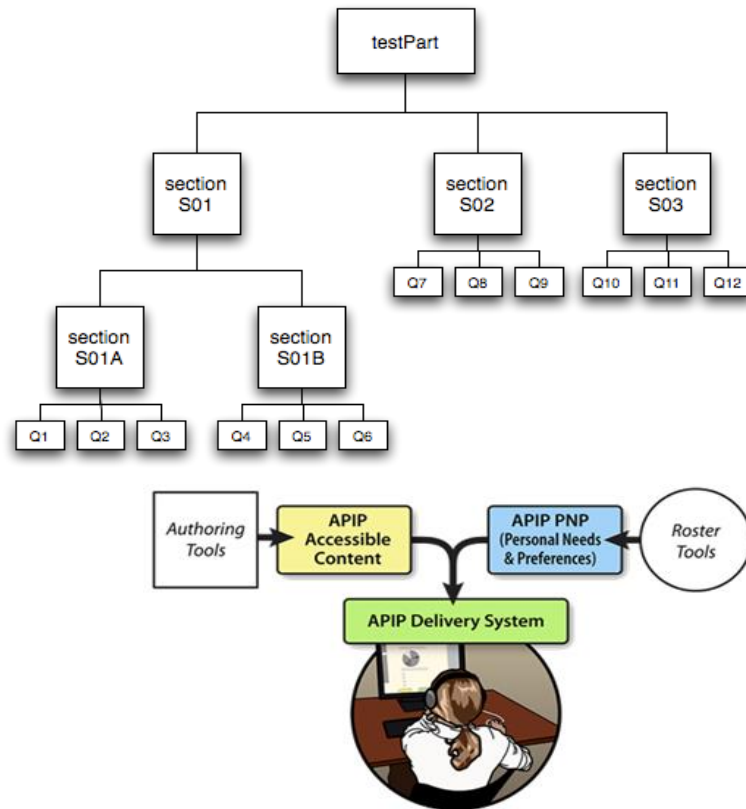
QTI 3.0 and Proctoring

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QTI?

- Question & Test Interoperability
 - The definitive open standard for **assessment content and related (results & usage) data exchange**
 - An **Information Model** at the Core (data at rest)
- With a very long history...
 - First version launched in **1999**
 - QTI 1.2 launched in 2002
 - **Still in use** by many LMSs today
 - QTI 2.1 launched in 2012
 - Incorporated **HTML** elements
 - APIP & PNP launched in 2014
 - Focus on **Accessibility**
 - QTI 3 Public Candidate Final available since August 2020!
 - Focus on **rendering & consolidation**
- Adoption: few official certifications (20-30)
 - But many **conformance claims...**
 - Conformance certification in **Levels** (Entry, Core, Advanced)



Source: <http://www.imsglobal.org/question>



QTI 3.0: Overview

- Remodel of AIP elements for **Accessibility**
 - Cards & catalogs
 - Extended HTML ARIA support
- New web components friendly **syntax**
 - Closer to **implementation**
- Introduced **Shared Vocabularies**
 - For providing **rendering** instructions
 - By use of CSS classes & data-attributes
- Integration of **Best Practices**
 - **PCI**: Portable Custom Interactions, for enabling Technology Enhanced Items
 - **CAT**: Standard on Computer Adaptive Testing, for integrating external adaptive engines
 - Previously **extensions**, now **native elements**
- Last version of QTI?

Example: Demonstrates class="qti-labels-upper-alpha"

```
0000 <qti-choice-interaction class="qti-labels-upper-alpha" max-choices="1"  
0001 response-identifier="RESPONSE">  
0002   <qti-simple-choice identifier="ChoiceA">You must stay with your luggage at all  
0003   times.</qti-simple-choice>  
0004   <qti-simple-choice identifier="ChoiceB">Do not let someone else look after your  
0005   luggage.</qti-simple-choice>  
0006   <qti-simple-choice identifier="ChoiceC">Remember your luggage when you  
0007   leave.</qti-simple-choice>  
0008 </qti-choice-interaction>
```

Expected Rendering: Visual labels are uppercase alphabetic

- A You must stay with your luggage at all times.
- B Do not let someone else look after your luggage.
- C Remember your luggage when you leave.

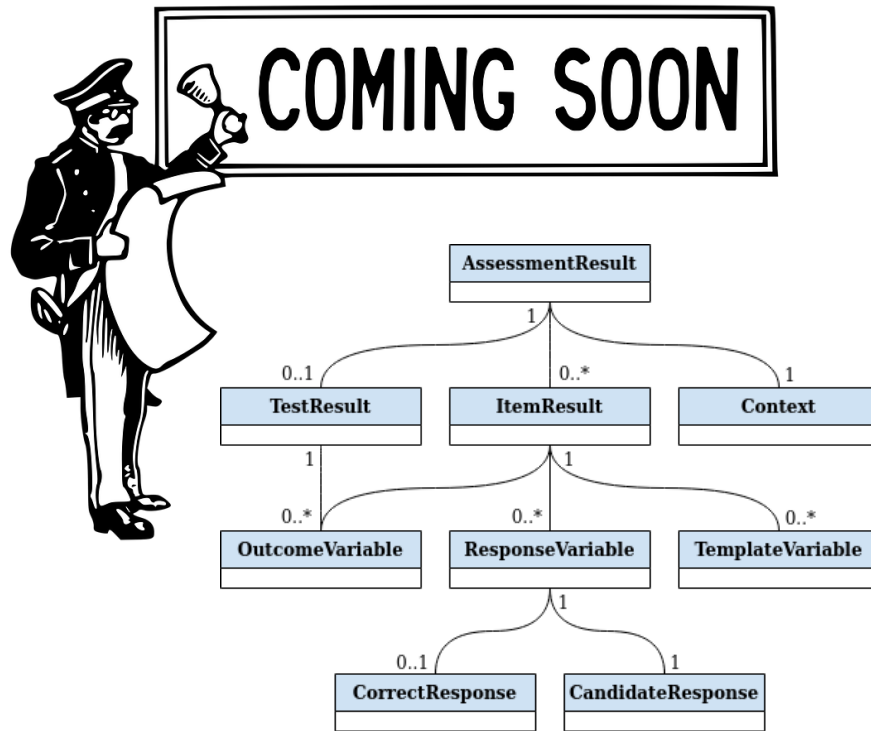
Source: <http://www.imsglobal.org/spec/qti/v3p0/impl>

