# Four I's of Internships for the New Information Society: Intentional, Interconnected, Interdisciplinary and International

By: Nora J. Bird, Clara M. Chu, and Fatih Oguz

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#### **Abstract:**

Internships in library and information studies (LIS) for the New Information Society are reexamined taking into consideration four concepts: (i) international and (ii) interdisciplinary that allow them to expand beyond the local and disciplinary, and (iii) intentional and (iv) interconnected, that draw attention to their purpose, the learning process and the role of participants. Internships are described in terms of what they are, why engage in them, where they are held, how they are conducted, and who is involved. As each question is addressed the four Is (Intentional, Interconnected, Interdisciplinary and International) are threaded into the discussion. This conceptual approach is then described in relation to how it actually works in practice through case studies that highlight the distinct concepts. General guidelines are presented in order for students, LIS programs and internship host organizations can understand their roles. This reconceptualization of internships enable all involved to take advantage of information and communication technologies (ICTs) and to engage with professional, disciplinary and diverse communities communities globally.

## **Article:**

## INTRODUCTION

Internships in library and information studies (LIS) for the New Information Society have to expand beyond local and disciplinary borders into being more international and interdisciplinary, and should be focused on their purpose, the learning process, and the participants involved, making them more intentional and interconnected. This approach to internships is appropriate for now and the future because it takes a conceptual approach to the various questions one should ask to understand this type of experiential learning, which include:

- a. What is internship in the new information society?
- **b.** Why engage in internship in the new information society?
- c. Where do internships take place in the new information society?
- **d.** How are internships conducted in the new information society?
- e. Who engages in internships in the new information society?

As each question is addressed the four Is (Intentional, Interconnected, Interdisciplinary and International) will be threaded into the discussion. This conceptual approach will then be described in relation to how it actually works in practice using examples and contexts from the United States (US).

#### **BACKGROUND**

Training of librarians and LIS curricula have been researched and discussed regularly over the years. More specifically, bridging the gap between theory and practice has been a topic of discussion even before the establishment of library schools in the US (Grogan, 2007). Preparation for a professional degree as granted by the American Library Association (ALA)-accredited institutions has similarly emphasized combining theory and practice (American Library Association, 1992 and 2008). Therefore, students are expected to gain and master a level of hands-on real life library experience. Library schools in the US have often responded to this need by adopting various experiential learning techniques (Ball, 2008).

In general, learning can be defined as "the process whereby knowledge is created through the transformation of experience." (Kolb, 1984, p. 41) Specifically, in experiential learning knowledge is built through the "combination of grasping and transforming experience." (Kolb, 1984, p.41) Learning theory suggests a four-stage learning process where one captures experience, both concrete experience and the abstract conceptualization of it, and then uses it as a guide to create new experiences through reflective observation and active experimentation (Kolb, Boyatzis, & Mainemelis, 2000).

Experiential learning techniques used in library schools have included practice-based assignments, projects, or activities based within instruction, service learning, and internship. Practice-based assignments, projects, or activities are designed to emulate actual real-life work experience through development of real-life solutions that are applicable to real-life problems. In the process, students can gain experience with tools used in the field while accomplishing class work. Service learning is more geared towards enhancing students' civic engagement and appreciation of communities that they will serve by applying classroom instruction to a community need and working with a community agency to accomplish it (Ball, 2008; Peterson, 2009). Internship provides a more comprehensive experience when compared to the other experiential learning methods for the student. In internship, students immerse themselves into daily routines of an information organization where they can experience the professional world, observe a variety of role models, and put the theory and academic rigor into practice.

The studies focused on LIS curriculum and the role of practice-based training in education of future librarians often use the term "internship" interchangeably with "field experience," "field work," or "practicum." A review of ALA-accredited schools' curricula revealed a few more terms: "professional field experience," "professional experience," and "clinical experience." Coleman's definition of internship appears to capture its true essence as "a relatively short-term, professionally supervised work experience offered as part of the school's curriculum and taken during the academic sequence [of course work]." (Coleman, 1989, p.22) The internship is typically completed in one library or information agency for the total experience. Although Coleman goes on to note that the student does not receive compensation in the form salary or wage, some institutions pay students an internship stipend.

