Modernisation of curricular education towards digital enironments

Dirk Fleischer, Emanuel Söding, Swantje Piotrowski, Axel Dennert, Mirl Trösch, Stella Thoben, and Franziska Weng
Christian-Albrechts University, Kiel Marine Science, Data and Information Services, Kiel, Germany
(dfleischer@kms.uni-kiel.de)

The digitization is reality in the daily student lives already, with smart phones and apps and social networks for general daily activities. The curricular education needs to come up to speed to stay with these developments to match the daily experiences of the students, but also to stay up-to-date with the modern requirements digital methods demand for maximum performance from the scientists applying these methods.

The discipline education applies methods to create first class quality data to enable students to graduate with Bachelor or Master projects. These projects do not yet include the daily reality of later project activities and organization. Data management plans and fundamental awareness of how projects require to handle data is still not a part of the curricular of most academic institutions. Nevertheless, working group leaders want to employ post-docs and graduates for future investigations capable of the most advanced methods available or even develop new methods.

During our project UniLLAP we tackled this field. We introduced research data management to standard curricular courses. We took action to document field expedition processes to support data flows from field expedition to Lab measurements analysis and modeling. Besides the geoscience disciplines we also focused on the humanities within our interdisciplinary research focus Kiel Marine Science. The textual data and their connection and the implications between natural sciences and humanities are growing strong in Kiel. Therefore, we already think about the connection between these fields of research. We evaluated our very owne starting points and consider the textual representation of Phd theses and their applicability for future research as a task we can mange to get towards the thesis of the future and en research environment ready for interdisciplinary data driven research. We will present our experiences from the transformation of teaching efforts and building up service capacities.