# Practical Use of ICT course in Libraries: Perspectives of MLISc graduates in Nepal<sup>1</sup>

Bhabana Nyoupane & Lila Nyaichyai

#### Abstract

Although the Central Department of Library and Information Science (CDLIS) was founded in TU 27 years ago, the Masters in Library and Information Science (MLISc) program is less popular among recent graduates. The MLISc program's reputation and significance are dependent on how successfully it has adapted to emerging information and communication technology (ICT). It is an early attempt to assess the MLISc ICT course material, primarily focusing on how applicable it is to real-world professional situations.Working librarians from Nepal participated in a focus group discussion to assess how well the MLISc ICT course applied to their line of work. Participants have suggested that the basic and advanced ICT course topics in the MLISc curriculum should be distinguished clearly. Library automation, digital library software, and other advanced ICT courses are available. However, the library profession places a high value on graduates with a complete understanding of information system architecture, library automation, and digitization services.

Keywords: Library- Automation, Library education - Curricula, Nepal

#### Introduction

The use of information and communication technology (ICT) in the library and information management fields in Nepal is rapidly growing and expanding. Still, the application of ICT in practical fields is a challenge due to the lack of ICT skills on library professionals. Because of the advancement of ICT, there is a high demand for competent library professionals with ICT skills in the job market. Masters in Library and

Bhabana Nyoupane, Central Department of Library and Information Science, and Lila Nyaichyai, Assistant Professor, Central Department of Library and Information Science, Tribhuvan University Email: vnyoupane@gmail.com; lalichyai@gmail.com

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Information Science (MLISc) is responsible for how ICT skilled librarians are produced. This study attempted extracting the view of library professionals on the efficiency of ICT course content included in MLISc.

The library is a knowledge development center, where information managers manage traditional, digital, and virtual resources scientifically and disseminate the appropriate information to the right user at the right time. Libraries serve as a link to information sources and information users' need. Information delivery to users required use of technology. So, the LIS field is transitioning to new technology. The daily work of library professionals has changed due to the adoption of ICT.

ICT has improved the library management and services (Moruf & Olaojo, 2020). The ICT capable librarians are the basic requirement for this 21st century library services. (Sachin, 2019). LIS education ensures sound theoretical foundations and practical studies with revolutionized concepts, aiming to prepare professionals who can manage emerging political, educational, psychological, cultural, and technological challenges.(Bhatt & Walia, 2016).

Are such ICT skilled librarians being produced in Nepal? How well the ICT courses were included in MLISc curriculum? What are the experiences of working librarians? Answers were sought from library professionals of Nepal.

## Research Method

A focus group discussion was conducted to explore their views on how useful the ICT content taught in MLISc in Central Department of Library and Information Science (CDLIS), TU. Participants were MLISc graduates from the CDLIS, TU, and they were working librarians. Participants were sent an email containing a semi-structured questionnaire as well as the MLISc curriculum. At first, each participant was made familiar about the issue, then only focused group discussion was held, which was analyzed based on their narrative.

#### Results

## **Daily ICT-related Task in Library**

The very first question was, "What is your daily ICT-related task in the library?" All respondents said they frequently use information communication tools such as computers, telephones, smart phones, fax machines, printers, photocopiers, scanners, digital cameras, multimedia projectors, and video conferences. The work related to computing, like word processing, editing, printing, scanning, uploading, downloading,

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saving, and Power Point presentations, are used regularly. Internet browsing is used for searching and evaluating various relevant sources of information.R4 noted that audiovisual resources for disabled people were specially provided. Koha, integrated library automation software, was mentioned by all respondents. They are using modules for acquisition, cataloguing, classification, and circulation in Koha. In addition, they are using software to generate statistics. R2 said that they don't circulate books. CC cameras are used to ensure the security of library materials. R3 and R4 responded that they gate for securities. Digital library management software D-Space is used for archival, preservation, and digital repository services. Likewise, large number of online resources was available to the public, some of them were free and some of them are purchased. ICT is also used for documentation and information retrieval, such as abstracting, searching bibliographic work, and answering student queries. Websites are updated in order to communicate with their users, R3 responded that they maintain websites up to date on its institutional websites. Some user said they are using Online Public Access Catalogue (OPAC), to find relevant information.