The requirement of an internship in LIS curriculum has been variable over the years. In 1975, internship was available to students in 20 library schools out of 65 ALA-accredited library schools in the United States and Canada (31%) while it was required in only four schools (6%) (Grogan, 2007). In the late 1980s, more schools, 55 out of 59 of the ALA-accredited library schools or 93%, offered internship as an option to their students but still, at that time, only six (10%) required it for degree completion (Coleman, 1989). More recently, Hall

(2009) found that the number of schools that require practicum had increased to nine (16%). In an informal survey taken at the time of writing this paper, all but two out of 58 ALA-accredited schools offer an internship course in their curricula but only ten schools (17%) include the course as a degree requirement. In contrast, internship is often required for school library media students in ALA-accredited schools with 25 schools (43%) requiring internship for the students in that program.

Students who participate in internships often use a physical site to meet the requirements for the experience. As LIS education has become more online-oriented, now students can also gain real-life experience and put the theoretical knowledge acquired at school into practice and apply skills without setting foot at a physical site. In addition, the internship iitself may be a completely online environment, e.g., the Internet Public Library has been used as a practicum site. Therefore, an internship experience can be completed virtually or blended. According to the 2010 Association for Library and Information Science Education (ALISE) statistics, over 70% of the courses offered in ALA-accredited schools are online. One drawback of online internships may be a sense of distance from the work and the people, however, regardless of internship mode, students may feel isolated as they are assigned to various places including international sites. In such cases, an online meeting place may be incorporated to support these students (Macchia & Freedman, 2004).

As Coleman (1989) noted, internships serve as a critical process through which students can gain an invaluable real-life experience, achieve a better understanding of the profession, link theory and practice, and apply skills to real-life problems to produce sound solutions. It enhances one's sense of commitment to the community as well as his/her sense of confidence. It also enables future LIS professionals to make a gentle entry to the field and network with their future colleagues. Further, it provides an excellent opportunity for LIS schools to reassess and align their curricula to current practice and trends.

# CONCEPTS OF INTERNSHIPS FOR THE NEW INFORMATION SOCIETY: THE FOUR I's

Internships for the New Information Society are able to provide LIS students not only with more opportunities but with richer learning experiences. These are made possible with the availability and affordability of information and communication technologies (ICTs) that ensure that students are not limited by geography and that allow observation in real-time or to record it for later review, and by the use of enhanced pedagogical strategies to triage and provide students insights into their learning from professionals, instructors as well as students themselves. Internships for the New Information Society need to consider four Is: international and interdisciplinary in order to expand beyond the local and disciplinary, and intentional and interconnected to ensure that they have a clear focus on their purpose, and the role of participants in the learning process. These Is (Intentional, Interconnected, Interdisciplinary and International) guide an approach to internships that is appropriate for now and the future as it takes a conceptual approach to the various questions one has of internships as an experiential learning method.

## What is internship in the new information society?

Internship in the new information society will continue to emphasize professional skill development, that is, learning about professional practice. As noted earlier, internships serve as a critical process through which students can gain an invaluable real-life experience, achieve a better understanding of the profession, link theory and practice, and apply skills to real-life problems to produce sound solutions (Coleman, 1989). **Intentionality** of the

internships needs to be determined by all those involved to ensure that goals of the internship are met.

In determining intentionality the question to be asked needs to focus on purpose, that is, whether internships should mainly focus on professional skills development or consider additional or alternative opportunities such as community engagement and research. The benefit of expanding professional training to include community engagement and research, when appropriate, is that it enables internships to focus not only on practice in isolation but to question who it benefits and on gathering evidence or data that will enhance practice itself. The focus on community and research addresses Wiegand's (1999) concern that the library and information profession has tunnel vision and blind spots by being library(institutional)centric rather than user-centric in its practice and research. The focus on research will enable those entering the profession with new eyes to not just learn about how things are done or have worked, but allow past and current practices to be examined and/or new evidence to be considered in improving service or operations. The implications of expanding professional training to connect it to community and research, when appropriate, are that depending on the interests of the student and/or LIS program, opportunities exist to guide students to "intentionally" design/select their internship experience(s) to both learn and understand community information needs, and/or to both learn and shape professional practice.

