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Convergence of Skills through Theory, Practice and Strategy

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Abstract:

Changes within the information and library science profession have required professional positions to have a convergence of skills that can better enable a more complex, dynamic and expanding role within the home institution. This includes combining specialized areas of traditional functions; including the cultural heritage positions with roles in libraries, archives and museums. Other considerations are:

- *Trends in LIS programs that recognize and address the impact of these changes in the earlier stages of development, during the education process.*
- *How post education human resource models are changing to reflect a new professional identity for librarians in whom hard skills are merged with the intelligence to utilize those skills in different ways, based on current organizational needs.*
- *And an expectation of how these skills need to have a practical approach and perspective, as demonstrated through the problem solving side of applying theoretical knowledge. Research work has been conducted that demonstrates a new internship model, tested over the past 4 years, that helps a student shape their professional identity for selected areas of librarianship, including work in a library archives.*

Keywords: organizational change, strategic planning, internship, skills, learning objectives

Introduction

Almost 20 years ago, in an opinion paper by Thomas J. Galvin, the debate over specialization of skills compared to the benefits of collaborative sharing and convergence of professional skills and duties was just beginning to see the impact of technology to individual jobs and research. Galvin recognized that technology would change the professional's focus from "keeper of content" to "instructor and curator of content and access" and that ultimately there would be a need to first collaborate and then converge processes, skills, methods and

infrastructure. Twenty years later this debate continues, but within a much more technology rich environment that in most cases produces a higher level of financial investment.

A review of literature will be provided for discussion of skills that are learned in a broader fashion, but can be specialized into organizational needs with a multidisciplinary approach to learning, through professional development and enhanced curriculum offerings. Strategic human resource planning can facilitate the convergence of skills needed to transcend traditional concepts among libraries, archives and museums. This approach can also address some of the challenges and conflicts regarding philosophical differences between LAM organizations.

A Changing Environment

The world is changing at a rapid pace with significant impact on many professions and lifestyles. Technology is the driver in most cases, to paths of change influencing services, collections and their contents and the ability to have instance access to knowledge and information. But technology alone does not sustain a profession nor uphold its core values and standards for incumbent employees doing the work of the various organizations. And new professionals entering the field with a defined set of skills may not match up with existing circumstances within the workplace without a flexible understanding of how skills can be utilized in various ways based on need.

Emerging trends of work processes in professional fields must also undergo a convergence of skills, from old to new, from educational theory to practical application and from individual existing knowledge platforms to shared knowledge using a variety of formats. This convergence has implications across economic and financial concerns, services and user expectation concerns and the staffing models of the professionals employed in the field, from a human resources strategic point of view.

The focus here is the human resource equation of convergence of skills, both convergence of skills based in a changing environment along with changing needs and the advantages gained and expected within the profession from collaboration between libraries, archives and museum organizations. As it was identified in 2008 by an OCLC research report (Zorich, 2008), successful endeavors will see staff who incorporate collaborative efforts into their work, as well as maintaining the support of administrators who are challenged to find creative solutions to financing and developing their organizations for the future. And it's the collaborative efforts that will ultimately result in a convergence of ideals that are no longer seen as collaborative but instead are a known part of the infrastructure or system(s) of operations.

An example can be seen from an article about educational services from the cultural departments in museums in France. Marie-Christine Bordeaux (2013) writes about the educational value and missions of museums and recognizes that libraries are not figured as predominately with regards to cultural services offered. But they are regarded as cultural agents which provide a link into the social mission of the public cultural institutions, thus collaboration. Determining what actions it would take and recognition of the advantages of a shared mission could move this relationship from collaborative to convergent.

Givens and McTavish (2010) offer another point of view in that much of modern day convergence of skills has already occurred previously but became divergent with new technologies and gender (male) interest in the profession. Whether motivated from financial

need or collaborative content sharing, they view current efforts of convergence, by institutions and organizations, to be a re-convergence with new players and technologies. Thus basic principles and similarities between the work to be performed already exist, it is a matter of redesigning the core missions of cultural heritage institutions to reimagine their shared visions.

A changing environment also occurs at the organizational level before it can successfully guide changes at the individual professional level. Davidson and Davis (1990) compare organizational changes for business models with the expansion of an information economy. Some of those principle changes to an organization apply to the professions of libraries, archives and museums. Most commonly, the shift from prioritized efforts at production and collecting, to a more customized approach of broader and easier access and outreach for addressing individual needs. As they stated in 1990, flexibility will be the key for driving organizational change for staff and the related issues of managing the human resource side of the organization. And it's the technology that will ultimately impact the economic factors that sustain the organization, thus staff must be flexible enough to embrace the technologies that will have a positive economic impact.

