Abstract: This paper reports on a study of current teaching practices and overall instruction-related experiences among academic instructional librarians in Atlantic Canada. Based on in-depth personal interviews with teaching librarians at six university campuses throughout New Brunswick, Nova Scotia, and Newfoundland, the study also reveals common themes among the librarians’ views and attitudes on information literacy and academic teaching in general. The study finds librarians to be largely self-reflective, student-focused, and pedagogically competent teachers who are passionate believers in the core role of information literacy in academic libraries. Specific details are reported on the librarians’ general instructional objectives, their view of the librarian’s role in the learning process, their specific teaching techniques, and their ideas on student assessment. Insight is also provided into the librarians’ professional relationships with key stakeholders in information literacy instruction: head librarians, other members of university administration, and departmental teaching faculty. In addition, the librarians’ main day-to-day challenges and future predictions for library instruction are described.

Résumé: Cet article présente une étude sur les pratiques courantes et l’ensemble des expériences reliées à l’enseignement des bibliothécaires enseignants des provinces atlantiques du Canada. Basée sur des entrevues en profondeur effectuées avec des bibliothécaires enseignants de six campus universitaires du Nouveau-Brunswick, de la Nouvelle-Écosse et de Terre-Neuve, cette étude dévoile également les thèmes communs parmi les perspectives et les attitudes des bibliothécaires au sujet de la culture informationnelle et de l’enseignement universitaire en général. Les résultats
de l'étude indiquent que les bibliothécaires sont largement autoréflexifs, axés sur les besoins des étudiants, et constituent des professeurs pédagogiquement compétents qui croient passionnément au rôle essentiel de la culture informationnelle des bibliothèques universitaires. Des détails spécifiques concernant les objectifs généraux d'enseignement des bibliothécaires, leurs points de vue sur le rôle du bibliothécaire dans le processus d'apprentissage, leurs techniques spécifiques d'enseignement et leurs idées sur l'appréciation des étudiants sont présentés. Cette étude offre également un aperçu des relations professionnelles des bibliothécaires avec les intervenants-clés de l'enseignement de la culture informationnelle : bibliothécaires en chef, autres membres de l'administration universitaire et corps enseignant départemental. En outre, les défis quotidiens des bibliothécaires, de même que les prévisions sur l'enseignement bibliothéconomique sont décrits.

As academic librarians well know, the information universe is constantly expanding. In fact, according to a recent University of California-Berkeley study, the world's recorded information is doubling every three years (Lyman and Varian 2003). Like other citizens of the information age, university students often become lost in this growing information landscape, struggling in their attempts to effectively access quality information for research purposes. At the same time, many Canadian academic libraries have been coping with major budgetary pressures in recent years and they have not always adequately funded potential growth areas such as information literacy instruction. This is perhaps especially true of those libraries on campuses in relatively underpopulated regions, such as the Atlantic provinces.

Within this context of information expansion and budgetary restriction, academic instructional librarians are attempting to teach their students the information literacy skills they need in order to travel the information terrain on their own. While instructional librarians throughout Canada have been actively sharing their experiences among themselves for many years at professional conferences, few of their voices have been recorded in the academic or professional literature. A recently published, extensive review of the international literature on information literacy makes little mention of Canada (Rader 2002), perhaps because recorded research in this country has been mainly limited to two national surveys conducted in the 1990s (Julien and Boon 2003). In order to help address this gap, an interview-based study was conducted in the summer of 2003 in an attempt to capture in detail the views and experiences of some of Atlantic Canada’s academic instructional librarians.
How are these librarians coping day-to-day? What are their overall experiences and current teaching practices? What are their general ideas on, and attitudes towards, information literacy instruction? How supportive are their relationships with key stakeholders, such as other teaching faculty and academic administrators? What challenges do they face? These are just some of the many questions that this study attempts to help answer.

Given the relatively small scope of this study, its results are not intended to be generalizable. Rather, by providing a summary of the commonalities among interview responses, it provides an in-depth, qualitative status report on information literacy instruction in a representative sample of Atlantic Canadian academic libraries. In doing so, this study updates and adds regional depth to the two earlier national studies on academic information literacy conducted by Julien (Julien and Leckie 1997; Julien 2000).

Study group and research method

Instructional librarians at six selected academic libraries from 3 of Atlantic Canada’s 15 universities were approached for this study. Selected to represent the diverse types of academic libraries in the area, these six libraries were located at campuses throughout New Brunswick, Nova Scotia, and Newfoundland. The libraries ranged in size from a large, comprehensive main library, with approximately 10 instructional librarians, to a small technical library branch, with only one librarian on staff.

