

# Agendas and minutes

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## Minutes 2014/06/04

Present: Scott Fullerton, Laura Geckler, Rich Stevenson, Leo Fernig  
Where do we take RATL from here?

1. Is it sufficient to continue with a small core group (Scott, Rich, Laura and Leo)?
2. RATL as a theme area
3. RATL is not yet a "reference architecture"

If it is going to go in the direction of a reference architecture it should point the way to where we need to go (not a description of current reality). Two key features we need to concentrate on:

1. Learning object repository (content management capability)
2. Learning analytics

Current LMS implementations constrain our thinking around a current reality.

Can we migrate to a more open architecture?

Does there need to be a single interface for faculty (grades, content management etc). CMS became an LMS as new tools got added

Can the LMS be unbundled? Can the MOOC style be applied to the ecosystem. Are there things that are unnecessarily tightly coupled. AuthZ, sequencing, grades. Gradebook is central...

<https://confluence.sakaiproject.org/display/PED/Sakai+Learning+Capabilities+v+1.0>

<http://mfeldstein.com/unizin-indiana-universitys-secret-new-learning-ecosystem-coalition/>

3 stools of unizin:

1. Content
2. Delivery
3. Analytics

We could layer technical capabilities on top of these 3 stools

How does the content part connect to the presentation (delivery) part

CALIPER+RATL: what data points are produced in the different capabilities described in RATL.

Faculty evaluations

CALIPER is concerned at the event level

Traditional enrolment events do not currently go into CALIPER

Using RDF so we can aggregate across domains

The triplet: subject object predicate

1. Goal
2. Action
3. Student

RATL: What would an open architecture should look like?

## Minutes 2013/06/18

First part of the discussion centered around the Administrator capability map. Comments made during the discussion have been incorporated directly into the wiki: <https://spaces.at.internet2.edu/display/itana/Administrator+perspective>

### Action items

1. Rich and Leo to complete the Administrator capability map next week in a 2 hour session
2. Scott to agreed to complete the information layer for the Instructor capability map

3. Mentor capability map: UW-M has a version of this. Scott can take the lead on this. Volunteers needed.
4. Infrastructure piece to left for later in August (when we have all the capability maps completed (so infrastructure is tied exactly to the capabilities we need)

### Discussion around modality

1. We examined the first capability of the Instructional Designer Capability map: "Evaluate audience". Observations:
2. This may vary enormously depending on modality (small f-2-f vs. massive on-line)
3. Modality is not the only variable/context. For example: Ivy league vs. large public

One way of representing modality is to try a color code to indicate where we need to pay special attention to modality

## Minutes 2013/04/22

Present: Rich, Glenn, Scott, Leo, Laura, Pattie

- Need for parking lots (Pattie):
  - Added Parking lot to project workspaces
  - Added parking lot to Workshop agenda
- Relationship between SIS and LMS
  - An institution may have multiple registration systems (SIS).
  - An institution may have multiple LMS's.
  - Conceptually, we need to know which enrollments go to which LMS's

### Learning tools and learning objects

There is a difference between "learning objects" and "learning tools". Learning tools are things like Piazza that facilitate the learning process through collaboration. Learning objects: items created and curated by the institution. Available for re-use (Laura's definition)

Question: are there artifacts generated by learning tools that need to be persisted (with meta-data)?

Discussion around e-Portfolio: content management of student artifacts

In scope or out-of scope (parking lot issue)

Rich listed a set of capabilities that should be in the ref-arch irrespective of whether the e-Portfolio is selected as the vehicle for those capabilities:

1. A permanent home for student work
2. Availability of that work outside of the context (temporal) of the course
3. Available for self-reflection
4. Available for assessment outside of the context of the course: eg competence evaluation

Question: what are the conceptual object model entities that describe a student's work (essays, answers to problems, etc)?

## Minutes 2012/04/16

### Discussion around scenarios.

Scenarios and scope will continue to be the topics at the next 2 WG meetings (Mon Apr 22, Wed May 8)

Additional scenarios????

