The Role of Thesis in Building Information Professionals: Comparing Among iSchools

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Abstract
Motivated by the questions of what role thesis plays in developing master level information professionals and why contrasting program requirements exist among iSchool master programs, the present study examined primarily the information/library science oriented master programs of the iSchool tier 1 members. As the first stage of a multi-phase study, the examination relied on three types of indicators: thesis as a requirement of the program, the nature of the requirement in terms of being mandatory or optional, and specifics of the thesis requirements. This “early work” paper reports on the background information that inspired the study, the methodological design that serves the research questions, and the findings of the study’s first stage in both the forms of statistic observations and narratives.

Keywords: thesis; thesis requirement(s); master’s degree; master program requirement(s); iSchool; iSchool tier 1 member


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1 Introduction
As of 2016, four Chinese universities have joined the iSchool movement: Wuhan University (School of Information Management), Nanjing University (School of Information Management), Sun Yat-sen University (School of Information Management), and Renmin (People’s) University of China (School of Information Resource Management) (iSchools, 2016). Although the programs these schools offer vary, one requirement appears to be common, that is, the mandatory requirement of thesis for master’s degree. This mandatory requirement contrasts to the experience of one of the researchers of the present study, who has obtained master’s degrees from McGill University and the University of British Columbia, respectively. Neither of these two iSchools required thesis as mandatory to the obtaining of their master’s degree. Why is this contrast? Are there any academic studies done concerning this phenomenon? A literature search in Academic Search Complete yielded zero answers to these questions, which, in turn, motivated the conceiving and initiation of the present study. This “early work” paper reports on the background information that inspired the study, the methodological design that serves the research questions, and the preliminary findings framed in both the forms of statistic observations and narratives.

2 Study Background
The fact that the four Chinese iSchools all require mandatory thesis is not a coincidence but the result of being compliant to China’s Central Government’s regulations. The Regulations on Academic Degrees of the People’s Republic of China (issued in 1980 and revised in 2004 by the Standing Committee of the People’s Congress; hereafter the Regulations) stipulate that thesis writing and defence constitutes a compulsory condition for conferring master’s degrees (China, 2004, Article 5). Upon completing course credits and a thesis, a master’s degree is believed to be able to demonstrate that the student has obtained solid understandings of basic theories and systematic knowledge specific to their affiliated disciplines and as a result, is capable of conducting scientific research or being independently responsible for specialized technological work – goals set up in the Regulations.
The mandatory thesis requirement does not distinguish between the two types of master’s degrees typically found in Chinese universities, that is, academic master’s degree and professional master’s degree. In other words, both types require the writing and defending of a thesis as an indispensable part of the programs – without a successful defence, students cannot be given the master’s degree diploma, but only a certificate of graduation. Another worth noting observation is that neither the Regulations nor the Interim Implementation Methods for the Regulations specify the operation of the programs. For example, program duration. It was found out that three-years was the program duration for academic master’s degree at Wuhan University (2015) and Nanjing University (2015), yet two-years is the program duration for the same type of master’s degree at Sun Yat-sen University (2015) and Renmin University of China (2015). Another example is course credit requirement. For the same type of master’s degree, some requires 32 credits, yet others require 33 or 26 – 33 credits. An overarching question thus arising from these observation: what is the role of thesis in developing master level students and how are the varied ways of implementing the thesis requirements achieving the common goals stipulated by the Regulations?

3 Method of Inquiry and Expected Outcomes

The method of finding answers to the above questions is designed with the following steps:

- Examine the thesis situations of iSchools other than the Chinese iSchools, starting from the first tier of members (26 in total as of 2016), then moving onto the second (23 in total as of 2016) and the third tier (19 in total as of 2016);
  - Collect data first from the websites of these schools, by the following parameters:
    - Thesis as a program requirement
    - Nature of the requirement (i.e., mandatory or optional)
    - Specifics of thesis requirements (e.g., conditions for writing theses and/or criteria for thesis defence)
  - Based on the outcomes of the analysis of the website data, send questionnaires to relevant schools for data not available on the website
    - Alternatively, and if conditions permit, to conduct interviews with relevant informants
- Analyze data first within the program objectives of individual iSchools and then compare among them;
- Send questionnaires to the four Chinese iSchools, inquiring about the variations in implementing the same Regulation;
  - Alternatively, and if conditions permit, to conduct interviews with relevant informants
- Send questionnaires to graduates of the four Chinese iSchools, inquiring about their thesis experiences and any impact on their job hunting and performance;
  - if conditions permit, to conduct interviews with relevant informants
- Analyze data from the Chinese iSchools;
- Compare the Chinese situation with that of the other iSchools.