The names of instructional librarians were obtained from each library’s Web site, and the accuracy of the lists was later confirmed with the instructional coordinators or department heads at each site. Every available instructional librarian at each of the six libraries was invited to participate voluntarily in the study. In total, 31 librarians were e-mailed an invitation. The initial response rate was very high at 77%, but several librarians later sent regrets, due to their unavailability during the interviewing period. In the end, a participation rate of 58% was achieved, and 18 instructional librarians were interviewed in person and at length about their current information literacy teaching practices. The level of the librarians’ experience ranged widely, from recent library school graduates through those with a decade or more of academic library teaching experience to a recent retiree with over 30 years experience in many different areas of academic librarianship.
The universities from which participants were chosen for this study represent a wide range of degree-granting institutions with at least four-year undergraduate programs. These institutions ranged from a small, primarily undergraduate liberal arts and general sciences university, with approximately 60 faculty and 1,200 students, to a relatively large, comprehensive university, with nearly 1,000 tenured faculty and 17,000 students, including many enrolled in a full range of graduate-level programs. Campuses included those in both urban and rural areas.

Each library in the study had its own unique instruction program, reflecting the individual nature of its campus. A few of the programs were highly integrated within the curricula of some of the academic faculties and departments that they served. However, many of the programs relied mainly on ad hoc, single-session, one-shot (or perhaps two-shot), course-specific lectures, presentations, or workshops, which were usually delivered at the specific request of individual teaching faculty.

Two of the programs were either wholly or partially centrally administered, with an instruction coordinator primarily responsible for faculty contact and scheduling. These coordinators were not members of senior library administration but rather were regular public-service librarians with coordinating responsibility. The other programs in the study were more distributed, with individual subject-specialist librarians responsible for promoting, scheduling, and delivering instruction in specific subject areas. None of the libraries had a separate instruction department or budget.

Even though instruction was a significant part of the workload of almost every librarian interviewed, they all (including the designated instruction coordinators) had significant additional responsibilities, including collection development, Web site management, reference service, and administration. Librarians reported that instruction accounted for between 30 and 75% of their overall workload. The number of individual instruction sessions taught by each librarian ranged from 10 to 50 per year, the average being 23 annually.

Each librarian was asked the same list of 29 questions, which were grouped under seven headings: Background, Faculty and Administration Relationships, Instructional Objectives, Librarian Roles, Association of College and Research Libraries (ACRL) Standards, Society for Teaching and Learning in Higher Education (STLHE) Principles, and Other Comments (see appendix). Many of the questions were open-ended, allowing librarians to elaborate on issues
important to them. Some questions asked librarians to rank items, providing quantifiable data for some aspects of the study. Instruction coordinators were asked an additional 15 questions about the overall instruction program, its history and resources.

Digital audiotapes were made of each interview, and these recordings were later transcribed with the aid of transcription software and equipment. Data analysis consisted of the systematic reading and re-reading of this qualitative data. Through this analysis, several common themes readily emerged. Quantitative data were also obtained and processed for questions that had required participants to rank items.

**Study results**

Despite some significant variations among the libraries in size, practice, and the administration of instruction, several obvious commonalities emerged from the interviews. Specifically, this article describes the passionate, student-focused, and self-reflective attitude of the majority of the librarians interviewed. It looks at commonalities in their pedagogical competency and training, at their common thoughts on their own educational roles, especially in relation to individualized and active student learning, as well as at shared ideas on student assessment. Common themes are also revealed in the librarians' professional relationships with other teaching faculty, with head university librarians, and with other university administrators. Finally, the librarians' similar day-to-day challenges and future predictions are described.

**Passionate about teaching**

One of the most significant commonalities found among the librarians relates to their overall attitude. With only one exception, the librarians expressed significant enthusiasm for information literacy instruction. Not only did they consider teaching to be a core activity of their libraries, and in many cases their first personal priority, but they expressed a whole-hearted belief in the necessity and importance of what they did. Simply put, for many of them, information literacy teaching was a passion.

Stemming from their enthusiasm, many of the librarians interviewed had a great deal to say. In fact, most of the personal interviews lasted for 60 to 90 minutes. All the librarians appeared to welcome the opportunity to articulate their own thoughts on instruction. For many, it seemed an
almost cathartic experience. "It is quite useful for me to express some of what is going on in my head," pointed out one librarian. This experience was similar to that found by Adler in a similar study of librarians conducted recently in the greater New York City area (2003). Like these librarians, the librarians in this current study also felt somewhat unappreciated. But most of them remained positive, not revealing much discouragement or frustration about this during the interviews. Rather, they simply seemed to express an excitement over the opportunity to discuss a primary professional interest.

Instruction a core function

Perhaps the most fundamental underlying theme that emerged from the interviews was the common view that information literacy instruction is a core library function. "It is part and parcel of our jobs," stated one liberal arts librarian. A colleague at the same campus seemed to continue her thought: "Librarians [do not teach] on the side. It's part of our job." Another librarian went further: "Instruction is what our job is all about in an academic library," she concluded. Still another librarian, recently retired after more than 30 years of professional library experience, philosophically stated that, "ultimately, all services in the library are public services and have only one reason to exist—to allow the patron to acquire the information or data they need."

Student-focused approach

Most of the librarians demonstrated a student-focused approach to their jobs as university teachers. When asked to reflect on the STLHE Ethical Principles in University Teaching (Murray et al. 1996), many of those interviewed immediately related to the fourth principle listed, which states that "the over-riding responsibility of the teacher is to contribute to the intellectual development of the student." The first librarian interviewed, speaking as if she felt she were stating the obvious, pointed out simply that "we're here for the students"—a succinct sentiment often restated in later interviews, in phrases such as "student development is priority one."

