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

<table>
<thead>
<tr>
<th>Knowledge area</th>
<th>Unit</th>
<th>Topic</th>
<th>Theme</th>
</tr>
</thead>
<tbody>
<tr>
<td>10</td>
<td>73</td>
<td>Many</td>
<td>Many more</td>
</tr>
</tbody>
</table>

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

**Comp2:** Dynamic platform
- To define and update knowledge areas, units and topics, access through services
- Wiki allowing discussion between GI S&T experts and users of the BoK

**Comp3:** Tool sets
- To define courses
- To define learning paths
- To define job profiles

**Software Tools**
European instance of BoK 2 repository

Proposal Repository

BoK Repository

Managed by US BoK2 community

Managed by EU GIN-2K community

Curriculum Design Tool

Curriculum Repository

VirtaBoK own repository

European instance of the WiKI (content: revised BoK)

AGIS
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
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.