

# Lumping, Splitting and the Integration of Museum Studies with LIS

Kiersten F. Latham

Kent State University, Email: [kflatham@kent.edu](mailto:kflatham@kent.edu)

This paper is an attempt to support and promote education programs that cover the entire cultural heritage landscape (libraries, archives, museums) as an integrated, larger meta-discipline. By taking a larger picture approach, professionals who do the work of memory institutions can be more effective in their work, in the promotion of that profession, and increase public value of all related institutions and their purposes. Through the description of the integrated museum studies specialization at Kent State University School of Library and Information Science, this paper aims to provide one example of how this can work, first by describing the role of Library and Information Science (LIS) as a meta-discipline, next by discussing the changing landscape of cultural heritage professional education, and finally by describing in detail the new Kent State integrated museum studies specialization. The infusion of museum studies with LIS is discussed as a part of a larger movement toward integration of training information professionals in the entire cultural heritage sector.

## Introduction

**W**hy museum studies in a library and information science school? This is a question I am asked often from my position as the coordinator of the museum studies specialization within Kent State University's Masters in Library and Information Science (MLIS). From my perspective, it makes perfect sense. But after a long history of dividing, splitting, shifting, and specializing in the many fields that comprise what we are now calling library and information science (LIS) we have arrived at our current situation (at least, in the United States) where such a scenario is questioned. Here we will not recount that trajectory, it can be found in many other places (eg. Rayward, 1983, 1985; Richardson, 2010; Simmons, 2010; see Ribeiro, 2007 for European perspective) but suffice it to say that training professionals to work in libraries, archives, and museums (LAMs) have distinct historical traditions that do not often overlap. The meanings and methods of access in these kinds of institutions have been built upon traditions developed over time and have

established different historical identities as well as distinct cultures (Trant, 2009).

In 2012 Kim reported that in the United States there were only two LIS programs that offered museum studies as an option *within* their LIS programs. Both of those were certificates and one (Pratt) was specific to museum libraries, which is actually a form of special library, not a museum per se. Kim ended the article by claiming that the time is ripe for museum studies in LIS, that many LIS programs are now inter- and multidisciplinary and more adaptable than in the past. If there was ever a time, it is now. Ironically, one such program was newly under way as Kim's article went to press. In Fall 2011, Kent State University School of Library and Information Science (SLIS) launched a new, integrated, full museum studies specialization into its master's of LIS.

This paper is an attempt to support and promote education programs that cover the entire cultural heritage landscape (libraries, archives, museums) as an integrated, larger meta-discipline. By taking a larger picture approach, professionals who do the work of memory institutions

can be more effective in their work, in the promotion of that profession, and increase public value of all related institutions and their purposes. Through the description of the integrated museum studies MLIS specialization at Kent State, this paper aims to provide one example of how this can work first by describing the role of LIS as a meta-discipline, next by discussing the changing landscape of cultural heritage institution education, and finally by describing in detail the new Kent State museum studies specialization within its MLIS. The infusion of museum studies into LIS is discussed as a part of a larger movement toward integration of training professionals in the entire cultural heritage sector.

### A Word about Terminology

In order to avoid the tension that seems to come with defining terms such as discipline and field, here we will use instead the words, landscape, area, and sector to discuss the broader, more inclusive grouping that involves the training and education of museum, library and archives professionals. Even these choices are tricky. How do we refer to the whole of libraries, archives and museums, what they do, who works in them, and the overall purpose they serve in society? Trant (2009) refers to the group of institutions that share the sector as *memory institutions*. Grenersen (2012) has used the term *document institution* to describe a center that holds all kinds of documents for a culture, where those documents and document complexes are preserved, used, organized, and interpreted. Another way they are characterized is as *cultural heritage institutions*, used throughout the recent literature of LIS. In this paper, the LAMs (i.e. Libraries, Archives, Museums as a group) and the broader culture under which they fall will be referred to using these descriptors. This entire sector is seen as part of the broader landscape of Library and Information Science, the study of people and their relationships with information, making LIS a meta-discipline. The

professionals that do this work in these institutions will be referred to as information professionals, unless otherwise indicating their role in a specific institution type.