Video: <https://youtu.be/ue0ctIKP26o>



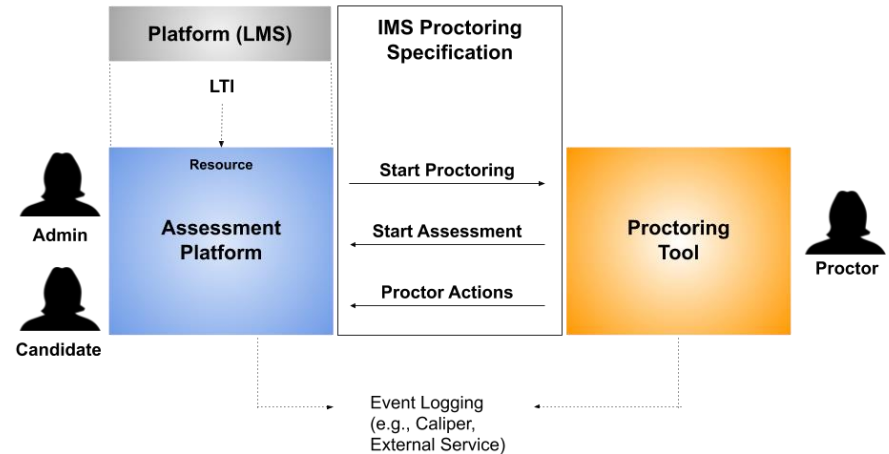
QTI 3.0: Coming Soon...

- Results Reporting (almost done...)
 - Used for exchanging **results**, linked to QTI content model (item, section, part, test)
 - New attributes for tracking **answered status**, **external scoring** processes
 - New **implementation guide** with samples
- Usage Data
 - Used for exchanging (aggregated) **statistics**
 - Updating **vocabularies** for statistical (IRT) models
 - Creating new **implementation guide**
- Standard on CAT
 - Specification & documentation **ready**
 - IMS updating documentation, **modeling**, **test suite**
 - Public Candidate Final **release**: end of 2020
- Next: Public Final Release
 - 2 x 2 Level 2 **conformance certifications** required
 - Looking for **implementations!**
- After that:
 - **QTI Services** (data in motion) for content & results exchange?
 - Suggestions welcome!



Standard on Proctoring

- Best practice on how to **integrate online/remote proctoring** solutions with LMS and assessment solutions
 - Start proctoring & assessment sessions
 - Service to control pause/stop sessions
- Based on **LTI Advantage**
 - Profile of LTI 1.3 Deep Linking Service
 - Separate Assessment Control Service **API**
- Workgroup established in **2017**
 - Initiated by Steve Lay (QuestionMark) @ **IMS Europe** event in Utrecht, 2016
 - **Participation** from UCLA, ETS, Proctorio, TAO, Examity
 - Public Candidate Final **available**
 - Looking for **implementations...**

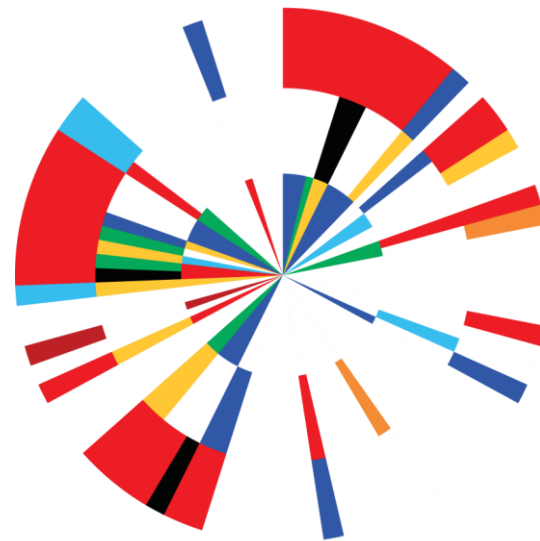


Source: <https://www.imslobal.org/spec/proctoring/v1p0>

Get Involved!

- “When will standard X be available?”
 - Up to you: **implementations** required!
- “Why doesn’t Standard Y support Z?”
 - Get **involved** and set the **direction**
- Help build the integrated assessment & learning ecosystem of the future!
 - **Join** the QTI/CAT/Proctoring **working groups**
 - **Join** the IMS Europe **Technical Taskforce**
 - **Join** the IMS Europe **Board**
 - **Join** the IMS **Assessment Product Steering Committee**

openup



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Questions?

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