#### *Graduate Studies*

Scott had some misgivings around taking scenarios from graduate studies. However, this seems to be ok as long as:

1. Our project does *NOT* deal with any of the issues surrounding research data.
2. We recognize that the underlying capabilities are the same as in undergrad. This is just a way of testing the capabilities with different use cases

#### *Distance Ed.*

Rich's point: same capabilities, different modality. Again, just a way of testing out that we have the capabilities correct.

#### *Coop, internships, work-study*

Laura came up with an interesting use case from ND that is worth writing up

### Workshop prep

Rich pointed out that there are multiple dimensions to the problem. OK to organize the workshop around one dimension (roles: learner, instructor, mentor, content developer) as long as we do not lose sight of the other dimensions (eg different modalities).

We can use Rich's capability map for learners as a starting point: <https://spaces.at.internet2.edu/display/itana/Reference+Architecture+Model+Lenses>

The final deliverable of the workshop is a complete set of 4 maps (learner, instructor, mentor, content developer) with accompanying text.

Laura warned against getting bogged down in capabilities that belong in other systems. That being said, we do need to enumerate fundamental enterprise-wide capabilities that are enablers for all applications (Identity and Access Management, Enterprise Workflow, Wireless networks, Storage). Maybe these all go in the bottom box of the capability maps?

## Minutes 2012/04/10

Rich Stevenson

Scott Fullerton

Glenn Donaldson

Carol Bershad

#### Action Items Check-in:

1. Pattie to deliver ERD's - Pattie has delivered ERD of roles which are on the wiki, as has Scott.

#### Learning Scenarios

1. Scott walked the three of us through the modalities presented last time, including the modalities, presented as [Learning Ranges, Personas and Scenarios](#). The Personas presented are typical undergraduate course personas, with need to add some additional personas to include other roles.
2. These also tie to the "ring" diagrams where the capabilities in the rings are activities that relate to the personas
3. Carol asked why course development and course offering are not distinct - tabled for a larger quorum
4. Glenn asked if student encompasses all people (employees, staff for compliance, etc.) who participate in a learning space (e.g., training of staff on FERPA) - also tabled for a larger quorum, Carol seconded and said that this ties back to our scope problem - whether this is "learning" generically, or the higher education learning space
5. Rich asked if these scenarios are the high level capabilities that enable or realize the personas - Scott clarified that the 3 personas are 3 different types of learning, and so the scenarios may play out differently and require different capabilities
6. Consensus was this is a valuable tool to build the list of capabilities, and may inform scope but probably won't decide.
7. Glenn and Carol committed to continuing to refine scenarios.

#### Deliverable Formats

1. The group reviewed [two different potential lenses or frames](#) for the reference architecture based loosely on a CORA model construct.. The first was role based, and the second was modality based. General consensus was that role-based is a better structure, but may have some challenges around how many roles. We also asked what other layers might be in a diagram like this, with no clear consensus.

#### Tools Inventory

1. Scott spent some time walking through the Inventory of Tools for Rich, Carol, and Glenn. Group will get additions to Leo for inclusion.

## Minutes 2012/03/13

Glenn Donaldson

Pattie Boettger

Leo Fernig

Laura Gekeler

Scott Fullerton

Steve diFilipo

#### Action items:

1. Laura to divide the IMS LTI list of roles into "primary" and "secondary"
2. Scott to develop a preliminary ontology around learning units
3. Leo to update the terms of reference to clarify the idea that the reference architecture is "an instrument for measuring maturity of the learning ecosystem" at an institution.
4. Leo to start an "issues parking lot" to keep track of unresolved issues/questions

#### Discussion around roles

1. In practice, a role maps to a bundle of permissions
2. Is there a set of definitions for the LTI roles? Have any institutions documented the roles? Or is every institution supposed to make their own interpretation (parking lot issue)?
3. Examples of complexities around teaching assistants:
  - a. Undergraduate vs graduate. At ND this is at the discretion of the colleges
4. Examples of complexities around mentors-advisors. UM advising project distinguished between:
  - a. Academic advisors
  - b. Peer advisors
  - c. Professional advisors
5. Small schools vs large schools. Often small schools do face the complexities/subtleties of large schools. Consequently, a simple set of archetypes can be very useful.