# Sufficiency of ICT Knowledge among Librarians

# Table 1

Sufficiency of ICT Knowledge

Categories	R1	R2	R3	R4
Theory	Sufficient	Sufficient	Insufficient	Sufficient
Practical	Insufficient	Insufficient	Insufficient	sufficient
Internship	Sufficient	Insufficient	sufficient	Insufficient

The second question— "Is there sufficient ICT knowledge in LISc curriculum?"—was collected into three categories, i.e., theory, practical, &internship. R1 claimed that the theoretical portion attempted to cover the content, and that students passed the examination, allowing them to have a good theoretical understanding. According to R2, the theory portion was insufficient because the entire content covers the superficial level of knowledge. He added that students with a strong theoretical background would have the best practical implications. R3 stated that ICT courses cover one-third of the curriculum, but when he took at the content, there was more irreverent content than relevant. According to R4, theory and practice are not quite similar, and he claimed that the new generation posses a proper understanding of theoretical knowledge of ICT.

For the practical application of ICT knowledge in the LISc field, all respondents made the same comment. R1 stated "I have seen the syllabus performance that ICT itself is a technical subject, and when the students do not do these things practically, this type of problem may occur." R2 claimed that there would be a great problem with practice, even with the most basic things. Similarly, R3 responded that the same issue with practical, either not having a proper guide or students losing interest on it. R4 had a few different points of view on this; it is difficult for LISc professionals to do all of the ICT-related tasks. However, simple orientation and on-the-job training could help with day-to-day library management tasks.

When the researcher asked if internships fill a gap in theory and practical knowledge, all of the respondents agreed.R1 responded that a one-month internship was sufficient if the institution and the student collaborated properly among each other.R2 responded that even professionals were afraid of the LIS practical; students were never taught from the beginning, so a one-month internship is not sufficient to cover all ICT curriculum. When we started to learn from scratch, we need more time, but it helps should be enough students to develop confidence, so he recommended a three-month internship with a thesis. He had anticipated mutual cooperation and knowledge sharing between the library staff and intern students. R3 responded that if we could gain knowledge even more in an internship as we did in college, we could learn a lot in a month. One month was sufficient based on the real work of library management, but the internship should be treated as on internship. R4 responded that a three-month internship is appropriate because LISc is a technical course.

## **Applicability of Existing Knowledge**

#### Table 2

#### Applicability of Existing Knowledge

R1	R2	R3	R4	
Semi applicable	Semi applicable	Semi applicable	Applicable	

The third question was, "Does the existing knowledge apply?" R1 claimed that the practical application of theory and its implementation in the real world are two distinct things. The whole All of them content has been beneficial to our technical knowledge and can be applied in some way. Similarly, R2 responded that every knowledge, whether directly or indirectly, is important and applicable. He came to the conclusion that academic courses are excellent, but practical are not sufficient. R3 agreed

with R2 that half of the courses are applicable to information management. Yes, some courses, such as ICT data communication, are applicable in the practical field. The course content, like information retrieval systems, automation software, programming languages, are absolute, redundant outdated. According to R4, ICT knowledge is applicable but there may be a lack of environmental factors, coordination, budget, ICT, skills at work place.

# Helpfulness of ICT Course in Developing Skilled Manpower

#### Table 3

Helpfulness of course ICT course in developing skilled Manpower			
R1	R2	R3	R4
Less helpful	Helpful	Helpful	Helpful

The fourth question was "Does the course help or does not help in developing professional ICT Competencies?" R1 responded that technology and information management systems are rapidly growing at the moment. He didn't agree that the curriculum increases ICT-competent workers. However, he saw a ray of hope in the new generation's interest in technology. R2 said that competing at a global level is difficult. However, we have been focusing on basic level work at a national level. An employee has managed to complete the basic work on daily library operations. The use of technology in library management is a specific part, and it is preferable to take initiative. According to R3, the student who had less knowledge of ICT has some problem in managing a library.

## **Present ICT Competencies and Market Demand**

## Table 4

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Present ICT Competencies and Market Demand

RI	<b>R</b> 2	R3	R4
Not matching	Not matching	Almost matches	Not matching

The fifth question asked was, "How do you feel your present ICT skill meet market demand?" R1 responded that current ICT skill and market demand are moving parallel. He observed that having a significant match on market demand takes time as user along needs and technological changes. He further said that the market requires

highly qualified personnel to transform the face of libraries. R2 explained that, on the one hand, market needs are undefined; there are no job descriptions or specifications for librarians, particularly in academic libraries. On the other hand, the automated library is suffering from a shortage of ICT-skilled.