The question of how is echoed by Paul Marty (Marty, 2014) with regard to maintaining traditional distinctions of work with cultural heritage institutions in lei of new demands by users and more complex relationships with partner organizations and institutions. Extending the work of W. Boyd Rayward, Marty associated the traditional values of cultural heritage workers with the increase exposure and use of materials and resources by a broader spectrum of users, who do not have the same loyalty or disposition toward the benefactor institution. He raises the question of organizational identity with regard to delivering information and services, which can ultimately translate into individual professional identity for professionals seeking to advance their careers or research interests.

Dr. Bob McKee expressed similar thoughts about the future of information organizations and how the need for flexibility and the recognition that we are a global society is important. This modern society trend toward personalization and consumer choice changes the traditional point of view between collectivism with approaches to individual consumption. And although as professionals, individual specializations and interests are still important and valued; finding ways to share and collaborate within similar contexts is not only important but part of the emerging trend for our profession.

There are motivating factors that support convergence and the process in which that could occur. In addressing the convergence of skills in an information economy Christopher Barth (2011) outlines these motivations as follows:

- Alignment of institutional goals and objectives
- Changes that occur in common service models
- Pre-existing collaborations
- Leadership attributes, supportive or missing
- Models set by others
- Financial benefits
- More efficient organizational structure
- Improvement of services for stakeholders

This list was modified to fit the current discussion but the principles remain the same. Today's environment provides many reasons to seek collaborative and convergence solutions to staffing needs and responses.

The professionals that make the cultural heritage institutions have an advantage regarding issues that have surfaced as part of organizations and other professions that are following these activities. That is, many have gone before and a lot has been learned. Looking at other examples, information management first needed to address convergence of skills as technology itself created convergence through systems and product development. This led the way for organizations to invest in strategic approaches for changing employee skill development from specialized to cross-trained.

J.E. Herring talks of this as it compares in the information management arena and in particular with health sciences (Herring, 1991). This is where it was recognized that employees needed to be given broader responsibilities that included a mixture of specialization but also included general knowledge. Competencies such as the ability to communicate effectively and focusing on the big picture of organizational goals and objectives become important at this point. This calls for a greater level of strategic direction with regard to employee competencies.

Strategic Intelligence for Planning and Change

Strategic intelligence is most often associated with military actions, plans and policies to lead resources toward a successful conclusion of a conflict or potential conflict. Wells (2012) discusses strategic intelligence as the purposefully "steering" in a winning direction. This purposeful steering can be considered for driving change toward developing skills that become useful and desired across the broad spectrum of cultural heritage organizations. Technology and systems enhancements that provide data faster, changing formats that are marketed commercially and a rise in user expectations, parent organizational demands of sharing costs or adding services, are examples of changes being made consistently in the last 20 years. Much of this change is being facilitated by professionals who did not experience these types of curricula in library school or worked on the development of those changes internally.

The human resources consideration within institutions of higher education is also undergoing change and is impacted by current economic conditions. Evans and Chun (2012) point out that by drawing the elements of human resource consideration into the strategic planning, an advantage can be gained with proactive contribution and leadership. This trend allows for the elements and activities related to human resources to become part of the strategic planning process and demonstrate a higher level of strategic intelligence by recognizing these advantages.

Strategic planning in itself is not new to libraries or museums. Traditionally, long terms strategic plans are developed and put into place to provide guidelines as to the organization's output for the larger institution or constituency. Then short term strategic planning can recognize changes when needed to protect the integrity of the institutional mission. In Wells' definition he discusses three different levels of strategic intelligence, as follows:

- Least intelligent – does not recognize the need to make changes
- Higher or smarter intelligence – recognize the need to change based on external factors and react accordingly

- Highest intelligence – foresee the upcoming need for change and change faster, thus influencing those external factors to their advantage

Part of preparing for strategic planning activities is to address where the institution stands with regard to organizational development. Strategic planning can cover many elements depending upon the level of detailed needed or desired. Obviously the more detailed and extensive of an effort that goes into the planning process, the more likely it is to be successful in the execution and overall results.

Convergence of skills, processes, systems or ideals within an organization or organizations can have a formal component of addressing needs or risks to the organization that is making changes. Sometimes called due diligence, this is the process of determining the impact future actions will have on individuals and the organization. This can be related to organizational culture, structure, technology, financial and sometimes even legal concerns. An example of legal could be found in a unionized environment. This review or investigation is necessary to find the proper path of action, strategically.

