

Trends in LIS Education: Coverage of Soft Skills in Curricula

Abdus Sattar Chaudhry
E-mail: aschaudhry@ntu.edu.sg

Christopher S.G. Khoo
E-mail: assgkhoo@ntu.edu.sg

Paul Wu
E-mail: hjwu@ntu.edu.sg

Yun-Ke Chang
E-mail: ykchang@ntu.edu.sg
Division of Information Studies,
Nanyang Technological University, Singapore

【Abstract】

Soft skills are vital for professionals in general but particularly to information professionals to be effective in the new environment. This paper identifies soft skills relevant to information work through review of relevant literature and analysis of job advertisements. The paper describes how education in soft skills is being addressed in the MSc Information Studies program at Nanyang Technological University. In particular, two courses called Professional Seminar and Critical Inquiry have been helpful for strengthening soft skills in students. The ways in which students are developing soft skills in these courses are discussed.

Keyword

Library and Information Science education ; Soft skills ; Curricula ; Information professionals

Introduction

Library and Information (LIS) programs have always faced challenges for a balanced coverage and orientation in the curriculum with regard to different areas of focus. Many new topics and areas have been added with the recent integration of information technology and emphasis on emerging areas such as digital libraries, knowledge management, usability, etc. LIS programs have attempted to enrich their curriculum to make it more relevant to the market and to attract more students. As a result, there has been less emphasis on non-technical topics, particularly on soft skills. Topics such as communication and presentation, critical thinking, team building, and other soft skills do not seem to have been covered adequately in the LIS curricula. On the other hand, these areas are becoming increasingly important as librarians are competing with professionals from other fields such as information systems, internet, and business management. Soft skills are also becoming important at the middle management level as a result of a need for hard selling of information services in the wake of budget cuts. Outsourcing trends are also making it necessary for information managers to be more adept in soft skills for negotiating better contracts and managing services efficiently through external parties.

Information professionals have to be effective in oral, written and electronic communication with users, colleagues and supervisors and managers. Soft skills will make them more effective in promoting and marketing their services, as well as promoting the value of their service to the parent organization.

They also need good interpersonal and networking skills to interact with their users and collaborate effectively with their colleagues. There is also a growing realization that libraries and information services play important social, cultural and community functions. Thus, social and community building skills are useful for information professionals—both for building a community of colleagues (community of practice or special interest group) and communities of users. As early as 1983, Cronin and Martin noted that management of information had become very much a social activity. This highlights the importance of soft skills including communication, interpersonal relations, and social skills.

In this paper we explain what are soft skills, what types of soft skills are relevant to information professionals and discuss the instructional approaches appropriate to impart these skills. We identified a set of skills through an extensive literature search and validated these through an analysis of job vacancies. We reviewed different approaches for imparting soft skills and concluded that an integrated approach will be more effective. Our proposal for such an approach is based on an experiment currently underway at the Division of Information Studies, Wee Kim Wee School of Communication and Information, Nanyang Technological University of Singapore. We expect that the discussion in this paper will be of interest to LIS educators, professional forums in the field, and to the professional community at large.

What are Soft Skills ?

Soft skills can be defined simply as a set of skills

that influence how we interact with each other including such abilities as effective communication, creativity, analytical thinking, diplomacy, flexibility, change-readiness, and problem solving, leadership, team building, maintaining good relations with colleagues and customers, and listening skills. (<https://www.dp.hq.af.mil/dpp/dppn/nsps/pr.cfm>) In the context of the work environment, soft skills refer to a cluster of personal qualities, attitudes, knowledge, and social graces that make someone a good employee and a compatible coworker. From an intellectual perspective, soft skills focus on thinking, including abstract, conceptual, strategic and critical thinking, and judgment. Other aspects related to attitudes such as comfort with ambiguity, adaptability and flexibility, and motivation and decisiveness. In some situations, soft skills are aimed at creativity: innovation, curiosity, and intuition. All these traits are expected to be on the top of the list of requirements of prospective employers.