Self-reflection

Self-reflection is widely assumed to be a key to successful teaching and learning, and much education literature rests on this very assumption.
Higher education and spiritual guru Parker Palmer states that "good teaching comes from the identity and integrity of the teacher," and he encourages academic instructors to look inwardly at themselves as teachers and individuals (1998). Many of the librarians interviewed demonstrated that such self-reflection is common practice for them. "Teaching is... an art," stated one experienced librarian, who went on to elaborate, "It's something you always work on. I'm always trying to improve. I'm still, in some situations, scared [but] I think anything is successful if you're willing to stop and look at it, and you're willing to make it better... It's just thinking about it." Another young librarian quipped, "I'm not perfect. I try to be, but I'm not there yet." Yet another admitted, "I'm always questioning myself. I think I learn every day."

**Pedagogical competence**

The librarians were asked how confident they felt about both their subject knowledge and their pedagogical competence. Every librarian interviewed expressed confidence in his or her information literacy subject knowledge. "I always feel much more competent than anybody else in the room," explained one instruction coordinator, "more competent than the students, more competent than the faculty member. I'm the expert in the room when it comes to content."

On the other hand, most of the librarians expressed a lack of confidence in their teaching competency. Despite this, however, their comments indicated that they did actually follow certain accepted pedagogical principles. According to STLHE,

a pedagogically competent teacher communicates the objectives of the course to students, is aware of alternative instructional methods or strategies, and selects methods of instruction that, according to research evidence (including personal or self-reflective research), are effective in helping students to achieve the course objectives. (Murray 1996)

When asked if they articulated and shared session objectives with their students, every librarian said, in effect, that they did—even if they did not conceive of this act as the articulation of student-learning objectives. "When I teach a class," stated one librarian, "I tell students, 'This is where we're going.' I don't think of that as being any more than that." Another admitted, "I may not tell students an information literacy objective, but I always go into any class session and say, 'This is what we're going to do, this is why we're going to do it, and this is how we're going to do it.'"
Similarly, many of the librarians interviewed also showed that they followed the STLHE pedagogy principle of being aware of various instructional methods and of selecting appropriate methods for specific classes. Again, however, many of them did not deem this practice necessarily to be evidence of pedagogical competence. “I don’t really feel very pedagogically competent,” admitted one librarian, who ironically went on to say

I have learned that certain things work well and certain things don’t work well. I know there are different types of learning and I try to appeal to the various types of learning—visual display, I talk about it, I give people hand-outs for those who want to go and digest it and read it on their own. I would like more interactivity and peer-to-peer learning.

It appears that, perhaps, pedagogical confidence, not competence, may be what was most lacking for this librarian and for many of the others interviewed.

**Informal teacher training**

Even though nearly every librarian interviewed gave evidence of pedagogical competency by pointing out that they shared session objectives with students and considered a variety of instructional methods, such competence did not come by way of formal teacher training. Of the 18 librarians interviewed, only 4 (22%) received instruction training during their library master's degree programs. Many pointed out that their library school did not offer an instruction or information literacy course. While somewhat surprising, especially since many of the librarians interviewed were relatively recent graduates, this situation is consistent with the fact that, in 2001, only four of Canada's seven Master in Library and Information Science (MLIS) programs even offered instruction as an elective (Julien and Boon 2002). Similarly, only three (17%) of the librarians interviewed had ever received any type of formal, non-library teacher training—from teacher's college, decades ago, in two cases, and as part of required academic teaching certification in the United Kingdom in the case of the third librarian. None of the librarians interviewed had completed a university teaching diploma, adult education certificate, or similar program.

The teacher training that the librarians had received came partly by way of various types of workshop and conference sessions related to teaching. Most of those interviewed had attended such workshops, including the
Workshop on Instruction in Library Use (WILU)—the annual, Canadian academic information literacy conference. However, many mentioned that their training came primarily on the job—from colleagues who taught, from reading about instruction techniques, and from trial and error.

Many of the librarians were not happy about their lack of formal teacher training. Several mentioned that they would like to have had the opportunity to take an instruction course in library school. “I think it should be a core [course in library school],” commented one instruction coordinator. This sentiment was repeated by another librarian, who argued that instruction is becoming a core activity of the profession and that therefore library schools need to produce librarians who are “better prepared, better able, and more interested in teaching.”

**Instructional objectives**

The librarians interviewed were provided with the same list of six instructional objectives used in earlier national surveys conducted by Julien and were asked to rank at least their top three overall current objectives (2000). A high degree of consensus was recorded on the top three objectives.