A strategic process should be followed in making changes as well. For example the need for change should be communicated and a clear explanation of the reasons and associated benefits should be stated. Plans should be developed with contingencies developed as alternatives if needed. The changes should be communicated to all stakeholders and then assessed for effectiveness. This provides the opportunity to be flexible or make changes if problems occur.

The depth or quality of the how a strategic is developed and enacted can be linked to the strategic intelligence of the parent organization. Proactively seeking dialog and communication regarding emerging trends that will move cultural heritage institutions further toward a positive influence to their constituency, will help ensure support and commitment to strategic initiatives that seek to converge process, systems and skill sets.

Trends in Library and Information Science Education

The traditional literature for coursework in LIS programs related to introducing archives and the work of museums into the curriculum focuses on the logistics of staffing and administrative hierarchy or authority. *Museum Librarianship* (Bierbaum, 2000) details staffing in terms of structure and how it all relates to planning and budgets from the point of view of a library student. This does provide a good basis for expectations but stops short of identifying skills that could be developed for use in both library and museum environments.

However; some writings are starting to recognize the shared interest and common elements inherent to libraries and museums even if they are defensive in nature. For example; in 2004 Dilevko and Gottlieb published *The Evolution of Library and Museum Partnerships*, in which they discuss factors impacting both organizations. They address the issue of organizational mission and thus justification for existence in terms of education, impact on community and the controversial topic of entertainment. This does imply the specific skills needed related to instruction, outreach and marketing as well as public service attributes for keeping clients and patrons engaged.

This leads to a more specific focus for these organizations of developing learning communities, in which learning outcomes, growth and sustainability of the organization was considered and how post-object care, deeper study to objects topic and display of unique

themes made a difference in public perception. These issues have been highlighted and supported by the Institute of Museum and Library Services through funding and programming efforts both elevate the work of these institutions, but also provide clarity as to the appropriate skills needed by professionals working in these areas. In their report titled 21st Century Skills (2009), the Institute of Museum and Library Services clearly outlines the skills, such as literacies and competencies that will be required for successful 21st professionals working in museums and libraries.

Paul F. Marty and Michael B. Twidale explore the work of their own institutions with regard to courses they have offered on museum informatics. They describe museum informatics as the sociotechnical interactions between people, information and technology within museums (Marty, 2011). Their analysis of how these courses have developed includes the introduction of project based work into the course design. This seems to help demonstrate the value of practical work experience within the educational process, as will be discussed later.

Marty and Twidale conclude that the benefits to their course go beyond learning more about museums. Instead they feel they have gained a means for teaching students a broader scope for technologies needed in cultural heritage institutions but also more importantly, non-technical skills. Those are listed as critical thinking for design, addressing multidisciplinary issues, project development and assessment, skills that can be common to professions in libraries, archives and museums.

Jeonghyun Kim conducted a study and published an article that highlights the integration of museum related courses into LIS programs across the United States. This study shows a general acceptance by museums to embrace LIS education as a credential for professional work on that side of the house and shows that interdisciplinary approaches to developing the skill set are working and valued.

Professional and Emotional Intelligence for Convergence

With a trend toward specialization for library positions, education and training for the convergence of skills for cultural heritage organizations might seem counter intuitive. But the need for economies of scale from economic and financial concerns, along with the shared issues advocacy and the need for justification of support from parent organizations demonstrates a need for skill convergence. In addition, the goals and missions of cultural heritage organizations have developed similarities in their execution so skills sets needed and desired begin to look similar.

An example of this is taken from O*NET, a partner of the American Job Center Network. This program produces standardized descriptors for a wide variety of jobs across the country in order for educators and employers to react and plan accordingly. Table 1 shows a comparison of knowledge, skills and abilities (KSA's) for the categories of librarians, archivists and curators. This is the top three listings in each category but they demonstrate the similarities for each professional category. KSA's become evaluation factors for matching jobs and positions with the appropriate individual.

Other attributes that can be a factor in the individual's success are listed in Table 2. Work activities, styles and things people value can also be a factor in an individual's success at a particular profession. Once again for these three professions, the attributes are similar and can be applied to the strategic planning process.