### LIS Landscape as a Meta-Discipline

A meta-discipline, as defined by Marcia Bates (2012) is a field that cuts across the entire spectrum of the traditional disciplines (arts, humanities, social and behavioral sciences, natural sciences and math), dealing with *every subject matter* by organizing itself around a particular social purpose or interest—a lens. A meta-field looks through that lens in order to address practical and professional concerns as well as more theoretical ones. Three examples of these meta-fields, according to Bates (2012), are communication/journalism, education, and the information disciplines (which include Library Science, Archival Science, Information Science, Knowledge Management, Museum Studies and more). Each of these meta-disciplines can use, apply, and study any of the traditional disciplines. The information disciplines have in common that they all concern themselves with “collection, organization, retrieval and presentation of information in various contexts and on various subject matters” (Bates, 2012, p. 3). According to Bates, all information disciplines are becoming more applicable to a broader range of information solutions as people begin to understand them in this light.

In arguing her point that the information disciplines are together a meta-discipline, Bates says that what unites all of the information professions (there are many, see the Encyclopedia of Library and Information Sciences by Bates & Maack, 2010 for the diversity) is “that they manage the record for our culture for all its uses, from entertainment and education to preservation for future generations” (Bates, 2012, p. 9).

While Bates and others have been discussing the meta-disciplines, there has

been a movement dubbed the ‘convergence of the LAMs,’ an acronym for libraries, archives, and museums (in some areas, GLAM, adding in galleries). Traditionally, libraries, archives, and museums have divided their content into “piecemeal offerings” based on the nature and focus of their collections (Zorich, Waibel, & Erway, 2008, p. 8). In recent years, however, the desire to bring these different, yet interrelated services together has gained prominence. At its core, the goal of convergence is to create a system that will allow access to information across all collections, in either a unified digital system or, in some cases, a singular physical location. This spirit of collaboration is driven by the desire to create a fuller, more comprehensive experience for users of these institutions.

### **Lumping and Splitting**

Long ago, my career path involved studying human evolution. One of the ways human paleontologists (sometimes jokingly) referred to their foundational outlook on the evolutionary process was as “lumpers” or “splitters.” Splitters are those who see the fossil record as a series of new species and when new discoveries are found, often consider those new finds as new forms of hominids (human ancestors). Lumpers, on the other hand, see diversity in a smaller number of categories. A lumper would be more likely to place a new find in an already existing species but say that the range of diversity in this species is great. I am a lumper. I tell this analogy because it is how I see museum studies as a part of LIS. Time has dealt us a series of splitting moments (in both LIS and museum studies). Our larger purposes—which we share across many kinds of institutions—were seen as so different that they should be considered and studied separately. What I am positing here is a period of lumping. By expanding our view of LIS as one large species that shares much diversity, we begin to open up networks to

each other, sharing information, concepts, and practices. This is not only efficient, but is more logical and sensible. In fact, there has been movement in this direction. One of LIS’s premier sources about the landscape, the vast Encyclopedia of Library and Information Sciences (Bates & Maack, 2010) now includes many chapters on museum studies and museum-related content. It will no doubt take time to integrate several areas of study that have traditionally been taught as distinct entities, but the period of lumping appears to have begun.

### **Shared Foundational Knowledge**

In 2008, a workshop and report supported by the Institute of Museum and Library Services (an independent U.S. federal funding and support agency) was set up to explore the current and potential future relationships among cultural heritage information professionals (aka, CHIPs) in, archives, museums, and libraries (Cultural Heritage Information Professionals, 2008). In addition they addressed the role of educational training institutions in preparing professionals that will be needed in these types of organizations. The workshop’s goals were “to explore the ability of educational institutions to support the information needs of cultural heritage organizations and to encourage a closer relationship between education, continuing professional development, and practice in LIS, museum studies, and archival studies programs,” (Cultural Heritage Information Professionals, 2008 p. 1). As an example of one kind of heritage professional that intentionally cuts across all fields, the CHIP is defined as one who: “uses or manages information technology to organize and provide access to information resources for all users of cultural heritage organizations, including libraries, museums, and archives,” (Cultural Heritage Information Professionals, 2008, p.1).