#### Discussion around technologies ("pinning jello to a tree")

One fundamental distinction:

1. Tools used to prepare content (ie used by content authors)
2. Tools used on the fly in the course of a course (chat, clickers etc)
3. Tools used by consumers? (learners)

One useful approach would be to establish a set of meaningful contexts in which these technologies are used. Steve mentioned MOOC's...we will probably have to say something about MOOC's in the reference architecture

## Minutes 2012/02/13

Present:  
Carol F. Bershad  
Pattie Boettger  
Paul Erickson  
Leo Fernig  
Laura Gekeler  
Scott Fullerton  
Mark McCahill  
Richmond Stevenson

#### Action items:

1. We need to complete the f-2-f survey before proceeding (to be discussed at next meeting)
2. Carol to work on Google spreadsheet that captures main actors and roles
3. Scott to supply some use cases for roles
4. Leo to create a survey of tools so we can tabulate who is using which tools

#### Discussion points:

- There is a danger of over-generalizing the roles in the data model. Rather than subsume everything under person, maybe better to call out some specific roles: instructor, learner, etc
- Conversely, there is also the danger of over-specializing the roles and losing some of the commonality or roles. Consumer and producer are both active and passive.
- The learner can be active in a sense that transcends engagement in the course
- Evaluations and critiques are things learners do. Evaluation is not just a question of instructors assigning grades. There is peer evaluation among students. There is also peer evaluation among instructors.
- Artifacts created by different groups are treated differently. A student peer evaluation is treated differently from an instructor's evaluation. Likewise, a learning object created by a learner is treated differently from a learning object created by an instructor.
- Everything can be subsumed under the concepts of organizer and consumer
- We should distinguish between primary capabilities and secondary capabilities. Although a learner may, under certain circumstances, act as an instructor, that is not their primary role.
- The model needs to account for self-directed learning and portfolios
- Our model needs to incorporate the goals of the learning process:
  - Meeting learning objectives
  - Engagement
  - Retention

## Agenda 2012/02/13

#### Housekeeping:

Update from Rich on the Educause presentation proposal  
Update from Scott on the conversation with Richard Webber at Stanford  
If we want to have a f-2-f meeting in May:

1. Please fill out the survey: <https://docs.google.com/forms/d/1l8XFCTmPCIOEX7-RoMbE0xQ8jrVZpfiysmUoiMhFgSI/viewform>
2. Also, if you could take a look at a proposed agenda and make comments: [https://docs.google.com/document/d/1\\_rx23aXh89Q-zZu6pqCQIWqDvbMncj2jj0Fe1sFyak8/edit](https://docs.google.com/document/d/1_rx23aXh89Q-zZu6pqCQIWqDvbMncj2jj0Fe1sFyak8/edit)

#### Substance:

A continuation of our discussion around actors and activities. Some important points were made at our last meeting: they should all be incorporated in the table: <https://spaces.at.internet2.edu/display/itana/Actors>  
The concept of an *instructional designer* was mentioned several times. I think that is worth digging in a little deeper: there are several roles here. I found the following very helpful: **Chapter 15** on OLI in Diane Oblinger's Game Changers: Education and Information Technologies <http://www.educause.edu/research-publications/books/game-changers-education-and-information-technologies>

#### For next meeting:

As we are taking an architectural approach to the learning domain, I thought it would be helpful to sketch out a conceptual data model. The data model contains the nouns. Here's a rough sketch:

<https://spaces.at.internet2.edu/display/itana/Conceptual+data+model>

## Minutes 2013/01/16

Carol F. Bershad, Glenn Donaldson, Leo Fernig, John Fontaine, Laura Gekeler, Scott Fullerton, Richmond Stevenson, Piet Neiderhausen

#### Housekeeping items:

1. The ITANA website Google calendar has been updated with our meeting schedule
2. Smaller group meeting on Friday 18 Jan to review Rich's Educause presentation proposal
3. Leo to get together with Carol, Glenn and Scott to discuss the workplan

Main discussion topic: what goes on a core diagram?