# ICT Degree and Training after Graduation by LISc Professionals Table 5

ICT Degree and Training After Graduating

0	0 0		
R1	R2	R3	R4
Degree, training	Degree, training	Training	Degree, training

Asked as a sixth question, "Have you ever enrolled in an ICT degree or training after graduation?" According to the norms of government employees, they have the opportunity to obtain a degree and training program. At times, learning activities may coincide with professional interests even its free. Sometimes people are unwilling to engage in training. It has been challenged to encourage LIS employee to engage in ICTrelated training. R1 claims that training is important to stay updated. R2 did receive various degrees and training courses in ICT at the national and international levels, but he was unable to focus on them all due to a personal family problem. Furthermore, he explained, since becoming chief, "My responsibilities have shifted to include stakeholder coordination and library management". R3 has not enrolled himself in a formal ICTrelated academic degree, but he has participated in various digital information management trainings. R4 responded that continued training is essential in order to keep abreast of the LIS field. They used to go to training sessions together and then share resources with one another.

#### **Experience** as a Student

The seventh question asked to the respondents' experiences as a student. R1 responded that he has examined that all learning is exam-oriented, and that students and faculty have limited knowledge and ability to share additional information in depth. He struggled with the PASCAL programming language. R2 did not have an interest in PASCAL programming and saw it as exam-oriented, which caused unnecessary torture. He recalled how difficult it was to memorize all of the PASCAL programming for the exam. The creation of a CDS/ISIS field was not cleared, despite the fact that it was

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requested time and again. R3 felt a lack of expert resource person and a lab problem, old computers, slow internet, and a lack of individual computers for every student. Practical time as per the credit hour is insufficient, and class is not held on a regular basis. Data communication and networking courses captivated his interest, whereas CDS/ISIS and web design courses such as HTML and PASCAL programming did not have enough class. Because there was a lot of advanced software, he remembered that the available courses are excellent for learning the fundamentals. R4 responded that the theoretical part, was difficult to do in the practical session.

## Findings

- ) Library professional must have practical knowledge of ICT particularly automation software, software design, system installation integration, operating system, configuration etc.
- ) There is a lack of expert resources person and laboratory; study is exam-oriented. Proper theoretical understanding, practical-oriented study, and at least three months of internship by maintaining a standard and better collaboration between college, students is required.
- ) The course provides general guidelines for producing ICT skill manpower, and even the most basic application. There are more useless contents than useful ones, so it is advisable to delete the irrelevant topics,
- ) Job market for librarians is undefined, automated libraries are suffering from a lack of ICT skills. It is preferable to take advantage of this opportunity to foster the image of a library professional.
- ) Government librarians have the opportunity to obtain ICT related training and a degree under government rules. Other resources struggle to find learning opportunities, to Authentic monitor Agency for impartial opportunity no need of the day,
- ) Library Science Department should focus on teaching latest full-phase automation software and also recommended that the course be revised to provide a complete package of library automation and digitization, from system design to operations.

## Discussion

The library services are largely technologically driven institutions; R4 said that each and every library's work is done with the help of ICT. Library professionals use communication tools and on a daily basis, office administrative tasks such as processing,

editing, and printing etc. R2 and R3 used Microsoft Excel to manage their ISSNs and gifted books, respectively. The Internet in the library is basically used to find and evaluate various sources of information. Audio, image, video, and animated multimedia content generate and disseminate information that is no longer limited to printing text.

Library automation is an excellent way to provide effectiveness and efficient services to reduce human resources while providing maximum services in the shortest double of time and at the lowest cost (Bhoi, 2017). Nepalese librarians are using ICT for automating library services. Similarly, ICT is equally applied for the digital library operation. Nevertheless, the ICT courses of MLISc covered the theoretical background only; the profession demanded the deeper understanding in ICT. Technological aids to boost the service are available (Onuohs & Obialor, 2015). They have suggested for including Python, Java programming language. Respondents were also aware about the huge gap in students' academic background of to MLISc Students.