Some interesting differences exist between the results of previous national surveys and the results of this study. First, “teach[ing] students general research strategies” was listed as the most important objective

**Table 1: Instructional objectives**

<table>
<thead>
<tr>
<th>Objective</th>
<th>Occurrences within Top Three</th>
<th>Average Rank (1 = highest)</th>
<th>Occurrences as #1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Teach students general research strategies</td>
<td>15</td>
<td>1.8</td>
<td>7</td>
</tr>
<tr>
<td>Teach students how to find information in various sources</td>
<td>14</td>
<td>1.9</td>
<td>4</td>
</tr>
<tr>
<td>Teach students how to critically evaluate the quality and usefulness of information</td>
<td>12</td>
<td>1.9</td>
<td>4</td>
</tr>
<tr>
<td>Teach students how to locate materials in the library</td>
<td>5</td>
<td>2.4</td>
<td>1</td>
</tr>
<tr>
<td>Teach students how databases in general are structured</td>
<td>3</td>
<td>3.0</td>
<td>0</td>
</tr>
<tr>
<td>Teach awareness of technological innovations</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
</tbody>
</table>
by respondents in the current study, while "teach[ing] students how to find information in various sources" was given as the most important in both previous surveys. But perhaps the most significant difference between these interview results and the results of Julien's previous two studies was that, in this study, "teach[ing] students how to critically evaluate the quality and usefulness of information" was given as the third most important objective (nearly as important as the first two), ranking far higher than "locating materials in the library," which was the third most important objective in the Julien studies.

When they elaborated on their instructional objectives, many librarians in this study pointed out that they focused mainly on teaching transferrable skills, as opposed to teaching only the specifics of using a particular database, print collection, or other individual information resource. "It's not just about knowing how to search a library catalogue," said one instruction coordinator, "but it's about knowing how to think about information...to think about the information landscape and choose wisely."

Some of the librarians further pointed out that helping students to become independent users was an underlying, core objective of their teaching. One librarian elaborated on this idea, saying

For most of the students I deal with, I realize that I'm never going to get them again once they leave and enter their professional careers. Most of them are not going to have library instruction again in a formal way. So, I always try to keep in mind that I'm trying to create independent users, and I'm trying to assist them in understanding their research.

**View of librarians' educational role**

The librarians were asked to further articulate how they viewed their instructional role in the process of helping students develop information literacy skills. The levels of education framework developed by Kuhlthau was used to define five different categories of instruction—organizer, lecturer, instructor, tutor, and counsellor—each of which reflects different librarian roles in the education process (2004, 120–26). The librarians were asked to list, in ranked order, at least three educational roles that best described their current educational relationship with students.

Nearly all the librarians said that the instructor role best described the majority of their teaching. In this type of teaching, students in a specific
Table 2: Librarian educational roles

<table>
<thead>
<tr>
<th>Educational Role</th>
<th>Occurrences within Top Three</th>
<th>Average Rank (1 = highest)</th>
<th>Occurrences as #1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Instructor: Specific course-related assistance is offered with a particular source in response to a specific need.</td>
<td>15</td>
<td>1.1</td>
<td>14</td>
</tr>
<tr>
<td>Tutor: Patrons are helped, during a series of course-integrated encounters, to use a logical sequence of library sources.</td>
<td>14</td>
<td>2.4</td>
<td>1</td>
</tr>
<tr>
<td>Counselor: Long-term instruction and guidance is provided, which includes the interpretation of information.</td>
<td>8</td>
<td>2.5</td>
<td>1</td>
</tr>
<tr>
<td>Lecturer: General orientation is provided in a single session, as might be expected from the traditional beginning-of-term library tour.</td>
<td>6</td>
<td>2.0</td>
<td>1</td>
</tr>
<tr>
<td>Organizer: Actual face-to-face instruction is not provided, although point-of-use materials such as pathfinders are available for the self-sufficient library user.</td>
<td>4</td>
<td>2.5</td>
<td>0</td>
</tr>
</tbody>
</table>

course are taught about a particular information source, or several sources, in response to a specific course assignment. This may be done in a one-time single-class session by the librarian, or in a number of independent single sessions. For example, the librarian may demonstrate the use of a catalogue in one class session, followed by a presentation on key indexes in a later session within the same course. The educational role second-most reflective of the librarians’ teaching was that of tutor, in which library instruction is more integrated throughout a course. In this teaching model, instruction is delivered in a successive series of sessions that present a logical sequence of information search strategies.

Although the counsellor role, involving long-term interaction with and guidance of students in identifying and interpreting information, was only the third-most-used mode of instruction, many librarians expressed a desire to move towards this model in the future. “I would like the long-term instruction and guidance,” explained one librarian. “I would like to have [an information literacy program] structured so that, throughout a student’s time at university, they were constantly getting some sort of
information resource at the appropriate time.” Several librarians also pointed out the importance and effectiveness of individualized instruction, which is implicit in the counsellor role.

**Individual instruction**

Most of the librarians considered the personal reference service that they provided to be part of their role as instructors. In the case of nine (50%) of the librarians, this service was provided at a central reference desk, while the other nine librarians primarily used their offices to meet with students. Several librarians mentioned that individual instruction was especially important as a follow-up when the only classroom instruction they were able to provide was the traditional, single 50-minute session. Many librarians considered the students’ discovery of the availability of individual follow-up help to be an important outcome of these short instruction sessions. Several librarians also pointed out that individual instruction seemed more effective for student learning. “They grasp much more when it is one-on-one because their individual project can get attention,” commented one librarian.