# Why engage in internship in the new information society?

Interconnecting theory with practice is a key objective and benefit of internship as experiential learning. Internship is not just learning about practice through applying skills, but should engage praxis, that is, to understand and engage theory in skill development. We additionally propose that interconnectivity is about the network effects of those participating in the internship experience. Traditionally, internships have involved the student and professional (as supervisor) as the main players, with a more hands-off role of grading by the faculty supervisor and logistics (placement and coordination) by an internship coordinator. The network effects of interconnectivity are more salient when there is intentional and active participation by all players resulting in stronger relationships, communication and knowledge development. Through intentional communication stronger relationships are developed among those on the practice side who learn more about the educational intent, receiving support and theoretical knowledge from the instructor, those on the instruction side who learn about organizational realities of practice, and those students who serve as a bridge in the learning process but also contribute new insights. Interns are not just the messenger or gatekeeper between practice and academia, or in some cases, the classroom, because interns who also participate in an internship class can learn from each other and find solutions together to issues encountered at their respective internship sites. Another network effect is social capital gained by all, for example, by the student who will gain knowledge about the hiring practices of the internship site and similar organizations, and who will have access to the professional ties of the internship supervisor and others at site. Although many definitions exist for social capital, all participants in the internship experience will benefit "on the individual level, [as] social capital refers to one's access to resources through reciprocal social networks" (Ciabattari, 2007, p. 35).

The implications for practice are that internships are not only to have someone who will work and learn at a particular site but that the benefits come from the relationships developed and the knowledge and connections that all participants can share and enrich their individual roles.

## Where do internships take place in the new information society?

Internships have been conducted in places that could be reached physically by the student and in some cases both the student and faculty supervisor who might need to observe in real time. However, ICTs and the increase in online education open up opportunities for **virtual and international** internships, and some contexts, such as digital library projects and virtual reference, lend themselves to virtual internships. Ease of travel, availability of ICTs, and international initiatives, such as the International and Comparative Librarianship Communitas http://www.lisuncg.edu/lis, mean that the **internationalization** of internships, conducted virtually or physically, are feasible and doable. Internships sites are more easily identified, translation tools are better in order to enhance communication, and for those students physically going to another country, they can be observed real time (synchronously) using videochat, corrections made using "bug-in-the-ear" coaching (Rock et al, 2009), or asynchronously with the students video recording themselves for later assessment.

Although there are limitations for regions in the world that are not digitally connected, the opportunity is present for the development of global librarianship with the participation from librarians in training who can intern anywhere and anytime, with new partners, in new contexts, and can take advantage of their multilingual skills.

# How are internships conducted in the new information society?

Internships need to be **collaborative**, tapping the **interdisciplinary knowledge** of the diverse participants and contexts which should be intentionally engaged in the learning process applied. Learning theory needs to be applied as part of the internship experience to ensure that it is not just modeling and perfecting practice/skills but goals and learning are articulated, reflection takes place, and every participant's interdisciplinary contributions are explicit and intentional. Although a specific learning theory is not proposed here, many exist in the education literature that engage the various elements of goal setting, articulation of experience, reflection, formative and summative assessments, communication, knowledge sharing and problem solving. The implication of this collaborative, interdisciplinary approach is that learning is an intentional multi-way communication and interconnected learning process of instructor, professional/community supervisor and student.

## Who engages in internships in the new information society?

Students, faculty, professionals and/or community members are active participants in order that all who can potentially benefit also actively contribute. If internships continue to just involve professional supervisor and student, the benefits will be limited to only the two, with the student having to serve in the additional role of messenger or gatekeeper between the profession and academia, whereby messages may not be communicated and any gaps between theory and practice are left unaddressed or left up for misinterpretation. A richer experience is had with multiple participants **interconnecting** and sharing their knowledge from their vantage point. This is especially the case for **international** internships of which there have been fewer in the past and is an area rich for exploration and development.

