Converging educational strategies: An Italian e-learning class for young LAMs professionals

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Abstract:

Converging education strategies is a proposed course originated from an e-learning class organized by the Italian Library Association. The outcome of the teamwork for the class was an e-learning course consisting of four themes. The theme chosen by our working group focused on the orientation and education of the young (18-25 years old) to the librarian profession. The proposed course, entitled Reloaded librarian with the slogan “Break the stereotype!” has prompted interest and received wide praise encouraging us to offer it as a module of the broader course on LAMs education, adopting a blended and active learning approach and making use of the open learning platform Moodle.

In Italy, at local level, there are currently many LAMs initiatives mainly focused on legislative and management issues. There is not, however, a comparable initiative on education. Our goal is to encourage the establishment of a course, supported by the professional associations, that offers an overview of the LAMs approach including the skills to promote its development. Many institutions have library, archival and museum collections that require professionals with a background in cultural heritage to consistently perform traditional tasks (e.g., resource selection, description, management, reference services, promotion, etc.) along with new and ever evolving technical skills (digitization, database development, digital asset migration, linked open data, etc.).

Among the open issues to be addressed: 1) building alliances among the professional associations AIB (libraries), ANAI (archives), ICOM (museums) to develop common strategies for education and career development; 2) reducing the digital divide between older and younger professionals (i.e., helping professionals transition from traditional competencies to the adoption of new technical skills); 3) engaging students through new learning techniques, such as gamification; 4) transforming the traditional curriculum through new strategies of engagement.

Keywords: LAM, E-Learning, Training, Professional Associations, Young education.
Introduction
As part of the international debate on digital heritage, a lively discussion has developed around the repercussions arising from digital convergence in relation to the redefinition of professional profiles in the LAMs (Libraries, Archives and Museums) sector. The changes taking place in this sphere have strongly called into question the individual and well-established professional identities of librarians, archivists and museum personnel, thereby providing us with a good opportunity to build an "interdisciplinary bridge" (Tammaro, Madrid & Casarosa 2013, p. 184).

The objective of this intervention is to propose and explore a possible "Converging educational strategies" training course: a blended learning module to be realised through the e-learning platform Moodle. Ideally, a project of this kind would involve the various Italian professional associations active in the LAMs sphere, if we set out from the firm belief that a joint effort made in the area of education represents an effective approach when it comes to the acquisition of new skills, and also for giving fresh impetus to professional advocacy.

Background
In the first three months of 2014, the AIB offered an innovative blended learning course to Italy's community of professional librarians. The course was titled "AIB continuing education in e-learning: teaching and learning by means of new technologies". Structured into four phases and positioned at the 6th level of the European Qualification Framework for Lifelong Learning (EQF), the goal of the course was to improve the quality of AIB continuing education by means of e-learning.

The course's educational objectives were:
- to impart knowledge in relation to teaching methodologies and e-learning technologies that can enhance learning levels;
- to develop in enrollees the ability to make choices with an awareness of tools, exercises and content based on the educational objectives and the needs of the participants.

The course was characterised by a constructivist educational approach, and therefore by active and significant learning. All enrollees on the course were allowed to find their own path by freely shifting between traditional resources (lessons presented on slides and pdf documents), informal learning tools, and collaborative learning (forums, participatory glossary building, feedback between peers, and self-assessment through the production of personal portfolios).

Our proposal was inspired by this interesting experience, which saw us participating in a work group on the theme of advocacy, and which led us to devise and realise an e-learning course titled "Reloaded Librarian", aimed at young students (18 to 25 year-olds) in order to foster orientation towards the librarian's profession. One feature of the course was the shattering of long-established stereotypes associated with the figure of a librarian – stereotypes which have become meaningless in today's technological and communications context. Positive feedback within the learning community prompted us to reflect on the possibility of adopting the course as a starting point for the development of a broader and better-structured learning environment for libraries, archives and museums.
The goal is that of offering, not only to those who are investigating employment opportunities, but also those who are already active in the workplace, a new professional model. By now, it has become clear that there is an urgent need for personnel who are already at work to rethink their established outlook and shift towards a lifelong learning scenario which rapidly evolves and requires a strong aptitude to change and openness to embracing non-traditional learning models. Digital convergence is already giving birth to new professions; Digital Curation (Harvey, Bastian 2011), is just one example.

**Why train a LAMs professional?**

By now, the convergence of the world of libraries, archives and museums has been underway for a number of years. Various projects, conventions and joint initiatives have taken place. In some instances there has even been a preference to employ a somewhat "sexier" acronym: GLAM: Galleries, Libraries, Archives, Museums (Edson 2013, slide 7).

