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	←	Unit	←	Topic	←	Theme
10		73		Many		Many more
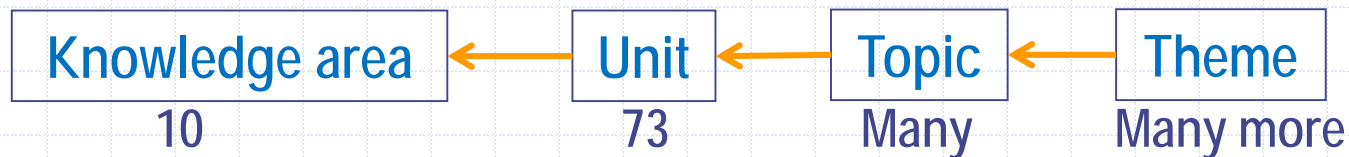
Purpose:
- to "bridge the gap between the GI S&T higher education community and the practitioners, employers, and clients who populate the various GI S&T professions" (DiBiase et al. **2006**)

Project GI-N2K

GIN2K: „Geographic Information – Need to Know"
(http://www.gi-n2k.eu/), 10/2013 – 09/2016
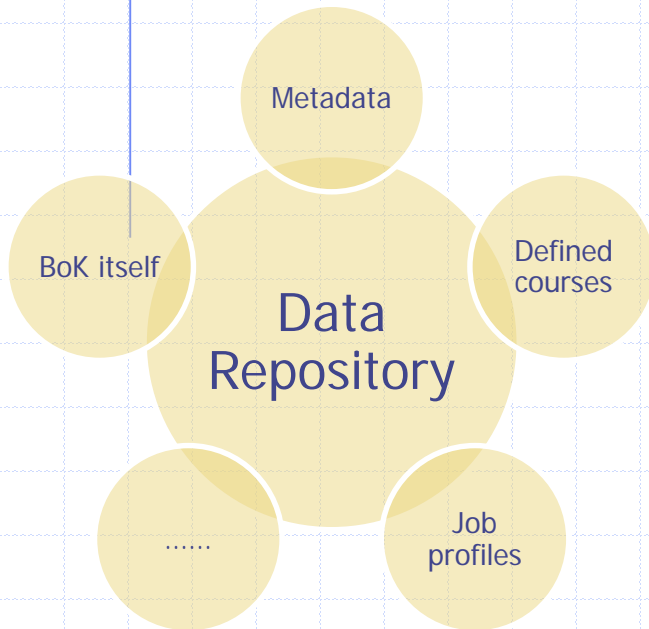Funded by EU (Erasmus Lifelong Learning Program)
31 partners from 25 countries
AGIS: Co-Lead of WP (with ISEGI/UNL), development of Curr.
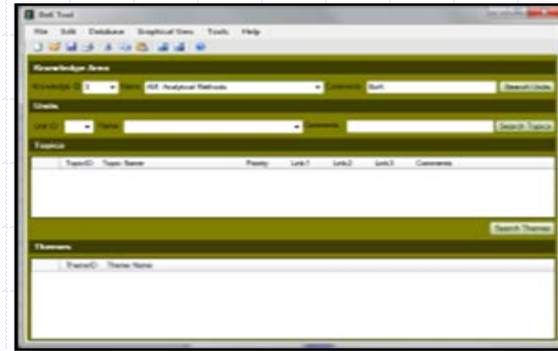Design tool (with UJI)

- Analysis of requirements to a BoK from different areas (education institutions, public services, companes)
- 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

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The Virtual Lab for the BoK: VirLaBok

Overview:

Comp2: Dynamic platform

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

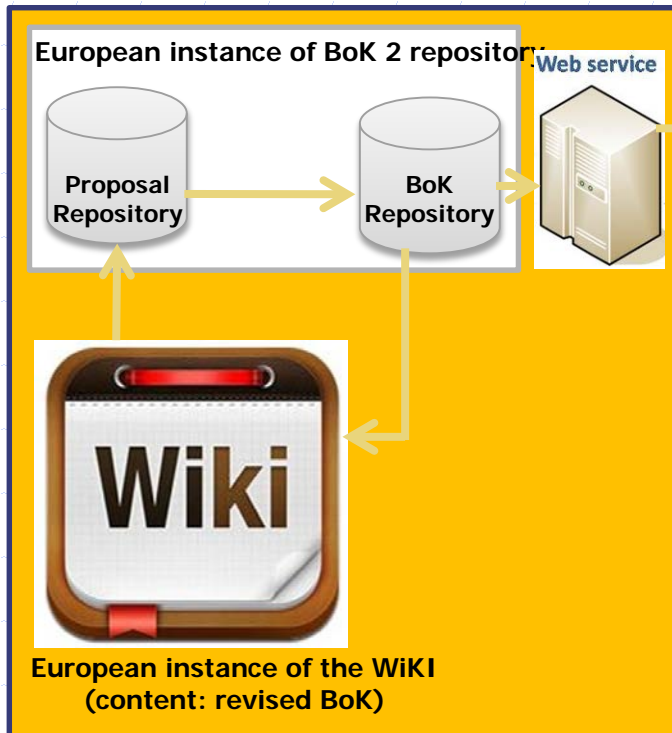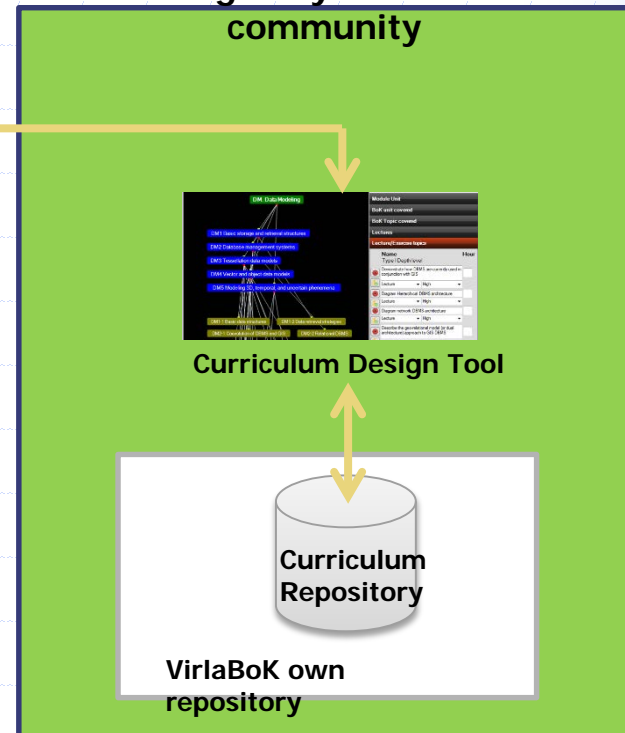- Wiki allowing discussion between GI S&T experts and users of the BoK

Comp3: Tool sets

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

Data Repository

Metadata

BoK itself

Defined courses

Job profiles

......

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

General architecture of the VirLaBoK

Managed by US BoK2 community

European instance of BoK 2 repository:

Web service

Proposal Repository → BoK Repository →

Wiki

European instance of the WiKI
(content: revised BoK)

Managed by EU GIN-2K community

Curriculum Design Tool

Curriculum Repository

VirlaBoK own repository

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 splitted 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

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.

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Thank you!

Questions?