Using a GIS S&T Body of Knowledge within a developed Curriculum design tool

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Overview

- GIS&T Body of Knowledge
- Project GIN2K
- Curriculum design tool
**GI S&T Body of Knowledge**

- BoK in general is basically the agreed ontology of a specific professional domain (reference framework).
- For GI S&T It is a collection of textual listing for GI S&T domain introduced in 2006 by the American Association of Geographers.

**Structure**

- **Knowledge area**: 10
- **Unit**: 73
- **Topic**: Many
- **Theme**: Many more

**Purpose:**
- to "bridge the gap between the GI S&T higher education community and the practitioners, employers, and clients who populate the various GI S&T professions" (DiBiase et al. 2006)
Project GI-N2K

Funded by EU (Erasmus Lifelong Learning Program)
31 partners from 25 countries
AGIS: Co-Lead of WP (with ISEGI/UNL), development of Curr. Design tool (with UJI)

- Analysis of requirements to a BoK from different areas (education institutions, public services, companies)
- Concept and implementation of tools to ease the usage of a BoK
- Transfer of the content of the BoK to an advanced Wiki (cooperation with Sean Ahearn and Andre Skupin)
- Revision of the content of the BoK
- Tools: focus on Curriculum design tool
The Virtual Lab for the BoK: VirLaBok

Overview:

**Comp1:** Data repository (from Ahearn / Skupin), Also Services

- Wiki allowing discussion between GI S&T experts and users of the BoK

**Comp2:** Dynamic platform

- To define and update knowledge areas, units and topics, access through services

**Comp3:** Tool sets

- To define courses
- To define learning paths
- To define job profiles

Software Tools
General architecture of the VirLaBoK
Some Terminologies

Study Program

- A program comprises the core required and elective courses that lead to a degree or a certificate.

Module, Course, Lecture

- A study program is usually split into modules. Module comprises one or more courses, which are somehow related, either in time or content.
- A course is a unit of teaching in which normally an individual subject is taught over a longer time period, typically in one academic term (semester).
- Courses typically comprise a number of lectures and/or a number of practical sessions.
- A Lecture is an atomic unit of teaching, part of a course.
Curriculum Tool Data Model

- Study Program:
  - ID
  - Name
  - Level
  - No. Sem/trim

- Module:
  - ID
  - Name
  - Learning Objective
  - Description
  - Prerequisites
  - ECTS/CP
  - Assessment

- Course:
  - ID
  - Name
  - Learning Objective
  - Description
  - Sem/trim
  - Prerequisites
  - ECTS/CP
  - Assessment

- BoK Concepts

- Lecture:
  - ID
  - Name
  - Description
  - ECTS/CP
  - Depth Level: EQF Taxonomy

- Practical Work:
  - ID
  - Name
  - Type: Exercise, Practical Project, Laboratory Test, Fieldtrip, Internship, Other (Specify)
  - Description
  - ECTS/CP
  - Depth Level: EQF Taxonomy

AGIS
Curriculum Design Tool

Bok is used to define the content on different levels

Courses (headlines)
Lectures (descriptions)

-> drag and drop
Conclusion and outlook

- VirlaBok now is available, introduced to the stakeholders and further tested in practical use cases
- T.b.c.