Teaching GI standards in higher education – examples from distance and classroom teaching

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Appropriate Conference Theme: Education and Training in Cartography, Internet courses

ABSTRACT

From the experience of the author there seems to be a strong need of representation of the issue of Geoinformation (GI) standards in the current GI curricula of courses like cartography and others but on the other hand there seems to be a lack of availability of materials.

Involved in the project Geoinformation – Multimedia for a New Interdisciplinary Course of Studies, sponsored by the BMBF (German Federal Ministry of Education and Research), AGIS, the GI lab at the University of the Bundeswehr Munich, developed a teaching module aiming on filling this gap.

This module deals with relevant issues of standardization in the field of Geoinformation and consists of eight teaching units. Some examples are:

- Standardisation bodies and procedures (especially ISO and OGC)
- Syntactic and semantic interoperability
- OGC web services (WMS and WFS) and GML
- Meta data
- Data quality
- Examples of the practical usage of standardization in the field of cadastre

The modules originally have been designed and developed – in german language - as generic units for usage during face-to-face lectures, but the material is also available in the internet [www.geoinformation.net] for post classroom learning at home and other purposes. It contains a series of (more or less) interactive slides which can be adapted to specific needs by changing order and/or including new slides. This point is very important as geoinformation is relevant for a lot of different disciplines which have different requirements regarding broadness and/or depthness of the content. A special functionality, the so-called module-builder, allows for this adaptation of the content to specific requirements. The usage of a given style-sheet ensures a consistent appearance. After this project has been finished in early 2004 we started to translate some of the units to english language and improved the usability for distance learning via the internet.

In the paper we give examples of the modules and its usage and report on the experiences in developing the material and in applying this modules in class room lectures and in the internet. Furthermore the issue of interoperability of such a material – means the usage at other sites –and the problem of keeing the material up-to-date and consistent is discussed.