Figure 1 illustrates the above research path.
This study intends to portray the landscape of master degree thesis of the iSchool institutions, to tease out the underlying reasons accounting for the variations in thesis requirements, and to demonstrate to all iSchool members the similarities and differences of operating master level programs, with the hope to stimulate further discussions on the subject among iSchool educators and to be instructive to iSchool administrators. In addition, recommendations to the Chinese education authorities are planned to be made as one major practical application of the research findings, with the hope to contribute to the improvement of the thesis situation in China.

4 Preliminary Findings

The study is currently at the initial stage of collecting and analyzing data from the websites of the tier 1 iSchool members. The preliminary findings are grouped in alignment with the three types of indicators.

4.1 Thesis as a Requirement

Among the 26 tier 1 members, 17 include in their program requirements thesis writing and defending as one, that is, 65%. The 9 iSchools that do not include thesis as a requirement provide information on courses and projects as well as how these courses and projects lead to the completion of the program and the obtainment of the degree. All of the 9 iSchools are located in North America (N.A.), such as:

- College of Computing & Informatics, Drexel University (N.A.)
- School of Informatics and Computing, Indiana University (N.A.)
- School of Information and Library Science, University of North Carolina (N.A.)
- College of Information, University of North Texas (N.A.)
- Information School, University of Washington (N.A.), etc.
4.2 Nature of the Requirement

Among the 17 iSchools that include thesis writing and defence as a requirement, 5 (again, excluding the School of Information Management at Wuhan University) make this requirement mandatory (i.e., 29%) and 12 treat it optional. In addition to, the other 5 iSchools that require thesis writing and defending as a must are:

- Royal School of Library and Information Science, University of Copenhagen (Denmark)
- Berlin School of Library and Information Science, Humboldt University of Berlin (Germany)
- Information School, University of Sheffield (UK)
- School of Information Sciences, University of Tampere (Finland)
- School of Information Systems, Singapore Management University (Singapore).

It is clearly observable that all of the thesis-mandatory iSchools reside outside North America: 4 are affiliated to European universities and two to Asian universities. Accordingly, all of the 12 thesis-optional iSchools are located in North America, accounting for 60% of the 20 N.A.-located iSchools. Among the 20 N.A.-located iSchools, 19 reside in the United States and 1 in Canada, that is, the Faculty of Information at the University of Toronto. Examples of the U.S. based iSchools include:

- School of Information, University of California, Berkeley
- Graduate School of Education and Information Studies, University of California, Los Angeles
- School of Information Sciences, University of Illinois
- College of Information Studies, University of Maryland
- School of Information, University of Michigan, etc.

Figure 2 below demonstrates the above observations in statistic terms, where Neither refers to those that do not include thesis as a requirement, and Non-mandatory refers to the sum of Optional and Neither:

![Figure 2. Thesis Requirement Observations – iSchool Tier 1 Members](image)

This observation leads to a question additional to the initial inquiring framework, that is, *will geographic location be a factor to the thesis requirement or is it a pure coincidence?*
4.3 Variations in Thesis Requirements

Variations in thesis requirements are explicit. No two schools appear to have the same requirements, and some prescribe with details yet others state only the general requirements. Among the 6 schools with mandatory thesis requirement, the majority of them belong to the “general requirements” group, stating only information such as when the thesis project needs to be initiated and/or how many credits are allocated to the thesis. The manner of communicating the nature of the thesis requirement vary as well, some offer clear statement yet others do so by simply placing the thesis project in core curriculums. Examples of this type include: Information School at University of Sheffield (UK) and School of Information Systems at Singapore Management University.

The School of Information Sciences at University of Tampere (Finland) is one example that offers more detailed information. This iSchool provides – in addition to the general information – a brief rational explaining why thesis is required to be an indispensable part of the master program. The Chinese iSchool, that is, the School of Information Management at Wuhan University, appears to have the most detailed requirements and some of them are rather unique when compared with the others. The University’s Thesis Rules regulate on procedures of thesis writing, formatting, evaluation, and defending, guidelines for choosing thesis topics (e.g., whether it is significant to societal progressing and national economic development), the environment in which thesis defence takes place (e.g., the place should be spacious, bring, displaying academic atmosphere, etc.), how much literature the student must read (e.g., no fewer than 40 articles and no fewer than one third of the articles must be in languages other than Chinese), and how classified materials should be used. Moreover, the Rules regulate on the thesis-writing students themselves, for example, whether he or she is a law abiding person, whether he or she possesses good manners, etc.

