

Development and Evaluation of a MOOC Extension for Teaching Subject-Specific Skills in Information Literacy for Business Administration

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Abstract

Information Literacy (IL) is “the set of integrated abilities encompassing the reflective discovery of information, the understanding of how information is produced and valued, and the use of information in creating new knowledge and participating ethically in communities of learning” (American Library Association, 2016). IL as a social key competence is particularly essential in post-secondary education and research. According to many studies (e.g. Katz, 2007; Rubinić et al., 2013), student’s information literacy levels are generally low. IL also includes subject-specific skills; e.g. relevant resources are different among disciplines (Johnston & Webber, 2003; Bundy, 2004). Analyses show the need for an attractive tutorial which can be developed on a broad basis of available material. Accordingly, an extension to a Massive Open Online Course (MOOC) for developing information literacy focusing on higher education students shall be developed and evaluated, that focuses on information skills needed in Business Administration. MOOCs are online courses with no entry barriers open for unlimited participation (van Treek et al., 2013).

Keywords: information literacy; MOOC; subject-specific skills; business administration

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1 Methodology

The thesis will follow the design science approach, which seeks to extend the boundaries of human and organizational capabilities by creating new and innovative artefacts (Hevner et al., 2004; Becker et al., 2009; Mertens, 2010; Heinrich, 2011). Accordingly, a generic artefact will be created by developing a subject-specific MOOC extension. The phases as defined by Becker et al. (2009) are analysis, design, evaluation and diffusion.

The main step of the analysis phase will be research on existing online learning material on subject-specific IL contents for Business Administration. For this purpose, an online research will be done on all available material in German that is online, with a special focus on MOOCs. Additionally, discipline-specific standards (e.g. Cunningham, 2003) and books (e.g. Herbig, 2011) shall be analyzed.

Out of the analysed material a collection of subject-specific skill-sets and material shall be created. This material will be verified and probably further extended by semi-structured expert interviews (Liebold & Trinczek, 2009; Meuser & Nagel, 2009). The interviews should involve specialist staff on the discipline from libraries, professors teaching IL for Business Administration and professors that essentially need IL skills in their teaching within Business Administration (e.g. professors teaching master seminars). The resulting material will build the basis of the subject-specific MOOC extension. A special emphasis will be put on the didactic concept. This will follow previous experience with MOOC development (Lackner et al., 2014) and several state-of-the-art approaches like the First Principles of Instruction (Merrill, 2002) and the revised Bloom's taxonomy (Krathwohl, 2002).

The content will be published within an existing MOOC as described in the Expected Outcome and evaluated while applied in practice. Therefore, several approaches will be used. First of all, a thinking aloud analysis (van Someren et al., 1994) will be applied to test the usability and clearness of the solution. In the test the persons will solve several tasks in the MOOC while saying their thoughts. This, along with the software interactions and a short follow-up interview will be evaluated. Second, the gains in IL of the participants will be measured. This will be done by using a questionnaire testing several real-world problems related to the discipline that will be handed out before and after attending the MOOC. Third, a questionnaire will be included in the subject-specific extension asking the users about their satisfaction.

The diffusion of the results (Becker et al., 2009) is guaranteed by publishing a publicly available online learning resource, along with several dissemination activities.

2 Expected outcome

The resulting MOOC extension will be part of a MOOC that is developed within the EU project Information Literacy Online (ILO), which started in November 2016. The ILO project will at first concentrate on information literacy elements which are relevant for all subjects/disciplines. A central innovative approach of this MOOC will be the implementation of technology based assessment components which allow students to get feedback on their learning success. The MOOC content will be developed in six European cultural and language groups: English, German, Spanish, Catalan, Slovenian and Croatian. The multilingual approach will not only consider formal translation but also cultural-specific differences in the various realizations.

Within the project also subject-specific extensions for Business Administration and Psychology shall be developed. The responsibility for the extension on Business Administration is under the sole responsibility of this author. The results will show how a subject-specific extension of a MOOC could look like and how this could be integrated in “generic” teaching material on IL. It will build the foundations for more effective teaching offers in IL in the future, which can be integrated more flexible into existing teaching offers due to the modular design with subject-specific extensions. Additionally, it brings value for the society by publishing the results as Open Educational Resource.

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