Communication and relationships are two other important areas targeted by soft skills. Most frequently listed traits in this category are advocacy and outreach, collaboration and team building, communicating across boundaries, social networking, etc. These traits are also sometimes listed as interpersonal skills, team spirit, negotiating skills, motivation, and time management.

In relation to the field of library and information science, the terms related soft skills have been used with a great deal of variations. Khoo (2005) grouped these skills under the category of 'transferable skills'; Hall (1996) highlighted these skills under teamwork; while Cronin and Martin (1983) called them social

skills. Pedley (2001) listed soft skills as additional skills required for concerted efforts in consortia building, electronic licensing, staff reduction as well as investments in staff education and development. Levy and Usherwood (1992) referred to these skills as 'people skills'. Koganuramath and Angadi (2000) highlighted the importance of public relations skills and considered these important for networking and teamwork. They included non-verbal communication, negotiating, and competence in presenting and explaining information, and basic listening skills as important elements of the skill set

Our view is that irrespective of the umbrella terms used, it is pretty clear that collaboration and team building have become central in today's work of information professionals. Effective communication (oral and written) and interpersonal and social interaction play an important role in achieving a meaningful collaboration. The term 'soft skills' therefore in this paper is used in a broader sense and includes all skills related to social, interpersonal, and communication skills as well as abilities of critical and analytical thinking.

What soft skills are important for information professionals?

A literature search in the Library and Information Science Abstracts (LISA) database for articles published in about five years discussing competencies needed by information professionals yielded 64 abstracts related to soft skills. The soft skills mentioned in the abstracts are listed in Table 1.

Table 1
Categories of Soft Skills

<p>1. Communication skills</p> <ul style="list-style-type: none"> . create welcoming spaces . customer management, customer service . dealing with a range of users . interaction between technical & public service professionals . public relations and interpersonal skills . negotiating skills . oral and written communication . persuasiveness . presentation . teamwork
<p>2. Social/community skills</p> <ul style="list-style-type: none"> . collaboration . community building . establishing professional, collegial relationships with colleagues . mediator of culture . networking
<p>3. Transferable/generic skills</p> <ul style="list-style-type: none"> . analytical skills . creativity and innovation . organization . problem solving . teaching and training skills
<p>4. Management and leadership</p> <ul style="list-style-type: none"> . administration . change management . create new roles by assessing changes in the environment . decision making . developing presence in the community . environment scanning . fiscally responsibility . keeping the organization and services lean . project management

(Continued)

<ul style="list-style-type: none"> . staff management . people management . strategic planning, strategic thinking . systems thinking . task analysis, needs assessment
<p>5. Enterprising skills</p> <ul style="list-style-type: none"> . fee-paying service . market research and analysis . marketing . research and consultancy
<p>6. Attitudes and personal traits</p> <ul style="list-style-type: none"> . ability to accept pressure . adaptable, respond rapidly to changing situations . approachability . assertiveness . good attitude to work . emotional intelligence . enquiring mind . enthusiasm . independence . lifelong learning, acquiring new knowledge and skills continuously . motivation . nurture a satisfying personal life, . professional attitude . self-confidence, good self image . sense of humor. . style of working . user orientation, customer focus . ability to work within different cultures

We carried out a study to validate the soft skills needed by employers (expressed as job requirements for information professional positions). We analyzed the job advertisements appearing in 4 Saturdays of the *Straits Times* newspaper (a major daily in

Singapore) in December 2006. Only those jobs that required at least a Bachelor's degree were selected for analysis (considering that positions that do not require a degree are more focused on paraprofessional jobs). We identified the jobs that

involved a substantial amount (at least 50%) of information handling in the job responsibilities. Of the 7,006 jobs advertised, 1,126 jobs (16%) were identified as involving substantial information handling (at least 50% of the job responsibilities). The job titles used were not always explicit in

announcing that these were information professional positions. Of these, 636 jobs were selected for in-depth analysis—including an analysis of soft skills and personal attributes required. The top ten most desired personal attributes are listed in Table 2.