1. Leo walked through a core diagram based on the Delta Airlines diagram from Enterprise Architecture As Strategy: Creating a Foundation for Business Execution  
By Jeanne W. Ross, Peter Weill, David Robertson: <https://spaces.at.internet2.edu/display/itana/Learning+and+teaching+core+diagram>
2. Scott walked through a set of three core diagrams he had developed: <https://spaces.at.internet2.edu/display/itana/Teaching+and+Learning+--+Framework+and+Principles>
3. Rich walked us through the capabilities he had identified at UMUC: <https://spaces.at.internet2.edu/download/attachments/34930757/UMUC+LMS+Core+Features+Presentation.pdf?version=1&modificationDate=1355875095070>

There was general agreement that it is worth working on a high-level capability map.  
Some of the observations and questions that were raised:

- Discussion around career exploration and life long learning. Several members raised a concern around the possible breadth of the exercise: how broad should we go? Scott felt we should start as broad as possible so that we don't miss anything. We can always narrow the scope later.
- Discussion around learning objectives, accreditation, learning plans. John: we need to call out the capabilities needed to support the creation and management of objectives.
- Discussion around group management. John raised his experience with IMS LIS. Groups in LMS are more fluid than registration groups.
- Carol: are we dealing with nouns or verbs. Which level of the architecture are we addressing: business architecture, application architecture, technology architecture. In terms of business architecture, capabilities are pretty stable. Laura: systems in the learning space are all dealing with the same dataset.

## Minutes 2013/01/10

Present: Glenn Donaldson, Scott Fullerton, Leo Fernig, Rich Stevenson, Paul Erickson

Agreed on meeting times for 2013: alternating Wednesday and Monday every 2 weeks starting January 16 1:00-2:00 PT

Rich is booking the UMUC Webex

Leo to update the ITANA Google calendar

Rich shared draft of 2012 Educause presentation proposal. Small group to discuss in detail next Friday (Jan 18). Still need to firm up co-presenters.

Leo to schedule a separate meeting to create a more detailed workplan for the project (Leo, Glen, Scott and Carol)

Follow up to last meeting's agenda items:

- Laura successfully connected with John Fontaine
- Scott connected with Ian Dolphin and arranged a conference call: more possible Sakai leads
- Leo was unable to connect with other Educause constituent group leads

## Agenda 2013/01/10

Welcome new members

Confirming our regular meeting time.

Wednesday 1:00-2:00 PT (4:00-5:00 ET)

Once every 2 weeks

Starting Wednesday 16th January

Rich's outline for an Educause presentation

Volunteers?

Comments?

Timelines?

Work on a Google doc version?

Additional resources <https://spaces.at.internet2.edu/display/itana/misc+links> See especial CMU OLI

Does anyone want to work with me on a detailed schedule (see attached workplan...needs to be fleshed for a week-by-week schedule)

Follow-up on previous meeting action items

## Minutes 2012/12/18

### Foundational work

1. At Jim's suggestion we should review ITANA capability maps and charge to working groups
  - a. <http://itana.org/capability-map/>
  - b. <https://spaces.at.internet2.edu/display/itana/Charge+to+Working+Groups>
2. Rich is working on TOGAF 101 as a lightweight framework for us
3. Jim: a possible screen-to-screen session on the UW-M capability map

### Reaching out to other constituent groups.

Jim has sent out introduction to other constituent group leaders. Leo to contact following directly:

Blended and Online Learning Constituent Group

Ellen Marie Murphy, Empire State College SUNY

Clark Shah-Nelson, The Johns Hopkins University

Evidence of Impact Constituent Group

Patsy D. Moskal, University of Central Florida

John Fritz, University of Maryland, Baltimore County

Instructional Technologies Constituent Group

Cyprien P. Lomas, The University of British Columbia  
Danilo M. Baylen, University of West Georgia  
Massive Open Online Courses (MOOCs) Constituent Group  
Jason Blanchard, Drexel University groups

#### **Educause presentation**

Rich has started work on this  
Will share with group in January

**First item to work through in 2013:** Solution scope

#### **Other action items**

Scott reaching out to Ian Dolphin (UK JISC) and colleagues at Duke  
Laura to reaching out Dr Chuck Severance and John Fontaine  
Leo to follow up Jim's suggestion: Harvard Business School poster session at Educause on Learning ecosystem  
Leo to send out Doodle poll for 2013 times by Friday Dec 21

## **Minutes 2012/12/11**

Present: Bob Winding, Rich Stevenson, Leo Fernig  
Regrets: Scott Fullerton, Carol Bershad, Chris Eagle, Paul Erickson

#### **Membership**

Reaching out to others to join the group:

- New members: Chris Eagle from uMich, Carol Bershad from UW and Laura Gekeler from ND
- Scott is going to reach out to Sakai community
- Rich is going to reach out to Michael Feldstein (esp for IMS connections)
- Leo still has to connect with Jim in order to reach out to other Educause constituent groups

#### **TOGAF**

We agreed that a loose adherence to TOGAF ADM would help give the project a recognizable architectural structure. Rich is TOGAF certified. He offered to circulate some readings so we have a baseline understanding as a group.

#### **Readings**

We agreed we should have a readings section on our site.  
You can see a start at: <https://spaces.at.internet2.edu/display/itana/misc+links> (examples provided by Scott Fullerton)

#### **Workplan**

We need a workplan to guide us through 2013. Leo to sketch out an initial draft.

#### **Webex**

The UMUC Webex seems to work well. Allows screen sharing, collaborative drawing and chat.

## **Agenda 2012/12/11**

Welcome to new members  
Reporting back on reaching out:

- Leo: SOA group, UW, Educause constituent groups
  - Scott: a rep from Sakai CLE?  
Other?  
Items we need to put together for January:
1. A short/simple workplan for 2013 (to be reviewed by group in Jan)
  2. Wiki layout. Wiki responsibilities
  3. Meeting schedule

## **Minutes 2012/11/29**

Present: Rich, Scott, Bob, Leo

#### **Growing the working group**

Action item: Prior to our Dec 11 meeting we will reach out to colleagues within our own institutions and in other organizations

1. Scott: UM director of learning systems, someone from Sakai CLE (as they have already done a lot of this work)
2. Robert: IT learning technology support group
3. Rich: reps from standards bodies?
4. Leo: contact SOA working group members, work with JIM to reach out to other Educause constituent groups

#### **Deliverables**

General agreement on

1. Artifacts published on the ITANA website
2. An Educause presentation (Rich offered to take the lead on this)
3. A short survey. Scott warned about scope and direction. We need to examine this more carefully
4. A possible Educause publication. In principle ok. But we need to let the project mature a bit before we make any decisions here.

**Workshop**

Earlier rather than later.

2 options: Madison and Seattle

This needs to be discussed with the entire group (once it has been constituted)

**Substantive discussion**

We agreed on a project title: Reference architecture for teaching and learning

We looked at Scott's diagrams:

1. A very useful starting point to generate discussion with the whole group
2. Possibly extend them to create core diagrams
3. Overlaying heat maps would be a good way of showing gaps

**Meetings**

Rich has scheduled the next meeting using the UMUC Webex (Dec 11)

Once the project starts in 2013 we will probably want 1 meeting every 2 weeks.