ICT courses are taught in LIS schools because they have been suffering from various problems (Kamba, 2011). R1 stated "I have seen the syllabus performance that ITC itself is a technical subject, and when the students do not do these things practically, this type of problem may actually happen." R2 claimed that there is a serious issue even with basic tasks such as operating automation software and Microsoft packages. Similarly, R3 encountered the same issue with practical, either due to a lack of a proper guide or students losing interest in it. Some developing countries are still continuing with LIS courses without ICT education (Yunusa & Muhd, 2017).R4 had a few different viewpoints on that; it was difficult for LIS professionals to do all the ICT-related tasks.

Almost all LIS schools in developing countries focus on balancing the theory and practice of librarianship (Aman & Sharma, 2005).Internships are the excellent approach in learning by doing way to bridge the theoretical and practical divide.The gap between teaching and practice, practice, is probably larger in librarianship than in any other profession South Asian Countries (Gorman, 1981). Students will have a much greater opportunity for and apply their knowledge in a real-world environment, can have hands-on practice in software operations, database management, digital library management, website design, information retrieval, operations of communication tools, and so on. R1 believes that a one-month internship is sufficient if a standard guideline is developed and students and institutions collaborate effectively (Bird, Chu, & Oguz, 2015).

Everything is dynamic; the course component may not always be able to meet the required demand. An efficient government, therefore, always manages libraries in the proper way (Wani, 2019)To achieve the course objectives, divide the course into theoretical, practical, assignments, and internship sections. ICT knowledge of curriculum is applicable, according to R4, but there may be a lack of environmental factors, coordination, budget, ICT, and skills. The updated and well-designed program enables students to have organized knowledge of course content and they apply it much more effectively in the work (Seger, Dochy, & Corte, 1999). Some content may be included for basic understanding and some for advanced. However, how honestly LIS professionals apply it in the real field is up to them.

R2 did receive various degrees and training courses in ICT at the national and international levels, but due to a personal family problem, he was unable to focus on all of them. While pursuing several ICT-related degrees and training programs, he had a certain level of motivation and energy. It was tough to balance the responsibilities of a family, a career, and studies. He stated that because of continual concentration, his colleague has been chosen as a national representative. Furthermore, he explains, since becoming chief, "My responsibilities have shifted to include stakeholder coordination and library management". Even after work hours, professionals prefer to attend workshops, conferences, seminars, and training programs (Mahmood & Khan, 2007). Employees must be encouraged to participate in on-the-job training programs, and it should be freely available (Litsalia, 2017). R3 has not pursued a formal ICT-related academic degree, but he has taken part in a variety of information management training courses. R1 claims that training is important to keep informed.

The Department must conduct in depth market research and fulfill a required component of the curriculum. According to R2, the practical knowledge of the course is almost sufficient for implementation, but some portions are lacking, so it is best to revise. R1 emphasizes that the Department is teaching something extra in addition to the current course, but it is insufficient. Students must have the opportunity to practice in order to be able to apply in the real world. Nobody can expect the best even after revision, according to R3, because it all depends on how honestly a teacher and a student engage in learning activities. The learner must be given the opportunity to learn practically, and the teacher must also contribute to this. When a situation arises in the real world, it is up to LIS professionals to apply their knowledge honestly (Bharat, 2010). R2 proposed a unified

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catalogue to maintain the national standard for cataloguing. The course for the full phase automation required with that practical and internship should be done in an efficient and effective way.

#### Conclusion

The majority of libraries in Nepal operate on a hybrid system. The ICT component of the curriculum covers one-third of the topic, but it does not address these issues in practice on the same ratio. The courses in PASCAL programming and CDS/ISIS have steadily declined in popularity so, both teaching and learning are examoriented, and it has become mandatory to learn for graduation. It may create dissatisfaction and less motivation among LIS graduates on leading to either unemployment or underpayment later on. Therefore, the internship should be particularly designed for ICT applications. On the one hand, market needs are undefined; there are no job descriptions or specifications for librarians, particularly in academic libraries. So, there will be opportunities for graduates to start from scratch. Graduates struggle to obtain additional training and there is still uncertainty about who will take on these kinds of initiative. There is a chaos between the ICT courses of the MLISc., Degree, the LIS professional, and the job market. Even after a librarian has studied, passed an examination, and started a job, there is still a huge problem to implement within the real world. LIS graduates can be updated through training, workshops, seminars, and conferences, because classroom teaching is not always available sufficient for on-the-job requirements. Individual capability impacts how a professional approach overcoming challenges in the actual world. It sometimes depends on how honestly you apply your knowledge in practice.

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