Among the thesis-optional schools, 2 were found to have the most detailed information. The Donald Bren School of Information and Computer Sciences at the University of California, Irvine (2016), makes clear that the thesis option requires qualification, and in order to qualify:

- students must be in good academic standing with their Department;
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- the student must enroll in at least two quarters of Thesis Supervision that will substitute for two required courses;
- all required courses must be completed with a grade of B or better, and
- the student must write a research or thesis project.

It also specifies with regard to thesis committee that:

- a composition of three faculty members is to be set up to guide the student and to give final approval of the thesis;
- one of the members of the committee is to be the advisor, assumed by a faculty member from the student’s department, who is willing to supervise the thesis project;
- the other two members are to be the readers of the thesis, who are willing to take upon the job, and
- an oral presentation of the thesis to the committee to be conducted.

In addition to these requirements, the School suggests that “The thesis option is available for graduate students who may wish to continue on to a Ph.D. program or those who wish to concentrate on a specific problem”.

The other school is the Graduate School of Education and Information Studies at the University of California, Los Angeles. This school (2016) provides Thesis Guidelines, which includes general information such as:
• students should anticipate that it will likely take approximately 14 months to develop and complete an MLIS thesis;
• students should meet with their advisor, or else with the faculty member who they would like to chair their thesis committee, to discuss possible thesis topics in early spring quarter of the first year of study and ask the faculty member if s/he will chair the committee;
• the committee chair will also serve as the student’s academic advisor from that point forward;
• the student should advise the Student Affairs Officer in the same spring quarter of his or her intent to write a thesis;
• 3 regular ladder faculty members, or other experts pre-approved as eligible to serve by Graduate Division, are required to form a committee, but not all of those faculty members need to be drawn from the Department of Information Studies;
• the thesis does not need to include original research, but it must offer an original approach to, or insights into the chosen topic. It often grows out of a paper already written for another course. The Guidelines also provide details such as:
  • the student is allowed to enroll in up to 3 courses (12 units) of independent coursework to develop his or her thesis;
  • the length of the thesis will depend upon the topic selected and the approach used to examine it. Most theses, however, tend to be in the range of 60-90 double-spaced pages; and
  • if collecting any data from human subjects, or using restricted datasets or records, the research must be approved by the UCLA Institutional Review Board.

Similar to the iSchool at the University of California, Irvine, students who wish to take the thesis option must first demonstrate eligibility. To submit a thesis proposal, the student must:

• be in good academic standing (cumulative GPA above 3.0);
• have met all the IS entrance requirements;
• have taken, or be completing in the current quarter the required core and research methods courses; and
• have completed all incompletes.

Although it came from a small portion, the detailed information provided by these schools indicate clearly there are reasons for including thesis in the master programs.

5 Conclusion

The research so far has uncovered, among the master programs of the first tire iSchool members, significant disparities surrounding the thesis requirement (or non-requirement). Although unable for now to answer sufficiently the overarching research question (i.e., what role thesis plays in building master level information professionals), the preliminary findings reinforced the study’s legitimacy. Further data collections and analyses are expected to yield deeper insights, capable of finding out not just the what to the research question but also the why.

6 References

Graduate Programs in Information and Computer Sciences
http://catalogue.ucl.ac.uk/donaldbrenschoolofinformationandcomputersciences/#graduatetext
Graduate School of Education and Information Studies at the University of California, Los Angeles.
Information School at University of Sheffield (UK). Teaching and assessment
http://www.sheffield.ac.uk/is/pgt/courses/information_management/imcourse

Nanjing University, 2016 Graduate Admission Brochure of Nanjing University

Renmin University, 2016 Graduate Admission Brochure of Renmin University
http://pgs.ruc.edu.cn/articleWeb?article.id=1899&category.id=18

Standing Committee of the National People’s Congress of China, Regulations of the People’s Republic of China on Academic Degrees (2004 Amendment), Article5

Sun Yat-sen University, 2016 Graduate Admission Brochure of Sun Yat-sen University
http://graduate.sysu.edu.cn/gra02/g02a/g02a04/23320.htm

School of Information Management, Wuhan University, China. Rules on Master Degree Thesis Writing, Evaluation and Defence of the Wuhan University

School of Information Sciences at University of Tampere. General Regulations Concerning the Master’s Degree 2015-2018

School of Information Systems at Singapore Management University. Curriculum Composition
http://sis.smu.edu.sg/programmes/MSeIS/structure-curriculum

Wuhan University, 2016 Graduate Admission Brochure of Wuhan University