Another librarian, who also said she had recently begun doing a lot of individual instruction from her office, pointed out that this type of instruction is like the counsellor role described by Kuhlthau:

> Usually I’m not doing a whole lot of instruction, but rather guidance. Many of them actually know what they are doing. They just want to make sure they’re doing it right. The questions have turned from, “I don’t even know what I’m doing” to ‘I know that, but I just want to make sure I didn’t miss something.”

**Active learning and classroom interaction**

Many of the librarians discussed their use of active learning techniques. “I think it is important,” emphasized one librarian, “to try to get students involved.” Another librarian expressed the importance of the instructor’s being “interested in what students have to say.” She went on to discuss some of the active learning methods she uses: “Asking a question is not going to get any answers,” she pointed out, “especially in undergraduate [classes]. But if they work together on something, and report back, you get them talking without singling themselves out.”

Another librarian also spoke about being flexible and responsive with class content and about how it helps to facilitate student learning: “You have to
allow yourself to be vulnerable when you walk into the classroom. You have to open yourself up and see what happens. I think that students really respond to that. It creates the opportunity for students to see that you are there for them.”

**Assessment methods**

Perhaps one of the reasons behind the lack of pedagogical confidence mentioned earlier was that student-learning assessment was somewhat lacking at many of the libraries included in this study. In the absence of much data on what the students were actually learning in class, the librarians inevitably questioned the effectiveness of their instruction. While assessment techniques and approaches varied from library to library, only one library conducted general assessment of student learning throughout its entire instruction program. At one other library, instructional librarians were responsible for marking student assignments in one course that had an information literacy component.

However, most librarians interviewed did not objectively assess student learning at all but only solicited student reactions to instructional content, methods, and instructor effectiveness, typically using brief end-of-class student evaluation forms. One librarian, who worked at a very small, two-librarian branch library, pointed out that she assessed long-term student learning less formally: “You can track students’ progress on a small campus. You see them [in their first year] having no idea, [and later in their program] coming in and having quite a high level of skill, familiarity, and comfort.”

**Assessment concerns**

While there were differences among the approaches to assessment at the various libraries, one common theme emerged—a questioning of the appropriateness of current assessment techniques, along with a more general concern over the feasibility of assessing information literacy skills outside the wider subject curriculum. One librarian, who had just recently begun assessing student skills through a short questionnaire at the end of her classes, pointed out that her questionnaire might be an “artificial thing.” This concern was taken up by a librarian at another campus: “I have got mixed feelings on assessment,” she admitted. “I think there are different ways of doing it, without asking questions that are completely out-of-context or removed from what students are doing.”
One instruction coordinator went further, questioning the feasibility of testing conceptual versus practical information literacy skills. "I think that the most you can really test," she reflected,

is what your students have gathered at that moment from your class. You're not really testing if they are information literate. That's a much harder thing to test. Testing the conceptual skills, as opposed to the practical skills, is a much harder thing. And in a way, that is the most important part. That's information literacy as opposed to being able to operate a database.

Another librarian's comments followed a similar thread: "Assessing literature searching and information literacy competency is a really, really difficult thing to do," she said. "How do you assess a search strategy, when there isn't a right way and a wrong way of doing it?"

One librarian expressed the concern that, in the rush to develop assessment tools to prove the value of information literacy to other faculty members, librarians are artificially separating information literacy--skills development from the broader development of academic skills among students. "While [assessment] is important," she pointed out,

I'm concerned that it may shift focus away from the fact that it is part of the academic enterprise, and has to be understood within that whole environment. There is a danger of suggesting it is something that can be particularized and itemized, and once you've had this checklist, you've accomplished everything that falls under information literacy.

She concluded that "in rushing to come up with these measures of success, we forget the role of [information literacy] in the overall intellectual activity at the university."

Professional relationships

The librarians were asked how supportive they thought three important individuals or groups of individuals were of information literacy instruction: their university's head librarian or director, the teaching faculty members on their campus, and other members of the university administration, such as academic deans or vice-presidents.

Head librarians

With respect to their head librarian, most of the librarians said that while the director appeared somewhat supportive of instruction, this support
appeared to be limited. “I question that support,” said one librarian, “and whether it is as passionate as [mine].” Another long-time librarian pointed out the head librarian at her institution “ha[d] questioned it on more than one occasion, but despite that we’ve gone merrily on our way.” Yet another librarian indicated that the head librarian at her institution did not realize how much time is required for the preparation and delivery of instruction.

Several librarians went on to speculate that head librarians’ motives for supporting instruction were political rather than being based on a belief in the intrinsic value of information literacy. One librarian pointed out that her director was supportive of information literacy only for its potential end result—ensuring the library’s place at the centre of the university’s curriculum. Another librarian explained that instruction was something her director “point[ed] to and use[d] as a measure of the library’s importance to the university community.... So, instruction [was] supported and promoted by library administration, as long as it d[id] not require additional resources.” Indeed, it is interesting to note that instruction was not given a separate budget at any of the libraries in this study.

One long-time librarian explained her belief that, in her library, the lack of financial support from head librarians was because immediate and difficult financial decisions needed to be made, forcing them to focus on other areas, such as collection budgets:

University librarians have a lot on their mind trying to keep a budget going at all. Instruction librarians tend to be so committed that they don’t bug administrators because they just do the extra work. They know the reason why they exist. This is what they want to do. And if they don’t get another person, they just fill in the time, or they spread it among the clerical staff.