Back in 2008, the OCLC published *Beyond the Silos of the LAMs: Collaboration Among Libraries, Archives and Museums*, a report that was the fruit of a meeting between the Smithsonian Institution, the Victoria and Albert Museum, and of Yale, Princeton and Edinburgh Universities, organised by the Research Libraries Group. The section titled "Flexibility" states:

> “LAM professionals who understand issues surrounding different types of collections and collecting institutions, and who are not rigidly wedded to their own professional traditions, bring an open-mindedness that allows them to embrace ideas from other professions in the interests of the collaboration. Traditionally, […] LAM professionals are schooled, trained and work within respective fields. When brought together, their discussions often focus on the distinctions – rather than the commonalities – among their various domains” (Zorich, Waibel & Erway 2008, pp. 27-28).

A little further on it states:

> “While campuses may promote mutual respect among all LAM traditions, they often offer little time and few opportunities to learn about what one participant called the ‘the cultural microclimates of various professional activities’” […] “a participant suggested providing cross-domain training for cultural heritage professionals to educate a new generation of professionals who will see the LAM (and not just one if its parts) as their domain” (Zorich, Waibel & Erway 2008, p. 28).

The LAMs cooperation frequently limits itself to questions in relation to organisation, bureaucracy and lobbying, based on the obvious consideration that cultural heritage institutions concern themselves with the management of collections (Hedstrom, King 2004). For example, in Italy the constitutive charter of the MAB Coordination (Museums, Archives and Libraries) of 2012 lists among its objectives the proposal to come up with "educational and qualification initiatives for members of the participating associations concerned with the protection, conservation and valorization of cultural heritage" (AIB-ANAI-ICOM 2012, art. 2), but it does not (yet) address training programmes that focus on convergence. Furthermore, according to the diagram (Waibel, Erway 2009, p. 11), convergence represents the final stage in the evolution of cooperation process.
In training/education, convergence (up to the present) has been placed among Digital Curation activities (Raja 2009; Marty 2008; Tammaro, Madrid & Casarosa 2013), namely the ability to add value to digital assets for use and re-use over the long-term. This consideration is undoubtedly motivated by the relative ease of merging digital objects and their descriptions (thus keeping traditional collections in place) in the memory institutions which house them (Robinson 2012). The role played by the Digital Curator is unquestionably an important and highly specialized one.

The module we are hypothesizing in this paper is instead a foundation course, aimed at young people aged from 18 to 25 and intended to accomplish two basic objectives:
1. orientation: demonstrate that careers in the cultural heritage context can be interesting, challenging, and on the cutting edge of high technology;
2. training in the area of skills commonly required in the sphere of LAMs, in such a way as to allow individuals to choose a context in which to learn skills relevant to the sector. This second objective may also be of interest to qualified personnel already working within an institution (library, archive or museum), but who wish to widen their professional horizons.

**Potential themes for the course to address**

In order to settle on the themes to address during a course intended for LAMs personnel, the various tasks performed by a professional librarian serve as a good starting point. Using a table prepared by the AIB in the preparatory stage of creating "A National Index of Educational and Training Titles and Professional Qualifications", one can identify three macro areas of professional activity: management of informational and documentary resources, supply of services, and planning and management of services. Specifically, the anticipated activities (and hence educational contexts) are:

1. Acquisition and inventorying of informational and documentary resources (a);
2. Treatment and physical organisation of informational and documentary resources (a);
3. Inventory control of informational and documentary resources (a);
4. Description and other details of resources (a);
5. Revision of collections (weeding) (b);
6. Discarding of resources (c);
7. Drafting of an emergency plan and preventive conservation projects (a);
8. Reproduction (of resources) for the purpose of conservation (c);
9. Maintenance of catalogues and databases (a);
10. Distribution (Borrowing) (c);
11. Loan;
12. Document delivery (c);
13. Orientation (front office) and reference both in person and remotely (via telephone, chat, e-mail, etc.) (a);
14. Information literacy;
15. Promotion (book launchings, realisation of exhibitions and events, guided visits) (a);
16. Institutional communications (website, online catalogues, social media, newsletter, leaflets, etc) (a);
17. Analysis of the social context in which the institution operates (a);
18. Drawing up of a Collections Charter (Library selection policy/Collection development policy). How to expand collections (a);
19. Management of physical spaces (reading rooms, depositories, service areas, furniture, signposting) (a);
20. Management of informational resources and hardware/software tools (a);
21. Drafting of a Service Charter (Library Service Policy) (a);
22. Management of human resources (selection, organisation, assessment and training) (a);
23. Management of a Safety Plan (a);
24. Fund-raising and management of financial resources (a).

