

# eTextbook Outcome Architecture

John Tibbetts, Integration Architect Vital Source Technologies



### Evolution of eTextbook

Simple reader of published content

Operate online or offline

Many devices supported (browsers, iOS, Android, etc)

Data gathering

Usage data, notes, highlights

Dynamic, interactive eTextbooks

Interactive quizzes, assessments, models, etc

Activity outcomes need to integrate with grade books of some learning system



#### Outcome Standards

Aimed at standalone activities, not eTextbooks

- Prerequisites
  - Course, user, grade book entry exists
- Start the quiz
- Do the work
- Score the work
- Submit result (with one-time access ticket)



#### Proposed eTextbook Standards

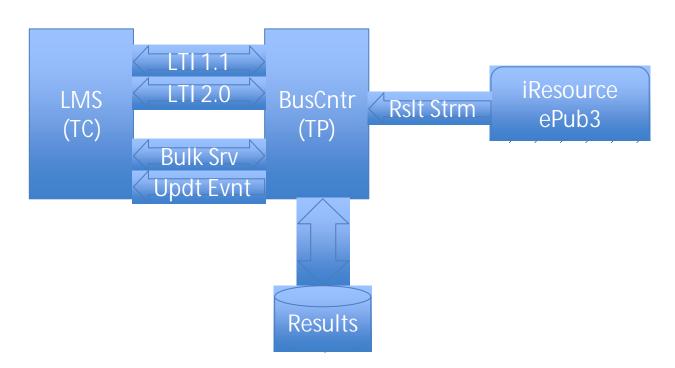
Any activity in any order at any time

- Prerequisite: student has eTextbook
- Student opens and browsers around the book
- On activity completion, post or queue outcome
- On course activity request, petition an outcome (bid/ask)
- Also bulk grade request from LMS

\*\*\*



### VST approach





#### Matches can be complicated

#### **TP Knows**

- ISBN
- TenantUser
- Course context
- QuizIDs needed for course





## Standards implications

Bulk grade petitions

IMS/LTI (maybe)

Result event protocol

This would be first resource → TP protocol

Needs to work for low-level devices

IDPF/ePub3

Markup for result reporting