Other teaching faculty

Over the years, librarians have had a lot to say about their relationships with other teaching faculty (Julien and Given, 2002/03). Typically, librarians either praise their positive working relationships with faculty or complain about the negative attitudes of faculty towards the library. This contradiction was certainly evident in the responses of librarians in this study. “We have a lot of support from a few,” explained one librarian. A librarian at another campus described her relationship with teaching faculty as “hit and miss.” She went on to explain, “It’s always hot and cold for faculty. Either they are on our side and they want us in their classrooms and we cannot do enough for them, or they do not want to come near us,
and they do not think we are important, and they think they can teach it themselves.”

Several librarians pointed out that newer faculty, or those heavily involved in research, are the strongest supporters of information literacy instruction. The main reason given for the lack of support from some faculty is the dearth of available instructional time within the curriculum of individual courses or programs to accommodate information literacy content. “We do get verbal support from most of the faculty,” acknowledged one librarian who has heavily promoted instruction to faculty at her campus, “but we don’t get a lot of action. We get a lot of ‘that sounds like an excellent idea, we really should do this, but you know we don’t have the time.’”

Another experienced librarian speculated that this situation would not change soon:

I don’t think there will ever be a time when we don’t have to go out there and haul them in. It’s not like medical care. You haven’t a broken leg; therefore you don’t hurt. Even if [faculty] do think of it, they are not going to think it is more important than the class they are teaching. It takes one or two classes out of the limited time they have to teach . . . . It’s those who are committed to the student, and the students’ future, who see [the need for information literacy instruction] better than those who are committed only to their subject.

However, along with a concern over the lack of real support from faculty, many librarians expressed a concomitant concern about not being able to cope if their hopes for recognition of the value of library instruction were fully realized. Several librarians said that they did not promote instruction to any great extent because they already had full teaching workloads. “I’m not going after them,” admitted one instruction coordinator, “because we don’t have the time and resources to take on new things.”

University administration

Although some of the librarians interviewed were unable to gauge the level of support from university administrators beyond the library, several librarians had had enough contact with deans and other administrators to enable them to evaluate support from that level. In some cases, librarians were encouraged by positive relationships with administrators. “The deans and department chairs were involved right from the beginning,” explained one librarian, reflecting on a successful instruction program, “and I think that’s important to make it pervasive through a department or faculty.
You need to have that administrative support.” Another librarian spoke about a former dean, whose support for the teaching of research and writing skills within the curriculum made it easy for instruction in those skills to become integrated into that particular faculty.

However, according to other librarians interviewed, many deans and administrators did not show such support. “It’s at the bottom of their list, generally,” complained one librarian. Another suggested,

> Across Canada, information literacy has to become a priority at the university level, but at this point, our only connection is through the faculty. [We have to] build that, then hopefully we can sell it to higher administration . . . . To work, it has to be a partnership, university wide. It cannot be something that we are solely responsible for.

**Time and workload challenges**

When librarians were asked what challenges or barriers they faced as instructors, the challenge mentioned most often, without any specific prompting, was related to time—time available within the curriculum for information literacy instruction and time within the librarian’s overall workload for instruction preparation and delivery. Several librarians mentioned the great deal of effort required to make instruction interesting and effective, especially when it came to developing and carrying out active learning techniques.

One instruction coordinator pointed out that her main challenge was to determine how to expand the library’s reach without doubling librarians’ workloads. “I’ve given up on my previous answer of incorporating more Web-based instruction,” she concluded, citing the amount of time it had taken to initially create, and then revise, a new online tutorial in order to keep it current. “We need more librarians,” summed up another librarian.

**Future predictions**

The last question asked of the librarians was where they expected information literacy instruction to be in a few years, both at their local library and throughout the profession. The librarians waxed eloquent on this topic, with nearly every one of them coming to the same conclusion: They believed that there will be an even greater need for information literacy instruction at universities in the near future and that librarians need to continue to demonstrate that they are the specialists required
to address that need. However, there was a simultaneous concern over the lack of human resources to enable this to happen.

“I think [the quality of bibliographic research] will become poorer as the students who have grown up with nothing but Google come through,” concluded one librarian. Another librarian predicted that technological changes and a growing number of online resources would necessitate “a strong move towards more personal instruction” tailored to the very specific needs of individuals. However, several librarians pointed out that in order for this to happen they would need to continue to promote awareness on campus of their information literacy expertise. One librarian explained how they continued to do this at her library: “We spend a lot of time with students and faculty, saying, ‘You’re good, but we’re great. You may be able to go out there and find something in half an hour, but I’ll show you something in a few minutes, and will show you how to do it for the rest of your life.’”

“I think that historically there was a time when the library was seen by everybody as the centre of the institution,” concluded another librarian. “I think that maybe there was a movement away from that, [but] I think that, with the emergence of the information age and information literacy, we’re coming back to that.”