Many of the activities are of an essentially clerical nature, and therefore well-suited to young people. The activities tagged by the letter (a) are those which, notwithstanding the differences between institutions, are all shared by LAMs; those tagged by the letter (b) are activities common to libraries and museums, while those tagged by the letter (c) are activities common to libraries and archives.

But what exactly do we mean by training/education in respect to "Description and other details of resources", for example, when the methods which have been tried and tested over time in LAMs institutes can vary? Bearing in mind that "coordinated" should not mean "identical" (Trant 2009), the proposed course would not go into too much detail as regards norms, but instead examine the objectives of descriptive tools in use in libraries, archives and museums. In the case of the Collections Charter (Library selection policy-Collection development policy), the course would present different ways of expanding collections (in line with institutional aims).
To the above list we can add a few more themes which are necessary to explore in order to give sufficient weight and depth to the context in which the course enrollee will subsequently work in:

- professional ethics;
- the concept of "service";
- the concept of "cultural heritage";
- support for professionals (Freedman 2009), support for professional associations, advocacy;
- the institutional typologies of libraries (national, state, civic, university libraries etc.), archives (state archives, non-state public archives, private archives, company archives etc.), and museums (art galleries, civic museums, science museums, etc.)

This second block of "material" to explore provides a conceptual framework for the activities listed in the first block by pointing to common ground, such as professional ethics, the predisposition of the LAMs operator towards user services, cultural heritage as physical objects, and an overview of the institutions included under the umbrella acronym "LAMs".

What kind of space for a LAMs operator?

Professional contexts now call for a great capacity to adapt, to solve problems, to be flexible, and for teamwork and creativity as part of a constant process of lifelong learning. A young LAMs professional will have to be able to:

- understand what kind of institute best answers to their preferences in such a way as to guide their subsequent training;
- work in institutions, networks and consortia that include collections in the whole gamut of LAMs;
- work in a flexible fashion in libraries, archives or museums;
- work on cooperative/collaborative projects, coordination or convergence programmes in the LAMs sector;
- guide users through LAMs resources, whether they be those who seek specific information, or alternatively those who are undertaking research in their free time simply because they feel inspired to do so.

At the same time, the "openness" of this kind of professional figure will make it easier to realise the desired convergence. Training should succeed in anticipating and "capturing" the needs of a context which is becoming ever more interconnected. Very often, and with good reason, the view is expressed that the context best suited to merging is the web, in other words resources in digital format, and shared (but virtual) research and consultation environments. On the other hand, we all know how most people feel the need for physical meeting places where they can communicate with each other in person – the so-called "third place" theorized by Ray Oldenberg 25 years ago: places where people can feel free to circulate and satisfy their curiosity among book shelves or in exhibition galleries, "harvesting" in the process multi-sensory stimuli which can then be built on. The differences between LAMS do not necessarily lead to the erection of barriers, all the more so given that the way users think and their wishes are becoming ever more "fluid". David S. Ferriero, 10th Archivist of the United States, who was formerly Director of the New York Public Library, and previously worked at the Massachusetts Institute of Technology, has stated (during a gathering organized by the Harvard Library Strategic Conversation, “We need to focus on
user behavior. We don’t know enough about how they use resources, users expect to be able to span the scope of knowledge in seconds” (Leddy 2012).

For this reason, personnel able to receive, advise and guide (users), in addition to being able to work in a cultural context without barriers, are required.

**New learning techniques for LAMs professionals**

Another aspect which should not be neglected in the educational process aimed at new professionals in the LAMs sector is without a doubt the development of a capacity to identify the needs of users, above and beyond the custodial histories typical of individual disciplines. The challenge we are presented with is to engage the audience so as to create connections and sharing among collections, institutions and users in information spaces, firmly positioning ourselves as trusted sources and avoiding the risk of getting lost in the meandering labyrinths of social media (Trant 2009, pp. 383-384).

Social engagement has always been an integral part of the activities of libraries, archives and museums, but it is necessary to make strides in terms of quality so as to enlarge traditional core communities: as the OCLC's Report on Social Media underlines, “to move beyond the project and experimental stage, LAMs staff need to know how to incorporate the user generated content generated by social media within their daily workflows” (Smith-Yoshimura 2011, p. 9).

To favour – in an effective way – active learning of this new capacity, we think it will be very useful to exploit new learning techniques, such as game-based learning and other methods based on simulation, which incline towards the acquisition of skills such as problem solving and critical thinking (Harvey, Bastian 2011).

