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
       2. Rubrics
       3. Scalars

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)
May 2013

Process row (arrows)

Determine value → Determine pedagogical goals → Design → Assemble content → Assess design → Implement → Evaluate (learning object) → Repose

Capability layer

Determine value
- Evaluate audience
- Evalaute scope of use
- Canvas similar objects
- Determine IP rights for design
- Determine type of use
- Protect IP rights

Determine pedagogical goals
- Analyse gaps
- Specify competencies
- Specify measurements
- Determine learner characteristics
- Review existing competency catalogues
- Formalize goals
- Vet goals

Design
- Assess/determine modality
- Assemble team
- Collaborate
- Assemble instructional and learning activities
- Develop map, sequencing
- Determine authoring platforms
- Identify competencies
- Select activity types
- Design metrics and analytics

Assemble content
- Determine whether to build or buy
- Assess quality of content
- Test that content meets goals
- Provide access to existing content repositories
- Determine rights and entitlements
- Obtain rights for external content
- Protect IP rights

Assess design
- Match outcomes to assessment types
- Develop assessmetn criteria
- Sequence with activities and content
- Match assessments to competencies and goals
- Validate efficacy

Implement
- Publish
- Activate
- Train/educate consumers
- Document practices and instructions
- Administer assessments
- Collect outcomes
- Entitle usage
- Track usage and consumption

Evaluate (learning object)
- Survey
- Analyse outcome data
- Peer review
- Collect analyse anaytics (learner, usage, instructional)
- Comapre iterations

Repose
- Store
- Retreive
- Tag, manage metadata
- Abstract, reuse
- Secure

Information layer

- Intial goals
- Industry, peer surveys
- Current assets
- Asset catalogue
- Catalogue of catalogues
- IP rules
- Student demographics
- Current course analytics

- Existing measures
- External requirements
- Course program catalogue
- External internal competencies
- Gap analysis
- Degree rules
- Learner competency mappings

- Team roster skill inventory
- IP rules and policies
- Modality list
- Learner competency mappings
- Learner map and sequencing
- Competency catalogues
- Inventory of learning tools
- Analytics from previous course

- Modality list
- Usage policies
- Best practices for tools
- Previous analytics