While the intent and spirit of this project is admirable, timely and smart, I would ar-

gue that even this does not go far enough. Its focus on technology as the tool that cuts across the LAMs carves up the field in an unnatural way. Technology is not the only thread that can be found across the LAMs; there is an entire base—philosophy, knowledge, and skill set—that can be shared across these boundaries that runs deeper than the technological aspect (Iljon, 1999; Kim, 2012). These foundational elements permeate the structural and functional activities of all heritage institutions (see Iljon, 1999 pp. 1–2 for a list). LAMs in particular share common denominators; to name a few: economic and sustainability issues, best practices, technological standards, intellectual property rights, preservation (physical and digital), information literacy, evaluating services, user experience, and frameworks and policies for selection and keeping of documents (Iljon, 1999; Trant, 2009).

The entire network of LIS would benefit from identifying itself as a meta-discipline that shares specific and unique features across all divisions and sub-divisions. This would entail a shift—an intentionality—about the identity of the field. Rather than an “us and them” approach, the various fields could be set up to work *for* and *with* each other rather than against (or ignorant of) each other. Instead of developing (broad) standards, policies, ethics, and practices in disparate ways (and in a vacuum that no longer exists), the three institutional entities that fall under the meta-discipline of LIS, can begin to work together to create a more powerful, visible, and valuable sector. Integrating these foundational elements across professional training in the sub-fields is one step in this vast effort (Trant, 2009).

A philosophy and identity across the meta-discipline would also help everyone to come together to make powerful ethical agreements regarding collection, organization, retrieval and presentation of information. While each division within the meta-discipline will have its unique needs, statements and issues, there are

indeed some larger principles that all can agree on and together stand upon these philosophies. The multitude of disparate cultural heritage sectors have been trying for years to come together around, for example, ethical principles. But these ethical guidelines, while good, still tend to stay in their corners, with each entity working in seeming isolation. In reality, there are many larger issues that could be tackled together—across the LAM spectrum—and with this integration, comes power. Trant (2009) succinctly summarizes the point:

While the traditions and historical areas of expertise in archives, libraries, and museums may differ, the new challenges facing all collecting cultural institutions are best addressed in concert, in an inter-disciplinary forum that explores multiple solutions and takes advantage of many skills. (p.377)

Trant (2009) goes on to note that inter-institutional, inter-disciplinary research and practice requires more than a few shared courses across program streams, but rather an integrated approach built on a rigorous reexamination of traditional approaches, along with newer understandings of how people interact with information.

### A Real Life Example

In 2011, Kent State University in the United States, created a new specialization in museum studies *within* the master’s degree program of library and information science (MLIS). While this is not entirely unique in other parts of the world, it is a different tactic for training museum professionals than most programs in the U.S. (Kim, 2012). The intent of creating this specialization was to embed and integrate the thinking and training across information institutions such as libraries, museums, and archives. The courses filled fast and continue to stay full, at the time of this writing, three years later—and our graduates are now starting to enter the job market. Students applying to the program understand the arrangement—their frame-

work is LIS but their specific knowledge and skills are museum-focused. They are taught within a broader context, one that understands that LIS is about the interaction of people and information and this foundation cuts across all types of information institutions and information work. This understanding, however, has not been as easy to elicit from many who do the training—academics and instructors in other museum studies programs and in some LIS programs across the country are often confused by the conflation of the two areas together into one program. This program was developed through a broader lens, a lens that sees the cultural heritage sector (that which includes LAM) as part of a meta-discipline (see Figure 1).

### A Holistic View

In the Kent State museum studies MLIS specialization, we take a holistic approach

using systems theory and thinking as a base (Latham & Simmons, 2014). To our students, we teach that the museum can be likened to an ecosystem. An ecosystem is a complex set of relationships between a community of organisms and the environment in which they live. Similar to the way that each organism is composed of systems, functioning in a way that allows it to survive as part of the ecosystem, a museum also exists as a functioning entity within a larger system (which includes the whole cultural heritage landscape, as well as contemporary political and social systems around it). Understanding the museum as one system within an ecosystem helps students understand how each part relates to each other and, more importantly, how the parts affect each other. Museums are not isolated, floating entities; they are embedded in a web of other memory institutions as well as within a dynamic external world beyond.