The goal of this approach is to succeed in engaging students by using as leverage their innate curiosity and the "entertainment" and pleasure they derive from participating, rather than focusing on the necessity to show that an objective has been accomplished as an end in itself. In other words, the emphasis is placed on drilling students in the valuable skill of knowing how to pose questions and how to make effective choices, rather than on the capacity to always and quickly be able to provide correct answers. A playful environment makes it possible for students to proceed at their own pace, testing out, through trial and error, the choices they make, and then assessing the consequences of those choices. In this way the student will acquire the ability to act and an awareness of how to make a difference in the working environment, qualities that we would like to see becoming an integral part of a new LAM professional's profile.

These skills, furthermore, are crucial if we are to establish ourselves as active protagonists, not only in communication and information processes, but also in education: more and more we hear talk of "extreme learning environments", environments which must not elude LAMs professionals if we are to build the relevant communities, both in physical venues and remotely – a future that will be rich in game-like and creative opportunities, and in which MOOCs, live events, augmented reality, and gamification initiatives all blend into a new way of ubiquitous learning (Buck 2013).

Among the initiatives, we can mention as being particularly interesting the experience of Metadata Games, a crowdsourcing project which has created a digital gaming platform (developed by Tiltfactor and Dartmouth Colleges) for collecting metadata on archival images, audio, and moving image artefacts, and which is also developing collaborations with important institutions such as the British Library (Flanagan, Carini 2012).
Last, but not least, this new scenario offers the chance to meet the challenge of transforming the traditional curriculum through new engagement strategies, such as the integration of gaming.

The *NMC Horizon Report Higher Education* Edition of 2014 cites an example of gamification that could potentially also be used in our context to incentivise professional development: “Deloitte developed the Deloitte Leadership Academy, a training program that leverages gamification to create curriculum-based missions. Learners earn badges for completing missions, which they can display on their LinkedIn profiles” (Johnson et al. 2014, p. 43).

A concrete example of development in the area of new learning techniques in Italy is represented by the AIB course that we have already mentioned. The success of the AIB e-learning training experience is a result of a constructivist educational approach: knowledge sharing was emphasized by the community of Practice (CoP) which, once the learning method was set in the e-learning mode, could be defined as a Community of Practice of E-learning (CoPE), endowed with a glossary of communications and specific activities.

These elements can be taken into consideration when mulling over the key components of the basic course that we are proposing to offer in the sphere of LAMs Convergences, taking into account, of course, that one of the fundamental goals will be to transmit a sense of
"professional community" to the students in such a way as to transform their learning into knowledge.

The CoPE philosophy is based on the presupposition that Knowledge Sharing represents the bedrock of Community of Practice (CoPs), today also known as E-learning Communities of Practice (CoPEs); let's therefore pick up again on some reflections on Knowledge Management as proposed by Dalkir, touching on its KM cycle. Dalkir (2005) lists several definitions of Knowledge Management examined from three main perspectives:

1. “from the business perspective”, of no relevance in the current discussion;
2. “from the cognitive science or knowledge science perspective”: “Knowledge—the insights, understandings, and practical know-how that we all possess—is the fundamental resource that allows us to function intelligently. Over time, considerable knowledge is also transformed to other manifestations—such as books, technology, practices, and traditions—within organizations of all kinds and in society in general. These transformations result in cumulated [sic] expertise and, when used appropriately, increased effectiveness. Knowledge is one, if not THE, principal factor that makes personal, organizational, and societal intelligent behavior possible” (Wiig 1993, pp. 38–39 as quoted by Dalkir 2005, p. 5);
3. “from the process/technology perspective”.

The various definitions listed by Dalkir make clear how difficult it is to define and encapsulate Knowledge Management within neat confines. In fact, Dalkir highlights the multidisciplinary side (Dalkir 2005, p. 6) and reiterates the distinction between "data" and "knowledge", as well as that between "tacit knowledge" and "explicit knowledge". The same author, in a successive passage, in addition to proposing an analysis of the importance that Knowledge Management currently places on the categories Individuals, Communities and Organizations, also proposes an integrated KM cycle. An integrated KM cycle makes it possible for different activities related to Knowledge Management to develop in a concatenated fashion: in this way Information, within the relevant context (whether it be that of Individuals, Organizations or Communities of Practice), is transformed into Knowledge.

Among the three abovementioned categories, that of Communities is perfectly matched to our context:

“For the community of practice, KM:
• Develops professional skills.
• Promotes peer-to-peer mentoring.
• Facilitates more effective networking and collaboration.
• Develops a professional code of ethics that members can follow.
• Develops a common language” (Dalkir 2005, p. 20).

