

EDU-API

Presentation from EDU-API Task Force at IMS Europe Summit 2019

Johan Planmo, EDU API Task Force
/SUNET
/University of Gothenburg

Agenda



- What is EDU-API?
- Guiding Principles
- Interoperability
- EDU-API Concept Model
- What is an Education?
- Examples
 - Educations
 - ◆ Education Offering How to instantiate an Education in time
 - ◆ Offering Association How to connect a person to an Education Offering
- Benefits
- What Happens Next?



What is EDU-API?



- IMS already have two standards for Learning Interoperability
- So why do we need a new?
 - LIS is getting old
 - One Roster is targeted at K12 and do not carry enough information for Higher Education
 - One Roster should stay simple for K12
 - ♦ New requirements have been identified Higher Ed Survey
 - ♦ Input from Cal State API, BYU API and others
- EDU-API is the answer to solve the issues above
 - We look into modern representations like:
 - Synchronous Services based on REST/JSON
 - We are also exploring asynchronous event driven solutions
 - Publication once many subscribers (Pub/Sub)
 - The work is done iteratively
 - The first release will focus on a small set of entities
 - More releases will come!



Guiding Principles

Concept Model

Define a shared concept model to ensure clarity of terms and their meaning.

Information/Entity Model

Define a shared information/entity model based on the shared concept model that provides technical continuity across bindings.

Interoperability

Ensure that systems, vendors, products, and any solution is interoperable for the use cases and workflows supported.

Integration points

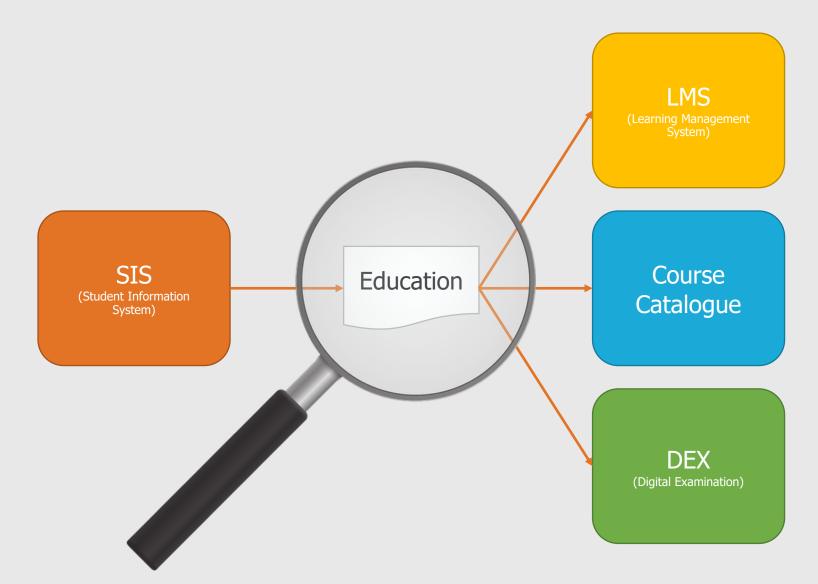
Focus data shared at integration points rather than data representations that are specific to proprietary inside domain solutions.

Iterative/MVP Development Paradigm



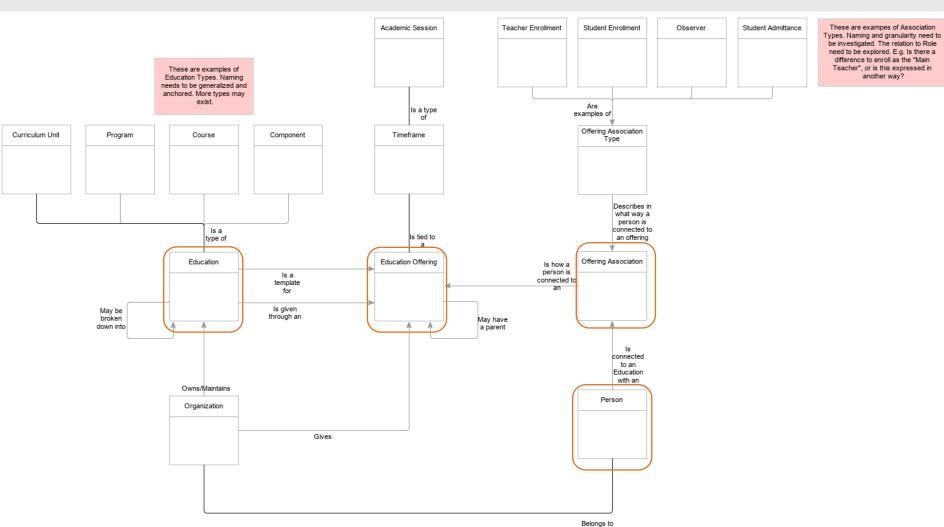
Interoperability





EDU-API Concept Model







What is an Education?

