DigCurV Curriculum Framework: Applications in the Development of Digital Curation Vocational Training Programmes

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Abstract

Digital curation is a rapidly evolving field, driven by a range of factors including the explosion of data currently being created, continuous change in information technology and emerging patterns in information use. As a result there is a pressing need for information professionals in the work force to remain abreast of developments in the field. Prior research conducted as part of the DigCurV project resulted in a curriculum framework, intended to guide the development of vocational training curricula, and identified a set of 12 characteristics that summarize the strengths of existing training programmes while reflecting the on-going training needs of working professionals. This poster bridges the gap between these tools by illustrates 8 ways in which the framework can be to achieve these 12 characteristics.

1   Introduction

Digital curation is a rapidly evolving field, driven by a range of factors including the explosion of data currently being created, continuous change in information technology and emerging patterns in information use. This situation puts heavy demands on curators and other information professionals responsible for maintaining digital objects. In this environment, working professionals need on-going development of their skills in order to stay current with technological advances and have the ability to address new challenges. A parallel challenge exists for educators seeking to construct viable and effective vocational training programmes that address the needs of experienced information professionals. This poster will illustrate how the curriculum framework developed by the DigCurV project can be used to facilitate these objectives.

By virtual of its target audience, vocational training in curation needs to be seen as distinct from either formal full-time graduate-level professional education or the research data management training given to researchers in other fields. Unlike graduate students or researchers, who are often new to the material, information professionals bring an existing knowledge base and a well-developed skill set to the training situation. These professionals require actionable knowledge and skills that can be immediately applied to their particular situation.

2   DigCurV Curriculum Framework

To facilitate effective development of curricula for vocational training, the DigCurV project created a curriculum framework the core of which is a series of three lenses or views that encapsulate the skills, knowledge, competencies and personal attributes required for success in a concise visualization (Molloy et al., 2013). Each of these lenses reflects the unique perspective associated with three major roles in curation activities: practitioner, manager, and executive. Their content is divided into categories and expressed as descriptors based the Vitae Researcher Development Framework and the information literacy taxonomy developed by the Research Information Network (RIN) (Molloy et al., 2013).

3   Strengths of Existing Training Programmes

In addition to the curriculum framework, the DigCurV project also resulted in a report on the broader context of existing vocational training initiatives. This report was based on a survey of 11 currently active or recently completed efforts to create, structure or develop curricula for vocational training. In doing so, the report identified 12 characteristics that summarize the strengths of existing training programmes and reflect the on-going training needs of working professionals (Moles & Ross, 2013). Like the descriptors in the framework lenses, these 12 characteristics are intended to be aspirational and to guide educators towards success. Currently, no programme contains all 12 characteristics. They reflect diverse strengths aggregated for use as an objective for development. The 12 characteristics as presented in DigCurV report D6.2 are below:

- *Sustainability*; the field is in a constant state of development, training will need to be a continuous process if professionals are to remain conversant with the latest advances.
- *Consistent Incremental Evolution*; programmes must provide a stream of new knowledge as it emerges as well as instruction in the accepted body of general or foundational knowledge.
- *Systematic*; a structured approach to training is necessary to ensure the all relevant topics are included, content is appropriately targeted and redundancy is kept to a minimum. A major step would result from defining a canon of preservation and curation knowledge that professionals require and keeping that canon under review.
- *Tailored*; curricula must fit the needs of the professional community, match the professional roles of participants, and be complimentary to their daily activities.
- *Based on expert consensus*; curricula should be distinguishable from open research questions in order to prevent vocational training becoming little more than a weather vane to academic debates.
- *Operational*; the orientation of the course content should be towards practical results in real world scenarios. The material presented should be readily applicable in curation workflows.
- *Certification*; training programmes should be embedded in a certification structure to provide evidence that professionals have and are maintaining the relevant skill set. Means should be in place for the maintenance of the certified status through continued training.
- *Portable*; while the training should be tailored to specific jobs, the skills, knowledge and competencies learned should be applicable beyond the particular instance of employment.
- *Leverage existing knowledge*; the participants in vocational training are assumed to be highly educated information professionals who approach programmes with a well-developed skill set relevant to the curricula. These skills should be harnessed to maximize the effectiveness of the training.
- *Incorporate participant/trainee feedback*; a mechanism should be in place to systematically gather and evaluate feedback from the audience at every stage. This can be used to evaluate effectiveness and inform later iterations of the curriculum.
- *Address issues of all relevant digital object forms*; formats or file types that can reasonably be expected to exist within the purview of a repository cannot be ignored by training curricula.
- *Utilize appropriate dissemination methods*; Vocational training has a much wider range of potential delivery methods than other forms of education. The full spectrum of these methods should be explored in order to provide the audience with learning opportunities that match their needs.

These 12 characteristics describe programmes rather than the curricula to which the DigCurV framework is predominantly directed. However, programmes and curricula are interrelated and inseparable. In order for programmes to achieve these 12 characteristics they need to overcome obstacles that can be conceptualized as tension amongst the range of knowledge, skills and competencies needed my their audience. This is played out in a training environment through the needs of audience members for content

that is general and conceptual, as well as specific and technical. Examples from recent literature include the need to balance technical skills with soft skills (de Smaele, Verbakel, Potters, & Noordegraaf, 2013) and organizational aspects with domain-specific aspects (Kim, Addom, & Stanton, 2011). Educators developing training initiatives have also acknowledged more immediate challenges that are symptomatic of this situation, such as defining the boundaries of the content to the covered, the rapid growth of literature in the field, and the lack of widely accepted best practices (Botticelli, Fulton, Pearce-Moses, Szuter, & Watters, 2011). The success of vocational training relies on educators navigating these competing needs in the design and delivery of their programmes.

4   Connecting Training Programmes with the DigCurV Curriculum Framework

The functionality of the DigCurV curriculum framework can be extended to act as a tool for balancing these competing needs. By concisely defining audiences based on their operational roles, the framework allows educators to position their programmes within this space at a point most beneficial to their audience. The descriptors within the lenses can then serve as a focal point around which a balance can be achieved. The framework does this in 8 ways that address these 12 characteristics either directly or indirectly, while bridging this gap between constructing tailored curricula and structuring effective programmes. These 8 operations are listed below:

- Guide the selection of content for inclusion in curricula
- Structure elements of the curricula by linking components through a common perspective and demonstrating relationships between roles, actions and knowledge
- Provides a knowledge base against which individuals can be tested for certification
- Determine appropriate pedagogical tools and techniques
- Isolate specific audiences for training and tailoring curricula
- Serve as a bridge that links activities, roles and functions with higher-level models for curation such as OAIS and the DCC Lifecycle Model
- Act as a conceptual meeting point for educators and practitioners in the field
- Function as a means to balance and combine the binaries around which vocational training is often built

Combined at the point of curriculum and programme development, these 8 uses will allow educators to construct programmes that harness the strengths of existing training initiatives and better address vocational training challenges. The success of digital curation as both a field of study and an area of practice relies on adequately skilled information professionals in the workplace and a symbiotic relationship between these two activities. Use of the DigCurV curriculum framework in the capacity described here is a decided step in this direction.

5   References

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