The integrated KM cycle that Dalkir proposes develops in three stages: 1. Knowledge capture and/or creation; 2. Knowledge sharing and dissemination; 3. Knowledge acquisition and application. By moving from one stage to the next, assessing, contextualizing, and updating of Knowledge Management (renewed by means of a continuous process), respectively, are achieved (Dalkir 2005, p. 43). The role played by Knowledge Sharing is the one of most interest to us since it develops the dimension of “social construction of meaning” (Dalkir
2005, p.109) and underscores the notion of "community", which is essential to the successful convergence of LAMs: “The establishment of a community identity depends heavily on knowledge sharing” (Dalkir 2005, p. 129). In particular, Knowledge Sharing is achieved by means of Communities of Practice (CoPs): “A community of practice refers to “a group of people having common identity, professional interests and that undertake to share, participate and establish a fellowship” (Pickett et al. 2000, as quoted by Dalkir 2005, p. 112).

Dalkir stresses the influence of technology on the development of Knowledge Sharing: thanks to this influence continual learning activities take form which differ among themselves according to the technological tools employed and are typified in the context of web 2.0 (Dalkir 2005, pp. 109-112). In this setting, the growing phenomenon of CoPs is characterised by a social constructivist approach to learning and knowledge. This Knowledge Sharing development model based on CoPs is the subject of another transformation. Picking up again on some emerging themes brought to the fore in the NMC Horizon Report: 2014 Higher Education Edition, noteworthy among trends of fast, mid- and long-range we find:

- fast trends: the "Growing Ubiquity of Social Media" and the "Integration of Online, Hybrid, and Collaborative Learning";
- mid-range trends: the "Rise of Data-Driven Learning and Assessment" and the "Shift from Students as Consumers to Students as Creators";
- long-range trends: "Agile Approaches to Change" and the "Evolution of Online Learning".

Thanks to technology, learning methods can be based on both the content devised by the supplier of the educational material and that created by the students, thus putting into effect the constructivist teaching model. Learning techniques based on "online learning" stimulate interaction within the community which, as a whole, builds the content.

This strongly interactive and constructivist role is suggested by Chikh, Berkani & Sarirete (2008), who observe the transformation of CoPs into CoPE, a new model of learning by E-learning. This group of researchers holds the view that “E-learning is seen as a process of learning”, in which both the student and the teacher or supervisor learn reciprocally in a constructivist way.

The fact that the community described shares a common vocabulary represents another successful element:

“A lot of research has been done to promote and develop good elearning models, practices, and technological environments. However, fewer efforts were deployed to support e-learning practitioners in performing their job on a day to day basis. There is a need to facilitate communication, collaboration, and coordination amongst e-learning community members. A strategic approach is to solve the problem of capitalization of techno-pedagogic knowledge, tacit and explicit, in the domain of e-learning within the framework of an online community of practice of e-learning (CoPE). The present thesis attempts to solve this problem by creating an individual memory and organizational memory for resources, information, and knowledge that need to be made available to the community members along with an ontology representing a uniform vocabulary for the CoPE” (Chikh, Berkani, & Sarirete 2008, p. 31).
The "ideal" model would therefore be to realise a professional community of students that truly becomes a community, a community which takes advantage of a common vocabulary (derived from LAMs vocabularies), and which develops shared competences.

**Observations and conclusions**

The key "common" word, "convergence", invites us to ponder the various ideas and phenomena that foster a transition “from Coexistence to Convergence” (Duff et al. 2013). Also of great relevance is the development of a common vocabulary and set of competences. By way of a couple of hints we can cite the studies on the taxonomy of KOS (Knowledge Organisation Systems) and the initiatives frequently linked to LAMs institutions of the "wiki" world which, by means of "hackathons", populate Wikipedia in a "structured" (not to say "scientific") way, so as to foster the development of Linked Data operability for the realisation of the Semantic Web.

The typical profile of a new generation LAMs professional, as envisaged by the training course we are proposing in this intervention, will be characterised by the need to establish a trusted identity and a common language derived from traditional competencies. The acquisition of a range of not strictly technical abilities, such as creative thinking, teamwork and problem solving, will also be necessary. In this way the student, who represents a future LAMs professional, will be able to manage – with a good degree of cognizance – social engagement, and will also be proficient in channeling user-generated content into the digital information space of memory institutions, as part of a steady process of collective lifelong learning.

**Acknowledgments**

AIB E-learning community and Maria Cristina Pattuelli.

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**Useful links**
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<http://www.aibformazione.it/>

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Metadata Games  
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European Qualifications Framework for lifelong learning (EQF)  
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Last accessed date: 29th May 2014.