ACCELERATING STUDENT LEARNING FOR TAXONOMY DESIGN WORK: RAPID ONBOARDING THROUGH CONSULTANT-INTERNSHIPS

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Consultant-internships are effective for rapid onboarding of higher education students into knowledge management (KM) positions, supporting them in bridging concepts and theories from their coursework into real-world information design and analysis projects. Building on a recently completed case study, this research uses template analysis methodology to examine skills and competences relevant to taxonomy design work, and the *soft skills* that employers both demand and struggle to articulate. This dual combination of information professional abilities is highly sought after in collaborative and virtual KM professional settings.

1. Purpose

Students preparing for careers in knowledge management (KM) struggle to make connections between concepts and theories from their coursework to real-world projects that call for sophisticated application of design and analysis skills. In addition, the workplace demands *soft skills*—dispositions and discipline-nonspecific competences—to support collaborative product development, iterative design, and team-driven implementation. Educators are likewise challenged in framing a learning environment that is sufficiently individualised and broad-based to meet both conceptual and practical objectives. Skillsets in both these areas of learning can be strengthened significantly through consultant-internships during professional degree programmes, resulting in more rapid onboarding of student-graduates into knowledge management and design positions.

2. Research Context

This research-in-progress builds upon a taxonomy design case study that was based on a consulting project involving several student interns in an MLIS (Master of Library and Information Science) degree programme (Tucker, Dale, Egge, & Fullman, 2018). The project was led by a faculty member hired to consult who then engaged three student-interns as taxonomy analysts for a Silicon Valley company. Their primary deliverable was a taxonomy of "subject domain knowledge across all academic disciplines, as represented in the structures of university faculties and departments" (Tucker et al., 2018, p. 2), in support of business analytics tools for the academic publishing clients. The earlier study resulted in two primary outcomes: substantial leaps in learning for the student-interns and research findings contributing to taxonomy design principles.

3. Methodology

This study is investigating the internship experiences of 20 students who interned in a range of knowledge management environments, as reported in their internship logs. The study is using template analysis methodology (Crabtree & Miller, 1992; King, 2004), a qualitative approach to analysing data thematically. Template analysis methods are used to analyse any textual data, such as interview transcripts, diaries, or reflective writings. In the early stages of template analysis, the researcher constructs a coding template based on themes pre-determined to be central to the datasets and research questions. The template is structured hierarchically, making it possible to cluster thematic codes and to sort major and secondary themes. There are generally six stages in the template analysis approach: 1) familiarisation with the data; 2) preliminary coding; 3) clustering of codes; 4) creating the initial template; 5) developing the template during data analysis; and 6) final interpretation (King & Brooks, 2017, p. 26). The process of data analysis begins with *a priori* codes that identify the core themes expected to be most relevant. In addition, the template evolves during analysis as unanticipated themes may emerge from the data.

For this study, the skills and dispositions necessary to successful work in taxonomy design are the basis of the template design, and are elicited from the case study recently completed by the research team (Tucker et al., 2018), described above, along with relevant themes from both research literature and professional standards (Lambe, 2007; Hedden, 2016; SLA, 2016).

4. Anticipated Outcomes

The thematic coding using template analysis is examining themes for skills relevant to taxonomy analysis and design, as well as to dispositions for design work on teams, the soft skills that employers may find difficult to articulate and yet are highly sought after and becoming embedded in updated professional organisation standards for performance (Tucker, 2017). These soft skills may include "critical thinking, including qualitative and quantitative reasoning, initiative, adaptability, flexibility … influencing skills … relationship building" (SLA, 2016, para. 20), and may also be referred to as "enabling competences" (para. 19). The design and analysis skills are similarly extensive, and yet it is the duality that genuinely enables a student to succeed and to onboard quickly in the workplace. The aforementioned case study (Tucker et al., 2018) demonstrated that consultant-internships can provide considerable support for these objectives. This research explores more extensively the internship experience in KM settings, building on the case study that focused on taxonomy design and applications. The researchers are engaged in feedback on the study's research design and finalising aspects of the methodology for the study's objectives.

Anticipated outcomes for the study are more multi-dimensional proficiencies for knowledge management and design professionals, both in skills for KM work itself and for the enabling competences (soft skills) necessary to varied workplaces. Close attention

to the workplace aspects of virtual environments and collaborative design is core to the construction of the template for the data analysis. Because the study is in progress, it is too soon to outline the research implications in detail; however, expectations are that the study findings will be of interest to educators in the information sciences, particularly those involved in teaching topics such as database design, vocabulary design, information retrieval systems, organisation of information, and search engine design.

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