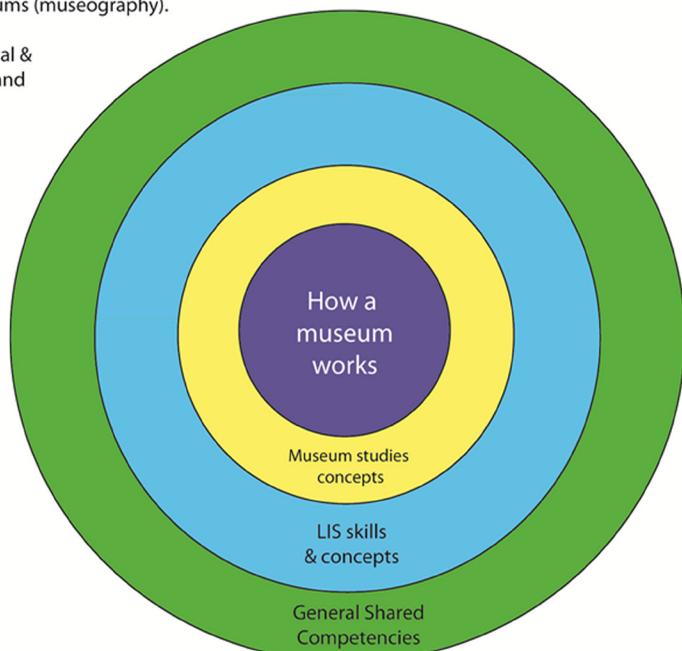
## MODEL OF A MUSEUM STUDIES PROFESSIONAL'S TRAINING IN KENT STATE'S MLIS PROGRAM

**How a Museum works:** specific learning about the functioning and purpose of museums (museography).

**Museum Studies Concepts:** theoretical & conceptual learning about museums and museality (museology).

**LIS Skills & Concepts:** specific training and knowledge drawn from LIS field (organization, access, & management of information).

**General Shared Competencies:** covers areas useful in libraries archives or museums, such as management, marketing, preservation, to name a few (LAM).



**Figure 1.** A visual depiction of the museum studies specialization within Kent State's MLIS.

A set of core values were first developed to guide the museum studies suite of courses. They can be found in Table 1. Using this set of core values, including the holistic approach, courses were not developed using the traditional practice-oriented approach that is often found in many U.S. museum studies programs (which often includes courses organized by function, such as administration, exhibition work, collections management, education, etc.). Instead, courses were built based on the notion of museums as person-document centered systems, ecologies of subsystems within larger systems (i.e. person/document interaction >> the museum itself >> nonprofit system >> society) and the way in which they communicate, function and interact with varying audiences.

The resulting suite of courses (see Table 2), if taken as a whole, provides the student with a well-rounded understanding of the whole museum, how it functions, what it maintains, what it means in society, who its users are (and their needs), and what tensions may exist on multiple levels. It allows students a chance to explore museums in the larger information context. The courses were also designed to allow for other customizations, beyond a more institutional focus, to occur. For example, if a student was not necessarily focused on museums as a whole but rather on collections—how to manage, preserve, organize, and interpret them—they could take other collections-related courses in our program such as Selection and Acquisition of Library Materials, Metadata Implementations and Architectures, Information Storage and Retrieval Systems, Digital Image Processing and Collection Management, or Foundations and Administration of Archives. In this trajectory, they could include the course Museum Collections in the mix, giving the student a broader perspective of collections and how they are handled across the whole spectrum of memory institutions.

The courses were built with the view that museum studies is—along with li-

braries, archives and other information institutions—a part of a wider spectrum that situates the work of information professionals as that of dealing with *external memory* in the form of “messages or performances stored in durable media other than the memories of living persons” (White, 1992, p.250) that are created, organized and used.

Following Bates (1999), the underlying assumption of this specialization is that the disciplinary (domain) content is not the crux of the matter, but rather that a strong expertise in information, and all we can do with it, is what counts. With this in mind, we have opened the courses to other departments’ students who are interested in museum work. This has made for a very interesting mix of perspectives in our courses because not only do we have students with more typical LIS backgrounds represented such as English and History, but now students with backgrounds in art, art history, geology, visual communication design, liberal studies, anthropology, and others are joining the courses.