## THE FOUR I'S IN PRACTICE - CASE STUDIES

Some examples of internships can be used to provide perspective on the issues. The authors will introduce their preliminary work on an expansive model of internship called the Teach-Library project, describe their work with internships done in online programs, and then speculate on the role of international internships.

## Teach-Library Project

The Teach-Library Project was designed with many of the concepts described above. In the past, models of internship were built on the assumption that the locus of learning would primarily be with the student while expertise and knowledge were within the faculty member and the practitioner. These models were built on a one-way flow primarily from the practitioner site supervisor to the student with the faculty member serving as a check over the process and providing conceptual knowledge where necessary. The teach-library model, however, is built on a concept where all parties in the internship are learners. Each may contribute to the growth of knowledge at any time in the process.

Internships can foster learning that flows from a student to the practitioner, unintentionally, especially in technology rich arenas. For instance, in a more traditional internship supervised by one of the authors this past year, the student was assigned to work on a guide to using Libguides (a proprietary web-based system for presenting resource lists on particular topics). He wrote this guide and then taught the Head of Reference at his internship site how to create her own guide and wrote a manual for their implementation at the library. Bringing his more up-to-date technology skills to bear on the problem allowed the student to assume the role of teacher and expert to the site supervisor.

Intentionality, as embedded in the teach-library model, would allow the practitioner to plan for this learning experience to be a part of what would happen during the internship. The site supervisor would be encouraged to reflect on what they hope to gain from the student, not only in work product but in new learning. With many library managers being 20 or more years away from their own time in an LIS classroom, there is much that they could learn from people closer to the digital native generation and with more comfort with emerging technologies. Intentionality should be designed into the fabric of the internship experiences.

The role of LIS faculty is especially altered under the new model. Because faculty are no longer practicing, they are likely to lose their facility with the skills that underlie librarianship. This is assuming, of course, that the faculty members have a background rooted in LIS practice, a diminishing assumption in the age of the growing movement toward I-schools (see http://www.ischools.org/ for more information) and the broadening of interdisciplinarity of Library and Information Science education. Therefore, the faculty member in charge of the internship must be willing to learn from the practitioner and the student as they negotiate the application of new skills to new work requirements and initiatives. As workplaces are in constant flux even the faculty member with prior experience in library organizations would need to learn about what constitutes current practice.

Even further, a faculty member may have to expand into areas that have not even been part of their academic training. Interdisciplinarity across and between LIS organizations such as libraries, museums, and archives is growing. For instance, librarians in small library institutions are taking on archiving duties or the museum-like roles involved in curating objects. Even if these are not assigned to them specifically, their work in digital projects may require a working knowledge of these disciplines. No faculty member could have a deep practical experience of all of these areas, so once again, she or he must put themselves in the role of student. In most cases, they have theoretical knowledge, much broader than the practitioner, but an argument can be made for a much stronger tie to be made by having the faculty member actually participating in the training given to the student at the internship site.

A pilot of the model was implemented as the Teach/Library project, a joint venture of the University Libraries at The University of North Carolina at Greensboro and the Library and Information Studies (LIS) Department. Money was committed to the project in the form of tuition waiversfrom the LIS program and salary from the University Libraries. Intentionality was evident as there was a competition in the Libraries for one of two internship positions. In the end, the projects proposed by the Archives and the Distance Learning librarian were selected.

Students also competed for the spots by submitting resumes and cover letters outlining their intentions for wanting to participate. This was in marked contrast to the usual practice in the LIS department where students worked to find internship placements on their own by contacting compatible work sites, a process that might lead to less intentional matching between site and student. The students were also encouraged to enroll in a particular class that would compliment the internship experience. For instance, the student chosen for the Archives experience was also enrolled in LIS 505, the Archives class.

Faculty member involvement was less intentional, however. It had been hoped that the faculty member with the most expertise in each of the chosen departments and the one teaching the class linked to each experience would oversee the projects separately. But this proved impossible. The Archives professor was an adjunct with limited time availability and there was no class linked with projects envisioned by the Distance Learning Librarian. In the end, interest in the Teach-Library model implementation as research was the driving force for the faculty member.