| Table 1 | | | |
|-------------|------------------------|-----------------------|-----------------------|
| | Knowledge | Skills | Abilities |
| Librarians: | English Language | Reading Comprehension | Oral Comprehension |
| | Service Oriented | Active Listening | Written Expression |
| | Technology Enabled | Speaking | Information Ordering |
| Archivists: | English Language | Reading Comprehension | Information Ordering |
| | History And Archeology | Active Listening | Written Comprehension |
| | Technology Enabled | Writing | Written Expression |
| Curators: | English Language | Speaking | Oral Comprehension |
| | History And Archeology | Reading Comprehension | Oral Expression |
| | Education And Training | Active Listening | Written Expression |

| Table 2 | | | |
|-------------|------------------------|--------------------------|--------------------|
| | Work Activities | Work Styles | Work Values |
| Librarians: | Getting Information | Cooperation | Relationships |
| | Computer Use | Adaptability/Flexibility | Working Conditions |
| | Communication | Attention To Detail | Independence |
| Archivists: | Doc/Record Information | Attention To Detail | Independence |
| | Getting Information | Integrity | Achievement |
| | Computer Use | Dependability | Recognition |
| Curators: | Thinking Creatively | Integrity | Independence |
| | Judging Quality | Attention To Detail | Achievement |
| | Outside Communication | Dependability | Working Conditions |

With strategic planning, the organizational goals are realized through the individual performance objectives of the professionals producing the work. Investment in employee skill development is linked to the organizational goals based on need. If the needs are comparable, then education and training of staffs is more appropriately done broadly instead of separately.

It is worth noting that asking incumbent employees to make job changes, merge concepts and reconsider some of their basic beliefs and values can be stressful and create a high sense of anxiety. This provides opportunity for some emotional intelligence training that would support self-reflecting of individual ideals for the benefit of the organization. Teaching employees how to understand and manage their own emotions which can positively influence their emotional responses to others, will help build the relationships needed in a converged environment. By providing emotional intelligence training, anxiety can be reduced as folks explore their emotions related to change.

A review of cases in Canada and New Zealand recognized the impacts that convergence or even collaboration might have on professionals, as well as anxieties that can be produced (Duff, Wendy M., et al). Their work involving these case studies demonstrates the complexity of the processes needed for collaboration and convergence by highlighting the diversity and uniqueness of the difference institutions. This produces a need to balance the professional expertise of any given institution and their strength of content, with the process or system that is causing them to merge with others, who have different interest and expertise.

They identify two common areas that can improve the opportunity to converge; unified or shared access to collections and data as well as raising the support of clients and users along with scholarship support. This could also support the need for emotional support and creating an intelligence model that provides respect for the differences between professionals and celebrates the gains and benefits of collaboration.

Practice versus Theory for Sustainable Professional Identity

So what are the components of this convergence for all of the aspects of libraries, archives and museums? What commonalities will afford them to come together with shared goals in a practical, yet sustainable and successful environment? Deborah Wythe (Wythe, 2007) addressed the differences, primarily between libraries/archives and museums as it related to difference organizational models. She described these differences for users in terms of an individual experience versus an interpersonal experience based on the service models and organizational support provided. But she also clearly saw how convergence was not only possible but also advantageous, as technology provides a means to merge concepts and ideals.

Building upon the shared professional ideals of similar skill set needed, adoption of standards for effective practice and providing access to the collections coveted and developed, Wythe proposes that common practices and relationships with users will blend to highlight the advantages of each. Once again this is driven by technology but must be embraced by the professionals at work to become influential to the users in practice.

As mentioned previously, LIS has begun moving in a direction to blend and combine the skills needed in a converged cultural heritage environment. This blending of advantages could also be served within the venue of practice. This author and his esteemed colleague have conducted research on a shared experiential learning model that not only benefits students learning specific areas of the profession, but also influences curricula decisions and provides a venue for practitioners to update and gain new skills by sharing and engaging projects with students.

The Real Learning Connections project (Bird, 2014) has provided important data into the development of skills for students, librarians and LIS faculty. Specifically, librarians working with students in this model have gained new insights and acquired new skills through the execution of their own learning objectives within the foundation of each individual project. Projects developed and used in this research are typically related to activities not present in their current state during the practitioner's LIS educational process. Thus the gain is not only a refreshment of current theoretical concepts being taught, but also an opportunity to learn new perspectives and potentially new technologies being employed, within the framework of the project.

Bird and Crumpton employ the work of Donald Schon, in Real Learning Connections, in which he promotes "reflection" as a key component to integrating theoretical knowledge into a practical environment that requires independent judgment in a changing environment. A project requirement is that each member of the project completes a reflection statement regarding that they have learned. Comments from librarian practitioners include statements related to; learning new methods and improvement of the quality of the project, with new knowledge.

Figure 1 demonstrates this method of learning with the convergence of the learning objectives into the center “sweet spot”.