Concluding remarks

The librarians in this study demonstrated themselves to be eager, self-reflective teachers who considered their instructional role to be a central part of their work. Despite a lack of formal teacher training, they displayed a large degree of pedagogical competence, using standard teaching principles in their efforts to help university students learn general transferrable research skills. Although they made extensive use of active learning techniques in the classroom, many also relied on individualized instruction and desired to have an ongoing research-counselling relationship with their students. However, many of the librarians felt that they did not get adequate support from key stakeholders in the educational process: namely, their library directors, classroom instructors and professors, and university administration. And as a result of considerable time and workload challenges, they felt that they were unable to fully meet their instructional goals.
Yet despite these challenges, the librarians remained hopeful about their future teaching roles, several of them expressing the general belief that information literacy instruction can help to strengthen the library’s central place in the academy. Will this hopeful prediction be realized? If research continues to be at the heart of the liberal arts and the general sciences and evidence-based practice continues to be a foundation of the professions, while at the same time the world of information continues to grow, then the need for high rates of information literacy among university students can only increase. Will the library continue to be the campus conduit to information literacy? Certainly, the instructional librarians in this study had the desire to achieve this goal. But it does remain to be seen exactly how it will be achieved at Atlantic Canadian universities, as they struggle to prioritize varied services within budget constraints.

Need for future research and action

During this study, several areas for further research became evident. First of all, in order to be confident in the effectiveness of information literacy instruction, librarians in the region need additional scientific student assessment data. Such data may also be required in order to convince universities to take the information literacy levels of their students and graduates seriously. In recognition of this need for more assessment data, since the start of this study, several of the libraries have begun new assessment initiatives, including participation in the Association of Research Libraries’ project for the Standardized Assessment of Information Literacy Skills (SAILS).

Another area where further study and scholarly communication is needed concerns instructional librarians’ professional relationships on their campuses. Given the concerns of librarians in this study with the level of support for information literacy instruction from various stakeholder groups, it would be especially worthwhile to hear more from these groups directly: from library directors, other university administrators, and faculty members.

Finally, there is a need for other regional or case studies to be conducted on the current state of academic information literacy instruction in different areas of the country and for this information to be shared nationally. It would be useful to be able to compare the results of this study with the situation elsewhere.
While the instructional librarians in this study were hardworking and competent teachers who were passionate about what they do, many of them believed that academic administrators were largely pre-occupied with budgetary pressures, while teaching faculty were often primarily concerned with their individual subject areas. If this is true, then academic librarians represent the primary voice for information literacy instruction in academe and, by extension, are a key voice for information literacy within our wider communities. In the developing information society, there is a growing need for that voice to be heard.

Acknowledgement

Financial support for this study was provided by the University of New Brunswick and the Atlantic Provinces Library Association.

References


Appendix: Interview questions

Background

Please briefly explain the extent of your involvement with information literacy at your library by answering the following questions:

1. Please give your job title or current position.
2. What types of groups or classes of students do you normally teach? (e.g., whole library course(s), general workshops, course-specific or curriculum-integrated sessions, online tutorials, etc.)
3. Are there specific subjects or information literacy topics that you specialize in?
4. How many sessions do you normally teach per week? Per semester or year?
5. Do you participate in any coordination or administration of the instruction program at your library?
6. How long have you been involved with information literacy at your library?
7. Have you been involved with information literacy at another organization prior to your current position at this library?
8. Have you had any formal training in information literacy instruction? (e.g., during MLIS, post-degree courses, conferences/workshops, etc.)
9. Have you had any other formal education/teacher training? (e.g., education degree, university teaching diploma, adult education certificate, education courses, conferences/workshops, etc.)

Instruction coordinators

Program overview
1. What is the size of your campus? (number of full-time students and faculty)
2. Can you provide a brief overview of the information literacy program at your library? (e.g., student groups targeted, number of classes/groups per year, etc.)
3. Is information literacy part of a formal overall library mission statement?
4. Do you have formal written objectives for your instruction program?
5. Do you feel that the program is successful in meeting its objectives? (Do you do any formal assessment?)

**History**
1. How long has there been an instruction program at this library?
2. How has it evolved?
3. Do you feel the program is headed in the right direction? Why or why not?

**Resources**
1. Is the instruction program at your library funded via a specific budget allocation or through the budget of another department or division?
2. How many librarians or other staff are instructors?
3. Are librarians members of faculty?
4. Is there a specific teaching workload expected? (e.g., number of classes per week)
5. What assistance from support staff do you have?
6. What physical facilities do you use? (i.e., classrooms, labs, meeting rooms, etc.)
7. Overall, how well resourced is the instruction program? Are the funding, staffing and facilities adequate?

**Faculty and administration relationships**
1. Do you regularly have any teaching partnerships or other direct instructional relationships with non-library teaching faculty?
2. Do you feel that teaching faculty are generally supportive of your library’s instruction program?
3. Is there any way that the relationship between teaching librarians and other teaching faculty could be improved?
4. What sort of relationship does your information literacy program have with senior library administration? Do you feel the program is generally supported by senior library administration?
5. What sort of relationship does your program have with university administration outside the library? (e.g., deans, other directors, vice-presidents, etc.) Do you feel the program is generally supported by university administration?
Instructional objectives

1. Please rank your current instructional objectives in order of importance from 1 to 6, 1 being the most important:
   _____ Teach students how databases in general are structured
   _____ Teach awareness of technological innovations
   _____ Teach students general research strategies
   _____ Teach students how to find information in various sources
   _____ Teach students how to critically evaluate the quality and usefulness of information
   _____ Teach students how to locate materials in the library

2. If your library's instruction program has formal written objectives, how does your own teaching relate to those objectives?