All MLIS students taking museum studies courses are situated and integrated within the larger framework of LIS. Every student in our masters program must take the core courses, which help them to understand the entire life cycle of information as well as the foundations of LIS. Core courses include introduction to LIS, access to information, organization of information, management of information institutions, and information technology. Admittedly, it is taking some time for our school to adapt to the broad inclusion of so many kinds of students with so many interests, but we, as a faculty, continue each year to work towards integrating other perspectives into all courses.

### **An Integrated Approach**

“These disciplinary contextualisations have to be integrated, so that each subject forms a coherent whole,” (Hider, Kennan, Hay, McCausland, & Qayyum, 2011, p. 212).

Table 1. Kent State Museum Studies Courses Core Values.

<b>MUSEUM STUDIES—Core Values</b>	
<p>To aid in structuring the museum studies specialization and to ensure that the courses fit into the emerging educational environment within SLIS, a set of core values have been developed. These courses recognize:</p>	
(1) Museums as Knowledge Centers	<ul style="list-style-type: none"> <li>• Museums as places that create, organize, use, disseminate, and engage people with information;</li> <li>• That museum objects play a significant role in museums and society, as meaningful physical documents;</li> <li>• That there are points of intersection between museums which do these things, and libraries and archives which function as informational, educational, and cultural institutions; and</li> <li>• The extent to which digital information technology is further blurring the boundaries between libraries, archives, and museums.</li> </ul>
(2) Holistic Approach	<ul style="list-style-type: none"> <li>• Within these courses, the museum (as an information system) is the center of study, not content of the museum (e.g. art, history, science) in contrast to other programs that take the subject content of museums as the focus for student training;</li> <li>• Courses view the study of museums as the core starting point, allowing content to filter in from previous degree work, other electives, or research;</li> <li>• Because they are embedded in a library and information science structure, these courses allow students to cut across spectrum of traditional academic disciplines;</li> <li>• This approach strengthens the skills of the future museum professional by giving them a broader perspective, larger skill set, and adaptability.</li> </ul>
(3) Collaboration & Connectivity	<ul style="list-style-type: none"> <li>• Working with other people, departments, and institutions is considered a basic theme across these courses;</li> <li>• With collaborative ventures come more connectivity, and the creation of multiple networks in-between;</li> <li>• Embedding collaborative and connective attitudes as a foundational value instills these values in our students, helping them to take these principles into the field with them.</li> </ul>
(4) Balance (Theory and Practice)	<ul style="list-style-type: none"> <li>• Both theory and practice are instrumental in understanding the world of museums;</li> <li>• In all courses, an effort will be made to not only balance theory and practice but to help them speak to each other;</li> <li>• Instructors will demonstrate and instill in students the compatible and necessary relationship between conceptual thinking (theory) and pragmatic endeavors (practice);</li> <li>• Students will understand the value of balancing these two traditionally conflicting epistemologies and carry this value into their future careers;</li> <li>• As part of this value, it is important to encourage the ethic of lifelong learning and critical thinking skills in students thereby creating a generation of information professionals who infuse the balance of theory and practice into their work environment after their formal training is complete.</li> </ul>
(5) Real World Experience	<ul style="list-style-type: none"> <li>• In all possible scenarios students will be expected to apply their classroom learning to real situations, whether lab-facilitated or in a museum;</li> <li>• Coursework will involve, whenever possible, application of principles in real scenarios or in a physical museum environment;</li> <li>• Volunteer work in museums is encouraged beyond these courses because work in museums expands the learning process, builds resume material, and increases the confidence levels of students.</li> </ul>

Table 2. Suite of Museum Studies Courses in MLIS Specialization.