Interdisciplinarity was obvious in the Archives internship and proved the source of some tension. The archives staff emphasized perfecting the practice of archives rather than utilizing the student's training in library work focused on working with people and creating innovative solutions, to reconsider and potentially enhance current practice. The situation might have been exacerbated by the lack of understanding of these salient institutional differences on the part of the faculty member. A resulting communication break down might have been avoided had the faculty member been immersed in the training, which was originally planned but did not materialize. Another aspect was that the archives practitioner/supervisor was less mindful of his learning about how to be a supervisor and engage with the positive aspects that librarianship might bring to the archives workplace. As the teach-library model emphasizes, all parties have to be willing to engage as students in the process.

Interconnectedness was the theme of the second internship, the Distance Learning Project. Both the supervisor and the student were interested in deep learning from the experience. The student brought training in the field of instructional technology and the supervisor brought years of experience in supervision and thinking about the application of instructional technology to library work. The faculty member had more frequent interaction with this internship participants as well as being more familiarized with the professional area of the internship. A further example of inteconnectedness is that some internship experiences can lead to independent research by the student that can be used for coursework and further inform the field. In a separate internship, an intern working with a business librarian and a business faculty member led to a research study of collaboration between academic library subject liaisons and content experts that was published. Such research has the potential for further studies and implications for practice in other areas beyond business reference/literacy instruction.

## Online and International Examples

As LIS schools adopt the online medium for content delivery and education of future librarians, and content information organizations that serve their communities become more accessible via the Internet, students can also complete their internship experiences virtually or in a blended fashion in addition to the traditional form of internship which is carried out at a physical site. Further, in the context of increased global connectivity, interdependency, and shared goals and vision in the profession, LIS students can also gain practical work experience and apply and transform their skills at international sites and some LIS schools facilitate this process.

The concept of virtual internship may sound relatively new but the underlying idea of carrying out tasks and gaining experience at a distance is not. As organizations and people have become more interconnected because of increased access to broadband internet and high-speed computing devices, telecommuting is becoming part of the workplace. According to the latest American Community Survey data, 5.7 million or 4.1% of the US employee workforce work from home (U.S. Census Bureau, 2009).

A European Union funded project, EU-VIP (Enterprise - University Virtual Placement), aims at placing students virtually at various organizations across national boundaries so that they can enhance their skills and competencies at an international level while not leaving their country of residence (Vriens, Beeck, Gruyter, & Petegam, 2010). The internship process is completely virtual as students are interviewed by host sites via web/video conferencing and initial trainings are provided online before students are placed at their respective sites.

The Internet Public Library (IPL) in the US provides LIS students a virtual internship opportunity with an international component as the library serves beyond the borders of the US. IPL recruits LIS students to serve as Digital Reference Librarian (Volunteering for the IPL, n.d.). Students are responsible for the daily functioning of the library's email reference service while mostly helping an international audience of youth and teens with their research. Several LIS students at Valdosta State University successfully fulfilled requirements of their internship experience at IPL a few years ago. Since the Valdosta LIS program is taught completely online, virtual internship experience was a relatively seamless process for students.

Currently, one of the authors of this paper is working with another colleague at Valdosta State University to initiate another virtual internship as part of a state-wide digital repository initiative, the GALILEO Knowledge Repository. Selected students will be given training via online conferencing and this training will be supplemented with a set of electronic readings and tutorials. Upon completing the training, students will be placed at participating institutions and will start engaging in daily functioning of the host institutions digital repositories. Students will complete their tasks virtually and maintain their communications with the host institution electronically or via phone. Students will also stay in touch with the faculty member who is supervising the internship to get support for questions or concerns. However, a sense of isolation may be an issue for some students as they feel more disconnected from their peers and faculty (Macciha & Freedman, 2004). Creating an environment to maintain constant contact among students and the faculty is important to overcome this issue.

