## Instructional designer perspective v0.1

- 1. Determine value
  - a. Capabilities
    - i. Evaluate audience
    - ii. Evaluate scope of use
    - iii. Canvas similar objects
    - iv. determine type of use
    - v. Determine IP rights for design
    - vi. protect IP rights
  - b. Data Elements
    - i. Initial Goals
    - ii. Industry/Peer Surveys
    - iii. Assets and Contents
    - iv. Reposed Asset Catalog
    - v. List of Asset Catalogs
    - vi. Intellectual Property Law Cheat Sheets
    - vii. Student Demographics
    - viii. Current Course Analytics
- 2. Determine pedagogical goals
  - a. Capabilities
    - i. Analyse gaps
    - ii. Specify competencies
    - iii. Specify measurements
    - iv. Determine learner characteristics
    - v. Review existing catalogues of competencies
    - vi. Formalize goals
    - vii. Vet goals
  - b. Data Elements
    - i. Existing measures
    - ii. External requirements
    - iii. Courses
    - iv. Competencies
      - 1. Internal
        - 2. Professional/external
    - v. Gap analyses
    - vi. Degree rules
    - vii. Course/program catalog
    - viii. Learner competency mappings
- 3. Designing activities
  - a. Capabilities
    - i. Assess modality (synch, asynch)
    - ii. Assemble team
    - iii. Collaborate
    - iv. Assemble instructional+learning activities in support of goals
    - v. Develop learning map and sequencing
    - vi. Determine authoring platforms
    - vii. Identify associated competencies
    - viii. Select appropriate activity types
    - ix. Design metrics and analytics
  - b. Data elements
    - i. Team roster and skill inventory
    - ii. IP rules and policies
    - iii. Modality list
    - iv. Learner competency mappings
    - v. Learning map & sequence
    - vi. Competency catalogs
      - 1. Internal
      - 2. Professional/external
    - vii. Inventory of learning tools
    - viii. Analytics from previous courses
- 4. Assembling content
  - a. Capabilities
    - i. Determine whether to build or buy (or adopt/adapt)
    - ii. Assessing quality of content (assets)
    - iii. Test that it meets goals
    - iv. Provide access to existing content repositories
    - v. Determine rights and entitlements
    - vi. Obtain rights for external content
    - vii. Protect IP rights.
  - b. Data Elements
    - i. Modality list
    - ii. Best practices for tools
    - iii. List of delivery systems
    - iv. Usage policies/best practices for content
    - v. Previous analyitcs
- 5. Design Assessments
  - a. Capabilities

- i. Match Outcomes to Assessment Types
- ii. Develop Assessment Criteria
- iii. Develop Assessments
- iv. Sequence with Activities and content
- v. Match assessments to competencies and goals
- vi. Validate efficacy
- b. Data Elements
  - i. Design/pedagogical goals
  - ii. Assessments
    - 1. Rules (timed, retries, etc.)
  - iii. Assessment types
  - iv. Competencies
  - v. Outcomes
  - vi. Outcome descriptions
  - vii. Learning map/sequence
  - viii. Criteria
    - 1. Evaluation Instructions
    - Rubrics
      Scalars
- 2 Pi
- 6. Implement
  - a. Capabilities
    - i. Publish
    - ii. Activate
    - iii. Prepare consumers (train/educate)
    - iv. Document practices/instructions
    - v. Administer assessments
    - vi. Collect outcomes
    - vii. Entitle usage
    - viii. Track usage/consumption
  - b. Data Elements
    - i. Documentation/training materials
    - ii. Sequence map
    - iii. Learning objects/assets
    - iv. Usage data
    - v. Usage policies
    - vi. Learning context (class or other types, e.g., MOOC)
    - vii. Outcomes
    - viii. Formats
    - ix. Assessments
    - x. Asset catalog
    - xi. Asset packages
    - xii. Entitlements
- 7. Evaluate
  - a. Capabilities
    - i. Survey
    - ii. Analyze outcome data
    - iii. Conduct focus groups
    - iv. Peer review
    - v. Collect & analyze analytics
      - 1. Learner
      - 2. Usage
      - 3. Instructional
    - vi. Compare iterations
  - b. Data Elements
    - i. Surveys
    - ii. Survey results
    - iii. Outcomes
    - iv. Competencies
    - v. Peers vi. External assessments
    - vii. External assessment results
- 8. Repose content
  - a. Capabilities
    - i. Store
    - ii. Retrieve
    - iii. Tag/manage metadata
    - iv. Abstract/reuse
    - v. Secure
  - b. Data Elements
    - i. Assets
      - 1. Attributes
        - 2. Lifecycles
    - ii. Asset catalog
    - iii. Tag metadata
    - iv. Package
    - v. Maintenance Schedules
    - vi. Versioning Scheme
    - vii. Entitlements

## ITANA Reference Architecture for Teaching and Learning

Instructional designer capability map (draft