Museum Studies Course Title	Course Description	Credits
Foundations of Museum Studies*	This course is intended for those interested in learning more about museums or specializing in museum studies; it could be described as a museum literacy course centered on the museum as the area of study. The goal of this course is to introduce students to various aspects of (all types of) museums as dynamic networked systems positioned around objects, people and ideas. The course is organized into answering the questions: When, what, how, how and why of museums and their study. This includes: History and types of museums, the roles of objects and ideas, structure, function, museum workers and users, and the purpose and future of museums.	3
The Museum System	Museums are by their very nature complex and dynamic systems composed of people, objects and activities. Comprised of an "outer" subsystem and an "inner" subsystem, museums as a whole function as an organic body, with all of its parts working together to function successfully. This system exists within a larger landscape, one filled increasingly with new types of interactions, unlimited access, and constant feedback. This course explores this holistic system from both practical and conceptual viewpoints, examining the role of administration throughout the system as well as considering current issues such as sustainability, advocacy and relationships with community and users add to an overall understanding of the museum system.	3
Museum Communication	Museums communicate to the public in a multitude of ways: interpretation, exhibition, publication, educational programming and using a web presence. This course introduces important concepts, theories, applications, processes and technology used in museum interpretation and communication. Students are provided with a balance of practical techniques with thoughtful conceptual exploration.	3
Museum Collections	This course introduces students to the organization, care and meaning of objects held in museum collections. Through both theoretical and practical concepts, basic collection management and registration skills are introduced. In conjunction, students explore the meanings made of museum objects.	
Museum Users	Families, individuals and students visit museums and community institutions for a variety of purposes including leisure, education and curiosity. Introduction to the research and theory on museum user experience. Inquiry involves examining notions of learning, engagement, and transformative experiences of users, characteristics of users and the social dynamics of the museum experience. In addition, reviews several programmatic techniques and methods used in museums to increase engagement and learning for users.	3
Museum Origins	While the collecting of objects can be found as far back as ancient times in various parts of the world, the birth of the modern museum finds its roots in Europe, especially in Italy. In the context of today's world, students will "go back in time" to understand the origins of western museums and the meaning of publicly shared collections through a series of competing dualisms in knowledge creation and organization. Students will explore the history of the modern museum and spend two weeks visiting actual sites and collections that played a role in this history. Exploring the past in this way is geared specifically to help today's museum workers gain a better understanding of their own role and purpose in their community, society and nation.	3 (on site in Florence, Italy)

\*Prerequisite for all other museum studies courses except Museum Origins.

In 2009, Trant called for an integrated approach to the educating of cultural heritage professionals, reminding us that integration does not mean dissolving the particulars that make each unique:

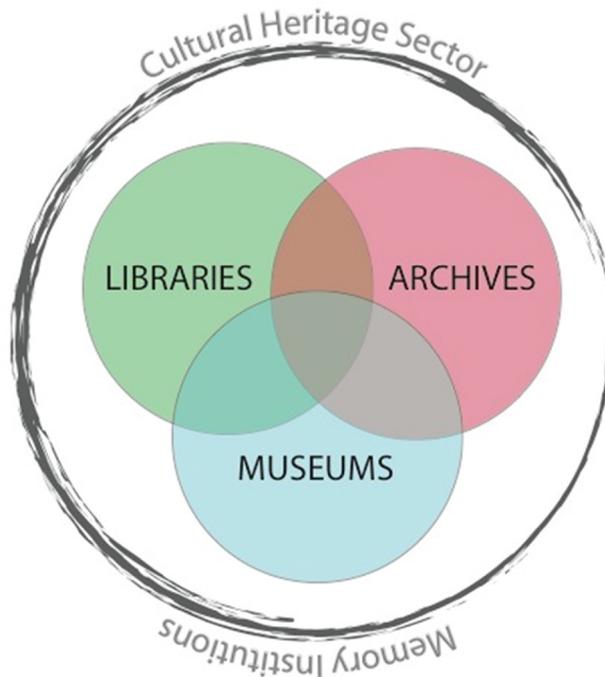
An integrated approach to training professionals to work in cultural heritage institutions needs to build on an understanding of and respect for the differences between libraries, archives, and museums. Recognizing the differences in the various kinds of work that occurs across the LAMs is important (p.370).

The ability to pay attention to the particulars while also understanding the whole is part of the system approach we use in teaching the museum studies specialization at Kent State. The LAM sector in the current scenario is the whole; we can no longer effectively function in compartmentalized categories and silo'ed structures (see Figure 2).