When engaging in international and virtual internships, learning about the cultures of the organization and community, and the foundations of LIS where one will serve is important

for both students and instructors, and likewise, for international and virtual internship professional/community supervisors to understand the training program and culture of the LIS program sending the intern. The success of international internships will be based not only on knowledge of the language appropriate for the internship but learning about professional practice that is based on preparation by all which includes cultural and operational knowledge of the sites, LIS programs of the interns, and professional development in the country of the internship.

### **GUIDELINES FOR 4 I's INTERSHIPS**

Guidelines to develop LIS internships need to include information for the three major participants so everyone understands their role and responsibilities. They are:

- a) How-to with students: application and placement, learning process, expected and actual skills learned, assessment and performance monitoring, assessment of instructor and internship supervisor, communication, assignments (evidence of learning)
- b) How-to with hosting LIS institutions: finding and working with new and ongoing institutions; placement, assessment of students, assessment of institutions, learning process, communication
- c) How-to with hosting community/professional organizations: role in supervision and learning process of organizations, orientation, assessment of students, assessment of organizations, communication, stipend (as appropriate)

For this paper we provide some basic guidelines for each stakeholder group but many others could be added as LIS internship guidelines are developed by an LIS program.

#### Students

Students should have completed the basic, foundational, theoretical knowledge in the targeted internship area. Some programs may expect more coursework. Keeping track of their hours by either self report or by signing in at the site. Cultural context (internship site and user community) should be studied before the beginning of the experience. Examples are international students here in U.S., or U.S. students in other cultures.

#### LIS Institutions

A document that outlines the expectations and roles of student, faculty supervisor, and site supervisor, internship coordinator, and in some cases the internship site and community, should be constructed. Some roles could be combined in one person. Prior description of the internship by the site is encouraged so that students know what they will be doing, but there is a role for negotiation as each student, site supervisor (plus others at site), and faculty supervisor will be designing a unique experience.

Sites should be identified, assessed for appropriateness, and some sort of training should be provided to all parties. The training should include the learning process, communication, expectations for completion, and formative and summative assessments. Alternatively, students can propose a site and then the coordinator will work with the supervisor to clarify details. A well-maintained list should be created and publicly available for future. Competition should be fostered; even unpaid internships can be competitive for prestigious sites. The LIS program should determine a method for keeping the list up-to-date and determining the suitability of the internship site. Continuous communication with the sites

should be maintained by the coordinator. Contact people should be identified - may be an administrator, not the direct supervisor.

Our strongest recommendation is that internships be required. The number of hours is a point of discussion. There are many models, although in the United States there is a practice of 120 hours/3 credit hours. A different focus, especially in online and international venues, might be to measure tasks completed rather than number of hours.

# **Hosting Institutions**

A professionally-trained site supervisor is recommended but the exact qualifications would vary depending on the site. The internship coordinator could serve as the site supervisor role for virtual projects and for community organizations that do not have professionally trained personnel but want to provide an opportunity for students to learn.

Paid internships are encouraged. As the Teach/Library project showed there is a stronger motivation on the student's part to fully engage in the institution and the organization is rewarded with more effectively completed projects.

There should be complete assessment from each party. Reflection should be encouraged throughout the internship or another form of formative assessment, and then a structured final report as a form of summative assessment. As appropriate in the learning process, sharing of assessments help to identify issues, gaps and successes in the experiential learning opportunity. Students need a forum to address problems and propose solutions. Some institutions may choose to structure their final assessments, sharing in a more constructive manner. Pass/fail is recommended as a grading scheme, or if paid, an assessment that is more like a job review may be used as it would be treated more like a job.

Liability issues have recently come into play in the United State, for example safety and privacy of data, and criminal background checks have been discussed. These should be determined by the site and adhered to by the internship coordinator.

### **CONCLUSION**

ICTs and other resources provide the tools that have created greater access and broader internship opportunities. However, internships in LIS in the new information society should focus on contexts, people, communication, collaboration and learning in order to be successful. By considering the four Is (Intentional, Interconnected, Interdisciplinary and International), internships now and in the future have a conceptual framework for greater success and enriched learning.

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