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## Digital Content Creation: A Global View on Curriculum Design

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# Digital content creation: A global view on curriculum design

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LIS education, digital content, international  
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## INTRODUCTION

As a result of emerging technologies, courses on digital content creation have been offered at library and information science programs in different countries. Each program presents unique considerations based on its own academic environment; campus expectations and demands; professional development; as well as standards of national education reform. The digital content creation courses are often related to the topics of

digital humanities, institutional repositories, digital scholarship, digital archives, learning technologies, and information services. The purpose of this panel is to discuss the current development of those courses, share the best practice strategies, and identify issues for future development from an international perspective.

This panel will discuss the following topics:

- The historical background of digital content creation courses in each academic program
- The goals of these courses and the mission of the program
- The current course offerings and practices
- The benefits of course offerings to the program
- Partnerships with other academic units or industries
- Future sustainability and challenges of the curriculum design

## Digital heritage courses in European academic programs: challenges, goals and expectations/ Tatjana Aparac-Jelušić

The problem of the impact and evolution of digital heritage courses is addressed using the concept of disciplinary convergence (Manzuch, Huvila, & Aparac-Jelusic, 2005). After introducing the perspective of the digital heritage, and the need to introduce new content into the curricula in LIS/IS and humanities' programs, several approaches are explored from their functional logic inside the European academic system/s that deals with internationalization, mobility and quality of teaching and research (Tammara, 2005). These systems are complex, based on different socio-cultural and political traditions and under the enormous impact of technological swift in teaching, learning and research processes.

Digital heritage education tends in Europe to be a meeting place for different and sometimes conflicting interests and goals, because of skills that are needed from many diverse areas (within e.g., technology, textual criticism and bibliography, medieval studies, knowledge organization, sociology, law, etc.) and the need to address varying issues from several different interest groups. In the short presentation the attempt will be made to address some of the most notable challenges, and trends that

affect the modern academic community dealing with digital humanities, especially from the viewpoint of: ubiquity of digital information management, digital convergence, technological standardization and leverage, surging of a European and worldwide space of collaboration and competition, to list some of them (Perry, 2005). Special attention will be given to several collaborative attempts that have brought to the academic arena the issue of joint programs at master and PhD level, as well as some examples of initiatives in converging content from archival, museum and library programs to the benefit of students' competencies for the labour market.

### **The expanded frameworks for digital content education and cultural heritage experiences /Ron T. Brown and Samantha K. Hastings**

Assessing the scope of digital library programs has been a priority for information and library science (ILS) researchers for some time (Spink and Cool, 1999; Coleman, 2002; Choi and Rasmussen, 2006). Traditionally, researchers have evaluated what curriculum topics, disciplinary overlaps and skills are needed for ILS graduates to be properly educated in digital content areas.

With the rising applications of 3D imaging, virtual worlds, video games and the continued emphasis on audio and video content, ILS programs must continuously reevaluate models for training, content development, and technology acquisition. These rapid expanding applications complicate the concepts of digitization, and cultural heritage while at the same time increase areas of specialization for professionals.

This presentation will consider current digital content course offerings at the University of South Carolina and the plans for integrating the Arius 3D scanner into the research, teaching and service mandates of the faculty. The challenges of curriculum design are addressed from the perspective of a distance education program. 3D scanning technologies provide unique digitization opportunities for ILS students and in this environment traditional learning outcomes can be implemented alongside innovative ones.

### **Digital Content and Innovation Application Advanced Certification Program at National Taiwan Normal University/Hsin-liang Chen**

In 2007, this certification program was initiated at the Graduate Institute of Library and Information Studies (GLIS) at National Taiwan Normal University (NTNU) (GLIS, 2011). The certification program is open to both undergraduate and graduate students. Students must complete 20 credits in three years. The program is managed by

GLIS with instructional support from the faculties of the Department of Fine Art, Department of History, Department of Chinese Language, and GLIS.

The educational goals of the program are to develop students' ability to use digital archives and information technologies. Students are expected to have basic knowledge of and experience using digital content and be able to apply their skills to develop creative value-added applications, instructional materials, and electronic publishing. The course requirements are:

Required courses (6 credits):

- Introduction to digital content and creative teaching (3)
- Special topics on digital content and creative applications (3)

Elective courses:

- Introduction to Library and Information Science (3)
- Introduction to computer and network technologies (3)
- Reference resources and services (3)
- Classification and cataloging (3)
- Personal knowledge management (3)
- Digital image processing (3)
- Multimedia design (3)
- Web site design and database applications (3)
- Introduction to digital publishing (3)
- Digital archives and digital libraries (3)
- Studies in marketing of digital content (3)
- Information technology and society (3)

The program admits 40 students annually. Program credits cannot be applied toward students' major coursework or other degree requirements. NTNU has been transforming itself from a traditional teacher-preparation higher education institution to a comprehensive university since the 1990s. The program is part of a university-wide transformation initiative and an interdisciplinary collaboration. This presentation will elaborate on the details and benefits of course offerings to GLIS and on partnerships with other academic units or industries.

### **Usability and reusability of learning objects in e-learning systems/Yin-Leng Theng**

As e-learning environments become more popular, many studies have been proposed to provide adaptive environments offering learners and educators customized courses for more effective learning and course construction. Demand for e-learning has created an industry and pushed vendors to improve e-learning technologies and product suites. E-learning offers flexibility and benefits to both educators and learners, saving time and money.

With the emergence of social media and participation of users in the creation of user-initiated digital objects, current systems are still unable to handle the exponential growth of millions of digital learning objects are being created. However, gaps on the concept and use of learning objects - discrete chunk of digital content that can be reused for various learning context - have resulted in design and usability problems in e-learning systems. Some solutions are aimed at helping learners, while others are aimed at helping educators and course designers/developers. However, a serious lack of conceptual clarity of definitions and uses of learning objects, could have resulted in design and usability problems in current e-learning systems (Boskic, 2003; Conole, Dyke, Oliver, & Seale, 2004). In this presentation, I will describe ReLOAMS, a Reusable Learning Objects Authoring and Management System, being implemented to address the problem of usability and reusability of learning objects in e-learning systems, concluding with a discussion on the impact of the design of e-learning systems (Theng, Saputra, Foo, Gan, Raghavan, & Devi, 2007).

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