3. Do you write student-learning objectives for each session you teach? Do you share those objectives with the class?

Librarian roles

1. Carol Kuhlthau has analysed the role of library instructors and has developed a framework for conceptualizing the relationship between the instructor and the student using the following five roles. Which roles do you think best reflect your instruction? Please rank the roles from 1 to 5, 1 being the most important or the role which most closely reflects your current role as an instructor:
   _____ Organizer: Actual instruction is not provided, although point-of-use materials such as pathfinders are available for the self-sufficient library user.
   _____ Lecturer: General orientation is provided, as might be expected from the traditional beginning-of-term library tour.
   _____ Instructor: Specific assistance is offered with a particular source in response to a specific need.
   _____ Tutor: Patrons are helped, during a series of encounters, to use a logical sequence of library sources.
   _____ Counsellor: Long-term instruction and guidance is provided, which includes the interpretation of information.

2. Are there any other terms that you can think of which more closely reflect your current instructional role?
ACRL standards

The following questions concern the Association of College and Research Libraries' (ACRL) Information Literacy Competency Standards for Higher Education:

1. Has your library’s information literacy program either formally or informally endorsed or adopted the Standards?

2. For each of the five standards, rank its importance in your current teaching from 1 to 5 (1 being the most important). If applicable, for each of the five standards also give an example of one specific instructional technique or teaching session that you use which addresses the student performance indicators or competencies involved.

   ____ Standard One: The information literate student determines the nature and extent of the information needed.

   ____ Standard Two: The information literate student accesses needed information effectively and efficiently.

   ____ Standard Three: The information literate student evaluates information and its sources critically and incorporates selected information into his or her knowledge base and value system.

   ____ Standard Four: The information literate student, individually or as a member of a group, uses information effectively to accomplish a specific purpose.

   ____ Standard Five: The information literate student understands many of the economic, legal, and social issues surrounding the use of information and accesses and uses information ethically and legally.

STLHE principles

The following questions concern the Society for Teaching and Learning in Higher Education’s (STLHE) Ethical Principles in University Teaching:

1. For each of the nine principles, rank its importance in your teaching from 1 to 9 (1 being the most important for your teaching currently):

   ____ Principle 1: Content competence—A university teacher maintains a high level of subject matter knowledge and ensures that
course content is current, accurate, representative, and appropriate to the position of the course within the student's program of studies.

Principle 2: Pedagogical competence—A pedagogically competent teacher communicates the objectives of the course to students, is aware of alternative instructional methods or strategies, and selects methods of instruction that, according to research evidence (including personal or self-reflective research), are effective in helping students to achieve the course objectives.

Principle 3: Dealing with sensitive topics—Topics that students are likely to find sensitive or discomforting are dealt with in an open, honest, and positive way.

Principle 4: Student development—The overriding responsibility of the teacher is to contribute to the intellectual development of the student, at least in the context of the teacher's own area of expertise, and to avoid actions such as exploitation and discrimination that detract from student development.

Principle 5: Dual relationships with students—To avoid conflict of interest, a teacher does not enter into dual-role relationships with students that are likely to detract from student development or lead to actual or perceived favouritism on the part of the teacher.

Principle 6: Confidentiality—Student grades, attendance records, and private communications are treated as confidential materials, and are released only with student consent, or for legitimate academic purposes, or if there are reasonable grounds for believing that releasing such information will be beneficial to the student or will prevent harm to others.

Principle 7: Respect for colleagues—A university teacher respects the dignity of her or his colleagues and works cooperatively with colleagues in the interest of fostering student development.

Principle 8: Valid assessment of students—Given the importance of assessment of student performance in university teaching and in students' lives and careers, instructors are responsible for taking adequate steps to ensure that assessment of students is valid, open, fair, and congruent with course objectives.
Principle 9: Respect for institution—In the interests of student development, a university teacher is aware of and respects the educational goals, policies, and standards of the institution in which he or she teaches.

2. Do you feel that your teaching is consistent with Principle 1 concerning content competence?

3. Do you feel that your teaching is consistent with Principle 2 concerning pedagogical competence?

4. Are there any other widely accepted professional guidelines, standards or principles that you formally or informally follow?

Other comments

1. Do you face any barriers as an instructor that have not already been mentioned?

2. This interview has focused mainly on five areas (faculty/administration relationships, objectives, roles, standards, and principles). Would you like to make any further comments on any of those five areas?

3. Do you have any other comments about instruction at your library or about information literacy instruction in general?

4. Do you have any recommendations for further research that is needed in this area?

Notes on appendix sources

1 From Julien 2000. Used with permission.
2 From Kuhlthau 2004. Used with permission.
3 From American Library Association 2005.
4 From Murray et al. 1996.