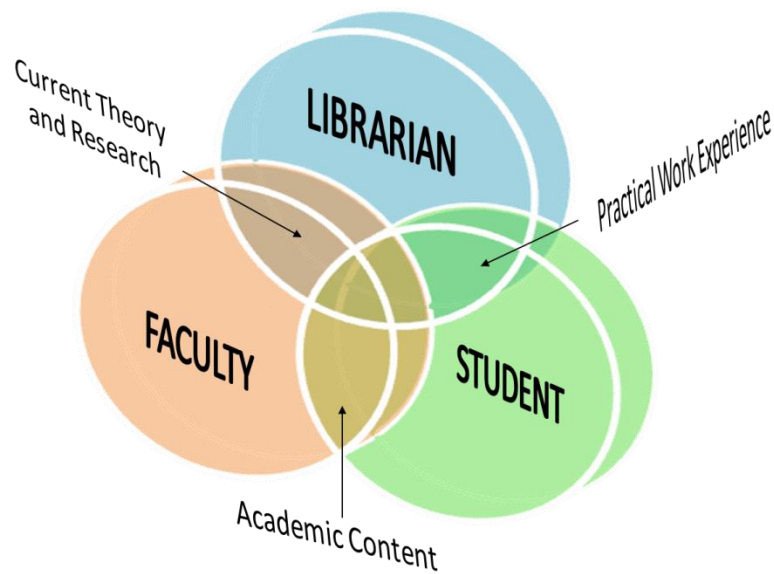


Figure 1.

In this model, the library science student can serve as a conduit for a practicing librarian and LIS faculty. In cases and studies conducted, it has been learned that this model reinforces and adds new knowledge to the practitioner’s frame of reference and also provides constructive feedback through the faculty member involved, to update and/or modify the curricular.

A specific project, which related to a manuscript collection in the special collections department, also gave opportunity to address the skills needed for the student working in a setting that crossed into librarianship, curation and archival of parts of the project. These skills converged in this project to the shared experience of the student, librarian and faculty with very positive results. This demonstrated that an individual professional can address all elements of a collection, from public service, care and curation of materials to providing the needed components of archiving appropriate parts.

Although this is a student practicum model, the benefits to a practicing librarian within this context can be significant. By working with others and with work requiring different skills, the librarian gains that broader sense of skill deployment beyond their specialized area. As has been the case with the project so far, the practitioner’s learning objectives are meant to refresh their professional knowledge and future projects can be studied with this skill convergence in mind.

Conclusions and Future Considerations

There are many factors to be considered with regard to convergence of skills needed and used across cultural heritage organizations, such as libraries, archives and museums. Some of those are economic and financial in nature, as could always be the case, in terms of justification of monies invested. Others will be technological in nature as technologies will continually change to enhance the user experience but also to produce work efficiencies. And the skills that produce a unique professional identity for those employed and who

promote the work of these institutions, will need to be flexible in order to benefit from those financial and technological changes, that will come whether desired or not.

Agnes Vatican (2014) discusses the community and public aspect of convergence from the viewpoint of pooling projects that have general significance of benefit to local communities. She indicates that collaboration on these projects is driven by means but she also implies that its professional duty that should motivate professionals working in libraries, archives and museums to seek convergence for the benefit of the community involved. Institutions should have a shared understanding of the importance of this collaboration for projects or convergence for ongoing sustainability.

Thus, having a mindset or strategic intelligence to proactively create a strategic to embrace change, will also provide a desire to modify and enrich job skills as needed by the organization. Organizational leadership should conduct environmental scans to the level of individual contribution and skills, in order to determine the benefits gained from seeking different, more blended skills. Individuals will need to demonstrate the desire to match the organization's strategic goals by learning new skills, blending skills and experiences with similar institutions to gain the common benefits, and allow new professionals to influence the creation of new materials and service models.

Library Science education has already started to move toward cross teaching subjects and skills need by strategically enabled organizations. Many examples exist in which thought has been given to changes in the curriculum that broaden the scope of exposure and learning to subjects and topics meaningful for work in cultural heritage organizations. And coupled with that is the opportunity to gain practical knowledge in work environments that will improve the context of theoretical applications. This can be useful for helping students understand the flexible nature of multiple skill sets and improve long term career goals and choices.

Future consideration should be given to professional development opportunities in which practitioners in multiple areas of these professional fields are given the chance to work with new knowledge and experiences so as to enable a wider understanding of organizational objectives and goals. But it's not just about the organizations, it's also about the profession and how respect for individual expertise and specialization can be enhanced to include the adoption of new skills that can be shared more broadly.

Additional education and training as it related to soft skills, such as emotional intelligence, will also increase individual understand of the benefits of convergence for everyone. This can be done as part of a strategic initiative for seeking change but should also garner new respect for all aspects of the profession.

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