Table 2
Most desired personal attributes

Rank	Personal Attributes	No. of Jobs	% of Job Vacancies
1	Communication skills	234	36.8
2	Interpersonal skills	129	20.3
3	Team player	115	18.1
4	Analytical	98	15.4
5	Independent	94	14.8
6	Others	65	10.2
7	Self motivated	61	9.6
8	Leadership skills	60	9.4
9	Resourceful	45	7.1
10	Meticulous	40	6.3
11	Organizational skills	40	6.3

Some vacancy announcements were very much loaded with soft skills requirements. An example of soft skills requirements by the National Library

Board of Singapore (Careers@NLB) is shown in Figure 1.

Careers@NLB

If the concept of a "library without walls" inspires you, a library where information and resources can be obtained anywhere, at any time; if you have a passion to serve the community with creativity and dynamism, we invite you to [explore the possibilities that NLB offers!](#)

Is this Your Skills Profile?

- *Customer and service oriented*
- *Team oriented*
- *Growth oriented*
- *Positive work attitude*
- *Flexible and adaptable*
- *Genuine interest in working with people*
- *Love for books and a thirst for knowledge*
- *Passion for learning*
- *Good interpersonal and communication skills*

Figure 1 : Soft Skills Listed in a Vacancy Announcement from NLB

Other vacancies for library and information jobs from different sectors also listed several of these skills using different expressions.

Goulding, Bromham, Hannabuss & Cramer (1999) noted that numerous studies in the U.S. and U.K. had found that library and information employers placed a high premium on personal skills and traits such as enthusiasm, initiative, interpersonal skills, commercial awareness, extroverted personality, independence, entrepreneurial flair, teamwork, ability to work under pressure, service orientation and

flexibility. They surveyed chief librarians in the U.K., asking them to select 10 personal qualities they considered most essential for entry-level positions. With 439 responses, the 10 most often selected personal qualities were (in decreasing order of frequency): ability to accept pressure, flexibility in responding to change, ability to deal with a range of users, written communication, inquisitiveness and love of learning, reflective, dedicated, detective-like, leadership, and innovativeness. They concluded that the ideal entry-level information professional would

have the following personality attributes: proactive, assertive, outgoing, patient, trustworthy, analytical, positive and self-motivated.

Several surveys of training needs have highlighted the need for such skills in most sectors at all levels of jobs in the field of library and information services (Choi & Rasmussen, 2006). These studies highlighted the need for more training in interpersonal and communication skills, although other specific skills were also mentioned, including public relations, customer service, team work, negotiating, and working with other professionals. The call for soft skills by prospective employers and professionals echoes the suggestions made by researchers and authors in the professional literature.

Hamblin and Stephens (2006a; 2006b; 2006c) have carried out a number of studies to determine the employable skills of professionals in library and information science. One set of skills they highlighted as emerging skills is soft skills. They linked soft skills to the success of customer care services.

Choi and Rasmussen (2006) highlighted that communication and interpersonal skills, project management skills, awareness of legal issues, and group presentation skills were as important as technology and library-related skills for future digital librarians.

Varalakshmi (2006) reported (based on an alumni survey) that the need for soft skills had further increased in the Internet environment. She highlighted that skills in the area of innovation, social sensitivity, and adapting to new ethos were crucial in the employability of information professionals in the networked environment. Khoo (2005) listed soft

skills as 'transferable' and 'generic skills' among the much needed competencies for information professionals and highlighted that skills in communication, leadership, and team work as well as the ability to empathize with users were among basic competencies of the new breed of library and information science professionals. He further elaborated on the need for positive attitude, values, and personal traits showing flexibility and willingness to handle a variety of tasks. Several other studies also endorse these findings indicating awareness of the need for soft skills among the LIS community.

How soft skills can be imparted ?

There are different views on whether it is possible to impart soft skills through academic courses, particularly at the graduate level as students come with traits already developed and need to 'unlearn' lot of things to be able to pick appropriate soft skills. While the LIS community seems to be well aware of the need for soft skills for information professionals, a great deal of variation prevails on questions of what level is more appropriate for such training, who should provide the training, and what approaches are more appropriate for imparting the soft skills.