Perhaps one further step beyond the Kent State approach of wholly integrating museum studies with LIS would be to eliminate, or reduce, institutional "walls" (as in libraries, archives, and museums as separate institutions) in the conceptual aspects of teaching new information professionals across the entire program. While institutions are indeed a part of the LIS landscape, they are deeply bound in their own histories and cultures. By dissolving those boundaries, it may be easier to teach more holistically about the relationships between people and information. The anchor for a truly integrated LIS curriculum might simply be stated as the study of the interaction between people and information in different contexts. At Kent State SLIS we are working towards this in our own core curriculum review and strategic planning process.

In other parts of the world, we find LIS schools are acknowledging this shift and

### Libraries, Archives, and Museums as Part of the whole Cultural Heritage Sector



**Figure 2.** LAMs in context.

restructuring programs. For example, the School of Information Studies at Charles Sturt University (CSU) in Australia recognized that the converging professional landscape was not matching their more traditional curriculum (Hider *et al.*, 2011). They undertook a lengthy and complex process of redesigning their curriculum to reflect current shifts in practice. Their new curriculum, designed so that students could examine the complexities of knowledge across many organizational contexts, is centered on an information-people-technology nexus in generic fashion, providing a foundation for a wide range of specializations. In determining core subjects, the key question was: What do all information professionals need to know? CSU viewed information studies as more than the sum of its parts, but also as the relationships between these parts. In this redesign, CSU applied the theory of convergence (Hedstrom & King, 2003; Zorich *et al.*, 2008; Waibel & Erway, 2009; Given & McTavish, 2010) to their entire curriculum. They believed that information professions have common foundational elements and their graduates will have a broad range of knowledge and skills that can benefit both library and non-library employers.

## Conclusion

“... I believe that if our cultural and memory institutions are to remain relevant in the information society and maintain the intrinsic Values (with a capital V) which they represent, they have little other choice but to work together. Battles of influence will not be productive because none can win except the outsiders whose stakes are elsewhere!” (Iljon, 1999, p. 3).

Iljon's point is direct, honest and rings true. From the training of professionals to classification of cultural heritage institutions, LAMs have more in common than not; their grand purposes are similar, the details are what differ. The current practice of compartmentalizing is inefficient,

not only slowing progress in each field's advancements, but in keeping the potential of valuable knowledge-sharing at bay. Bates' concept of a meta-discipline serves as an excellent framework to use in understanding, teaching, and building curriculum around the relationships between LAMs and other related disciplines. Museum studies integrates well with the LIS purview and vice versa. This integrated approach will ultimately serve to achieve efficiency and excellence in the public memory sector as a whole. The literature reveals that an idea such as this is not new (eg. Rayward, 1996; Iljon, 1999; Trant, 2009; Hider *et al.*, 2011). But old habits die hard, and there appear to be only a small number of instances (at least in the U.S.) of putting these ideas into concrete form (Kim, 2012). The new museum studies program at Kent State University is still in its infancy, but it serves as a model that Kim was right: LIS and museum studies are ready for each other.

A harmonization of curricula across the entire cultural heritage information sector will benefit emerging professionals, users, and scholarly communities alike. In the five years since Trant (2009) made her case for such a move, we have taken some steps in the right direction, but only baby steps. As Trant (2009) pointed out:

Museum, archive, and library staff need new professional and research skills that, while building on the historic practices of their disciplines, encourage openness, collaboration, and ongoing learning and evaluation. Addressing these challenges together will strengthen the sector as a whole, reinforcing the underlying cultural significance of museums, archives, and libraries, and enabling a vibrant contribution to our evolving networked information society (p. 384).

The time is now for an integrated approach to the education of future information professionals that still respects diversity. It will not be easy, but challenges can yield great rewards.

