

How to Update a Geo-Information Curriculum? Process and Content to Be Attractive for New Students and Useful for the Labor Market

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SUMMARY

7 years ago, 4 lecturers of HAS University of Applied science developed with help of SAGEO (Foundation Job Market GEO) a new 4 year bachelor curriculum Geo Media & Design. This development was started with a high risk. Are students interested and are there relevant jobs available?

The influx of students started with 20 students and increased now (17-18) to 75 students. Two classes are now graduated, and all of them (circa 30) have either a job, or started their own company or follow a Master study.

So, although the high risk, we can say that we developed a satisfying curriculum. But is it also good for the next 5 years? Our field of study is changing rapidly, and these changes and trends should be incorporated to be attractive for new students and deliver the right students with the right competencies (knowledge, skills and attitude).

In this paper we discuss how we develop the update of the curriculum. Process and content will be discussed.

First step was to discuss what changes are visible in the last few years. Some topics that were mentioned by the team, but also by employers. Most mentioned are big and more data available, crowd sourcing, geo integrated with BIM and Business Intelligence.

Second step was also to evaluate the first curriculum. This curriculum was developed from year 1 towards year 4. Now with the expertise of students working and the information from the internships we reason from year 4 towards year

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These steps led to a new formulation of 9 final qualifications, subdivided into 3 levels. Each final qualification is subdivided into several learning outcomes. These outcomes are linked with specific elements (mostly derived from our older material and the Body of Knowledge (<http://gistbok.ucgis.org/>)).

Next step was the subdivision of the year in 4 blocks of 10 weeks and indicate which learning outcome of an end qualification should be taught in this specific block.

The next phase is the development of the material. We will use as far as possible “old” material. We define the content of a block from an examination point of view. All the learning material should be linked towards learning objectives and defined as a type of test (e.g. essay, presentation, multiple choice exam; individual or group level: use of an updated Bloom approach). This phase is mostly done by the lecturers that also will be involved in actual teaching.

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