Some academicians take the view that LIS programs should focus on technical and specialized skills and that's what the students come to these programs for. They think that they are already hard pressed to retain some basic technical courses and sometimes have no choice but to drop important courses like management and research. Also, their view is that when students come to graduate

programs it is already too late as these skills are better developed at the undergraduate level. There is also a feeling that other programs on campus may be more qualified to teach these skills. Therefore, it may be more cost-effective to require students to take additional courses from programs outside LIS programs. Some academics are also of the view that formal teaching may not be an effective way of imparting soft skills.

Agada (1984) asserted that the library profession is indifferent to social skills training despite concern over the lack of appropriate social skills in its fold. Cronin and Martin (1983) attributed such reaction to the erroneous belief that social skills cannot be taught. Agada (1998) reported that although interpersonal and social skills are addressed in LIS curricula as aspects of management and reference courses, their treatment has been largely cursory and theoretical in approach. He cited several courses related to user services where these skills were incorporated and concluded that to insure proper skills transfer instruction ought to be laboratory intensive and involve hands-on exercises. Cronin and Martin (1983) and Hall (1996) suggested models for integrating social skills training in LISE.

Agada (1998) highlighted that collaborative skills are best imparted through rehearsals and practice. He pointed out that unlike traditional pedagogy which is based largely on oral lectures; collaborative learning strategies create active learners of participants. He, however, alerted that in predetermined standards and forms of performance collaborative learning models may be a risky option for individual instructors. They would be judged on basis of student feedback that may not take into

consideration the intricacies and complexities involved in the process of developing and strengthening soft skills.

NTU Strategies for Imparting Soft Skills

Our experience at NTU, where we employed a variety of approaches to impart soft skills, corroborated with the observations expressed in above studies. We initially tried to use foundation courses such as *Introduction to Library and Information Science* and *Information Society* to cover the soft skills. But, have recently moved to an approach of using multiple methods: integrating soft skills in all modules. This is done by introducing group projects, peer learning, presentations, online discussion, and peer evaluation of project work. While efforts are made to include group projects and teamwork in all modules, our focus in this regard has been on two new courses: *Professional Seminar* and *Critical Inquiry*.

Professional Seminar Course

We are offering *Professional Seminar* as a core course in our Master's programs in Information Studies, Information Systems, and Knowledge Management. One of the objectives of this course is to cultivate soft skills, such as leadership, communication, critical and creative thinking, and encourage enterprising skills with the ultimate goal of building a learning community. This course attempts to empower students to learn and practice at the same time.

Spread evenly over the semester, *Professional Seminar* course is conducted in three full days where

the focus is to organize invited talks as thematic seminars with industry and academic speakers. Past speakers include the Deputy Speaker of the parliament, founder and CEO of companies listed in Singapore, partner of a global consulting firm, National Archives director, university librarian, and alumni of the school who have excelled as knowledge and IT consultant, and special librarian in various organizations and industries. Morning and afternoon sessions have talks of one hour followed by half an hour panel discussion, after which there is a half hour tea break where students catch up with one another and with the speaker personally. Following the tea break, there is a one-and-half-hour break-out discussion session, where moderating students organize their groups in discussion: typically they will start by presenting some discussion points and break out into smaller groups, then congregate back for concluding remarks. Each moderating group is encouraged to write their summary report and posted on the university eLearning system for comments. The same format is repeated for the afternoon session. The eLearning platform, edveNTUre, equipped with its own blog, forum and wiki, is seen as an extension to the physical seminar with an asynchronous mode of communication. Students have more time to reflect on their thoughts and engage one another at their own time and pace. This is useful when a fair number of students are working professionals.

An important design parameter of the Professional Seminar is that there are minimal requirements for students to pass the course: they are only required to attend all three seminars and submit a free format final report of 300 words. The objective is to free them of academic burdens (and

perceived pressures) so that they concentrate solely on interacting with speakers and one another. Another important parameter is to organize students in groups so that they take turns in organizing the break-out discussion as described above. Activities are designed to help students forge their individual teams, such as competition for the Best Team award. Students are also asked to reflect on their experiences on blogs and forums. With such foundation in place, they are tasked to lead other groups in moderating, note taking, and summarizing the break-out session.