## References

- Bates, M. J. (1999). The invisible substrate of information science. *Journal of the American Society for Information Science*, 50(12), 1043–1050. [http://dx.doi.org/10.1002/\(SICI\)1097-4571\(1999\)50:12<1043::AID-ASII>3.0.CO;2-X](http://dx.doi.org/10.1002/(SICI)1097-4571(1999)50:12<1043::AID-ASII>3.0.CO;2-X)
- Bates, M. J. (2012). The information professions: Knowledge, memory, heritage. Proceedings from *Association for Library and Information Science Education conference Dallas, TX, Jan. 18, 2012*. Retrieved from <http://pages.gseis.ucla.edu/faculty/bates/articles/pdf/InfoProfessions.pdf>
- Bates, M.J.; Maack, M.N., Eds. (2010). *Encyclopedia of Library and Information Science* (3rd ed.). New York: CRC Press.
- Cultural Heritage Information Professionals (CHIPs). (2008). *Cultural heritage information professionals (CHIPs) workshop report*. Sarasota, FL: Ringling Museum of Art.
- Given, L. & McTavish, L. (2010). What's old is new again: The reconvergence of libraries, archives, and museums in the digital age. *The Library Quarterly*, 80(1), 7–32. <http://dx.doi.org/10.1086/648461>
- Grenersen, G. (2012). What is a document institution? A case study from the South Sami community. *Journal of Documentation* 68(1): 127–133. <http://dx.doi.org/10.1108/00220411211200356>
- Hedstrom, M., & King, J. L. (2003). On the LAM: Library, archive, and museum collections in the creation and maintenance of knowledge communities. *Paris, France: Organisation for Economic Co-operation and Development*.
- Hider, P., Kennan, M., Hay, M.L., McCausland, S., & Qayyum, A. Moving from LIS to IS+L: Curriculum renewal at Charles Sturt University. *Australian Library Journal*, 60(3), 205–217. <http://dx.doi.org/10.1080/00049670.2011.10722617>
- Ilgon, A. (1999). Convergence of archives, libraries and museums: A European perspective. *Proceedings from Delivering Diversity: Promoting Participation*. Retrieved from [http://network.icom.museum/fileadmin/user\\_upload/minisites/cidoc/ConferencePapers/1999/6.pdf](http://network.icom.museum/fileadmin/user_upload/minisites/cidoc/ConferencePapers/1999/6.pdf)
- Kim J. (2012). Building rapport between LIS and Museum Studies. *Journal of Education for Library and Information Science*, 53(2), 149–161.
- Latham, K.F. & Simmons, J. (2014). *Foundations of Museum Studies: Evolving systems of knowledge*. Westport, CT: Libraries Unlimited.
- Rayward, W. B. (1983). The development of library and information science: Disciplinary differentiation, competition and convergence. In F. Machlup & U. Mansfield (Eds.), *The study of information: Interdisciplinary messages* (pp. 343–363). NY: John Wiley and Sons.
- Rayward, W.B. (1985). Library and Information Science: An historical perspective. *The Journal of Library History*, 20(2), 120–136.
- Rayward, W. B. (1996). Libraries, museums and archives in the digital future: The blurring of institutional distinctions. In *Multimedia preservation: Capturing the rainbow: Proceedings of the Second National Conference of National Preservation Office, Brisbane, 28–30 November 1995* (pp. 71–86). Canberra, Australia: National Library of Australia.
- Ribeiro, F. (2007). An integrated perspective for professional education in libraries, archives and museums: A new paradigm, a new training model. *Journal of Education for Library and Information Science*, 48(2), 116–124.
- Richardson, J.V. (2010). Library science in the United States: Early history. In *Encyclopedia of Library and Information Science* (3rd ed.). (pp. 3440–3511). New York: CRC Press.
- Simmons, J. (2010). History of museums. In *Encyclopedia of Library and Information Science* (3rd ed.). (pp. 2096–2106). New York: CRC Press.
- Trant, J. (2009). Emerging convergence? Thoughts on museums, archives, libraries, and professional training. *Museum Management and Curatorship*, 24(4), 369–387. <http://dx.doi.org/10.1080/09647770903314738>
- Waibel, G. & Erway, R. (2009). Think global, act local—library, archive and museum collaboration. *Museum Management and Curatorship*, 24(4), 1–14. <http://dx.doi.org/10.1080/09647770903314704>
- White, H. D, Bates, M.J., & Wilson, P. (1992). *For information specialists: Interpretations of reference and bibliographic work*. Norwood, NJ: Ablex.
- Zorich, D., Waibel, G., & Erway, R. (2008). *Beyond the silos of the LAMS: collaboration among libraries, archives and museums*, 1–59. Retrieved from [www.oclc.org/research/publications/library/2008/2008-05.pdf](http://www.oclc.org/research/publications/library/2008/2008-05.pdf)