It may be a Course



Course Chemistry 101 The most common form of Education is a Course

It may be a lab or a module in a course



- An Education can be broken down into smaller pieces
 - Modules/Components
 - ♦ Labs
 - Etc.



It may be a Program



Program Course Chemistry 101 Course Mathematics 101 Course Analytical Chemistry

- An education can be an aggregate of courses
- A Program will usually give you a degree like a Bachelor or a Major

Example

Lucy is interested in Chemistry. She is not sure about a career in this field, so she will start by taking a basic course

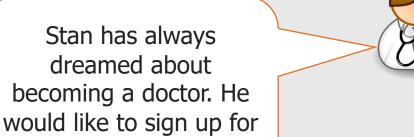


Course
Chemistry 101
20 weeks

Doctors Program
5,5 years

When can I start?

the Doctors Program





Instantiating Educations

A Program usually run on full speed, but may start many times a year

- It is the same mechanism as above

Educations

Course

Chemistry 101 20 weeks

Doctors Program
5,5 years



Education Offerings

Chemistry 101 100% Speed Starting Spring Semester 2020 Campus Gothenburg

Chemistry 101
25% Speed
Starting Spring Semester 2020
Campus Gothenburg

Chemistry 101 100% Speed Starting Autumn Semester 2020 Campus Gothenburg

Chemistry 101 100% Speed Starting Spring Semester 2020 Campus Lindholmen

Doctors Program 100% Speed Starting Spring Semester 2020 Gothenburg

Doctors Program
100% Speed
Starting Autumn Semester 2020
Gothenburg



I need to Apply for Admittance



Offering Associations

Stan is already admitted and is ready to start. He accepts his seat in the education by Enrolling to the entire Program

Educations

Course

Chemistry 101 20 weeks

Doctors Program 5,5 years



Education Offerings

Chemistry 101 100% Speed Starting Spring Semester 2020 Campus Gothenburg

Chemistry 101 25% Speed Starting Spring Semester 2020 Campus Gothenburg

Chemistry 101 100% Speed Starting Autumn Semester 2020 Campus Gothenburg

Chemistry 101 100% Speed Starting Spring Semester 2020 Campus Lindholmen

Doctors Program
100% Speed
Starting Spring Semester 2020
Gothenburg

Doctors Program
100% Speed
Starting Autumn Semester 2020
Gothenburg

Association





Teacher Association

Susan will be equally responsible for the Doctors Program starting Autumn 2020.

Educations

Course

Chemistry 101 20 weeks

Doctors Program 5,5 years



Education Offerings

Chemistry 101 100% Speed Starting Spring Semester 2020 Campus Gothenburg

Chemistry 101 25% Speed Starting Spring Semester 2020 Campus Gothenburg

Chemistry 101 100% Speed Starting Autumn Semester 2020 Campus Gothenburg

Chemistry 101 100% Speed Starting Spring Semester 2020 Campus Lindholmen

Doctors Program 100% Speed Starting Spring Semester 2020 Gothenburg

Doctors Program
100% Speed
Starting Autumn Semester 2020
Gothenburg

Association

Association

Association

Association



Benefits



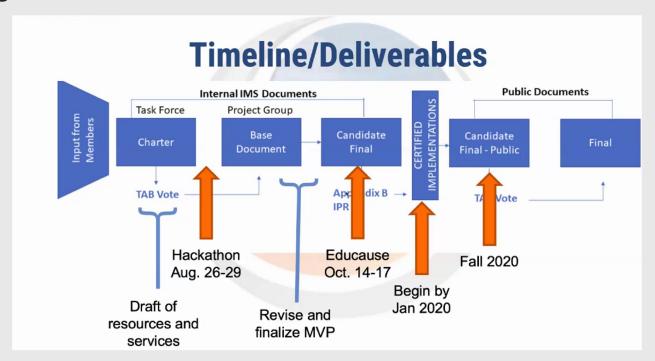
- By having a generic Concept/Information Model we can support many Use Cases with the same set of Integration Messages
- It is possible to break down Educations
- It is possible to create many Offerings based on different Business Requirements
- It is possible to associate persons on many levels
- It is possible to associate persons to Offerings in different ways, E.g.:
 - Student Admittance
 - Student Enrollment
 - Teacher enrollment
 - etc.



What Happens Next?



- The EDU-API Task Force will conclude the Project Charter
- .. and transform into a Project Group
- We will define the MVP for the first iteration of EDU-API
- In practice, we are working with detailed specifications for the Message attributes and behaviors





SUNET

www.sunet.se