By sensitizing students' sense of reciprocity, through appropriate activities and corresponding efforts by fellow students, most students do contribute their share of participation. For students stronger in certain soft skills, the course provides an opportunity to exercise their skills that benefit fellow students. For those weaker in certain soft skills, they may learn from the stronger students or experience the need to invest effort to learn such skills. More importantly, students may deploy their stronger skills to complement one another's. For example, we have witnessed students who are good at critical thinking assisted by their fellows in communicating their thoughts to the rest of the group.

Critical Inquiry (CI) Course

CI employs a mix of different learning experiences, in which soft skills are essential for a successful project, though the main objective of the course is to focus on research skills. Typically about 80 students from three Master's programs in Information Systems, Information Studies, and Knowledge Management are enrolled in CI every semester. Students form groups of two to three

classmates and are under one faculty member's supervision to conduct a research project within a one semester timeframe. The course coordinator conducts workshops to introduce general research methods and brief the students on the administrative procedures before students start working on their projects. Throughout the semester, students meet with their group members and supervisors to plan their research proposals, conduct data collection, and write the reports. At the end of the semester, students present the research results orally to fellow students and faculty members.

There are several important stages in the CI exercise. First, students are required to form teams, choose topics, and contact potential supervisors. We have found students to be more proactive now compared to the first few years when CI course was introduced. During the earlier years, students would expect the CI coordinator to help in forming groups and waited until the workshop to start the process. We have noticed that students start to form their groups earlier, discuss their interests, and consult the CI coordinator regarding topics, supervisors, and other project matters before the workshop starts. In the current semester, around 90% of the students had formed groups before the workshops started, which suggests that students started networking quite early. While this may not necessarily indicate the strength of their soft skills, it is encouraging to see this trend.

To work together as a team demands more than simple friendship. The nature of their collaboration includes a shared goal. We have observed that students form teams across different programs. We are excited to see that our students can benefit from each others' expertise to achieve a shared goal.

However, students also are faced with the reality of different expectations of different group members, different capacity, and working styles that may benefit or hinder the progress of their projects. Students have to learn to communicate their ideas and negotiate their work with team members, as well as find time to meet with each other for face-to-face discussions or communication via other information communication technologies, such as telephone, email or online chatting. The international make-up of the student body does make it challenging in the real sense taking into consideration the cultural and language difference among students.

Communicating research findings is one of the most important CI related activities, and both written and oral communication skills are evaluated. Students are assessed by their written proposal, project report, and oral presentation. A formal proposal is the product of numerous communications between students and supervisor. One of the supervisors reported more than 26 emails and five face-to-face meetings with a single group of students before they finalized a survey questionnaire. We require the final report to follow a formatting standard that is equivalent to one for a conference paper. The oral presentation and final report are graded by the supervisor and another faculty member; however, presentations are also attended by other fellow students. Students' presentations are evaluated for their, content, clarity, creativity, and answers to audience' questions.

Conclusion

Soft skills are becoming increasingly important for librarians and information professionals in the

digital age. The networked environment provides more channels for the exercise of these soft skills. Review of relevant literature and analysis of job advertisements indicated that social skills, interpersonal communication, teamwork, and collaboration and relationships are frequently listed as required traits for positions of library and information professionals.

More innovative methods need to be employed to draw out and develop soft skills in students in library and information science programs through multiple methods and channels. We have described our attempt through the *Professional Seminar* and *Critical Inquiry* courses for nurturing and strengthening soft skills in our students. More

emphasis on communication and teamwork skills is being injected into all courses across the curriculum. However, such efforts are limited by the short amount of time available in the semester and complicated by the increasing enrollment of international students coming from various cultures and education systems.

We are currently conducting analyses of impact of group projects, teamwork, and peer learning on development and nurturing of soft skills in our courses and plan to introduce intervention to increase student engagements for further strengthening of soft skills.

(收稿日期：2008年2月12日)

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