What Can Student Theses Tell Us About the Educational Role of School Libraries in Croatia?
A Thematic Content Analysis

Denis Kos
Faculty of Humanities and Social Sciences,
University of Zagreb, Croatia
dkos@ffzg.unizg.hr

Mihaela Banek Zorica
Faculty of Humanities and Social Sciences,
University of Zagreb, Croatia
mbanek@ffzg.unizg.hr

Abstract: This study examines Croatian LIS student theses, particularly those in school librarianship. These theses often discuss various educational interventions in school libraries. Using quantitative and qualitative methods, the research identifies prevalent themes, educational interventions, and the influence of non-LIS faculty departments on school librarianship. The findings show that most theses focus on school libraries during graduate studies, reflecting students’ growing interest in the field. Since 2016, there has been a steady rise in the number of school library-related theses. Mentorship patterns indicate that mentors primarily come from the Chair of Librarianship within the same department, and interdisciplinary collaborations are infrequent. Theses commonly emphasize presenting the work of school library institutions, but few detail specific educational interventions. Common methodologies include practice reviews and surveys, with prevalent themes focusing on information literacy, reading habits, and services for minorities. However, the study reveals limitations, with theses often lacking depth in reporting students’ authentic experiences as teacher librarians. This underscores the need to improve reporting on educational interventions and encourage practical engagement. Enhancing the quality of reporting through narrative and reflective writing, qualitative research methods, and data analysis is recommended. In conclusion, the study provides valuable insights into Croatian student theses related to school librarianship. The findings can inform future thesis topics and mentorship decisions in the school librarianship field.

Keywords: School Librarianship, Student, Graduate, Undergraduate, Thesis, Croatia, University of Zagreb, Thematic Content Analysis
Introduction

Each year hundreds of students propose, write and defend their bachelor and master theses in the field of library and information sciences (LIS). Being the most numerous kind of libraries, a significant part of theses are written about topics related to school librarianship. This large body of professional and scientific contributions hasn’t been studied in necessary depth in the context of LIS as a whole and even less so in the field of school librarianship. In Croatia, student theses traditionally show student expertise in academic reflection on particular professional topics. Alternatively, students who already work in library settings use them as places of reflection, showcasing and assessment of the impacts of their professional practices. Many of these showcase particular educational interventions that emerging practitioners have implemented in school libraries. Both approaches, but especially the latter, make student theses a rich, largely unexplored, content base to study the development of school librarianship in Croatia and the kinds of educational interventions employed in those settings. However, the term educational intervention is a very broad denominator of a very diverse set of activities, practices and teaching acts. From organizing workshops, celebrating holidays, providing inclusive services and support to almost any kind of intervention whose variety only the contextual needs and creativity of school librarians can limit. In the context of the present study we use the term educational intervention to mean any kind of educational activity designed and/or delivered by the author of a thesis in the past or as part of a thesis project. Indeed, many theses in our institutional context often report on students previous experiences and participation in design and delivery of diverse educational interventions. From this standpoint our orientation towards reflective teaching practices leads us, on one hand, towards considering the impacts of our teaching and mentorship practice, and on the other, towards analyzing what student theses can tell us about the educational role of school libraries in Croatia. Thus, we aim to understand the development of new library professionals interest for school librarianship in Croatia and investigate the kinds of educational interventions employed in school library settings.
Literature Review

Analyses of the field of school librarianship mostly study the characteristics of scientific production in research articles (e.g. Clyde, 2002; Mardis, 2011; Beeson & Branch-Mueller, 2015; Cahill & Joo, 2018; Johnston & Santos Green, 2018). Studies of student theses in the LIS field usually focus on master theses and doctoral dissertations focusing on national trends and theses production analyses of specific institutions (e.g. Chikate & Patil, 2008; Ocholla & Le Roux, 2011). As Clyde (2002) also notes, studies focusing on student theses whose topics are specifically related to school librarianship are rare which points to the need to systematically map their topics and describe their impact. Still, the significance of students’ master and doctoral theses is immense. Primarily they show the future research directions and identify the topics that are of interest to the future as well as current young professionals. In some cases, they can be a repository of good practices that support the work initiatives, and collaboration. Especially for the part-time students where their previous work supports what Todd (2015) identifies as evidence-based practice.

As research about school librarianship in Croatia is scarce and there aren’t many journals focusing on school librarianship in this study we take a look at student theses to see what kind of picture of school librarianship in Croatia they paint and what insights can be gained. As school librarians are deeply involved with educational settings we need to also explore the nature of that involvement. School libraries are an integral part of the educational system, relying on the legislation, curriculum, and practice that differs from country to country. However, insights about national practices are sometimes out of reach since the major part of this body of literature is usually published in the national language, making it difficult to have international outreach or to be included in the creation of comprehensive research. Even the IFLA’s School library guidelines state that they “…are intended to be adapted and implemented in ways that suit local contexts, especially legislative and curriculum contexts” (Schultz-Jones & Oberg, 2015, p. 14). Therefore, research into theses collections in Croatian language could broaden the insight into the research topics that students are interested in, on one hand, and contribute to the international base of evidence-based practice, on the other.
Methodology

Our study employs a quantitative and qualitative approach by means of a descriptive analysis of common documental variables and a thematic content analysis of undergraduate and graduate student theses. Our general goal was to map the thematic structure of the defended theses focused on topics related to school librarianship in the Croatian context. The specific goals of the research are:

- to determine the prevalence, kinds and characteristics of educational interventions in theses;
- to describe the professional and research contributions of theses defended on non-LIS faculty departments to the field of school librarianship.

These goals naturally lead to the following research questions:

1. Which themes are most prevalent in theses related to school librarianship defended at Faculty of humanities and social sciences University of Zagreb?
2. Which non-LIS faculty departments have by publishing thematically relevant theses professionally and scientifically contributed to the field of school librarianship?
3. What kinds of educational interventions have students described, developed or researched in theses related to school librarianship defended at Faculty of humanities and social sciences University of Zagreb?

The research process consisted of two main phases, namely gathering of research materials and qualitative data analysis. First, the documents were described with several common documental variables (like authors name, affiliation, year of thesis publication, thesis subject area, etc.). Second, the qualitative data analysis is an inductive analysis which focused on uncovering the key themes of theses and the characteristics of identified educational interventions which the theses present, debate or research (like institutional contexts, outcomes, types of analyses, applied pedagogical methods and values, etc.). This analysis was done using selective coding at document level via a coding scheme developed in MS Excel.

The sample of theses was constructed by searching the national database of academic repositories “Dabar - Digital academic archive and repository” which keeps records of all theses since 2016. When it became compulsory to store and keep all defended theses in a
publicly available repository. By using a wide search strategy 182 theses published between 2016 and 2023 at the Faculty of Humanities and Social Sciences University of Zagreb have been identified and selected for research. The system was queried for the terms “school library” and “school librarianship” in the Croatian and English languages for all singular, plural and case variants using search operators and full-text search fields. A thesis has been considered related to school librarianship if it mentioned the term at least once in the full-text of the thesis.

The context of research is mainly defined by the nature of LIS study programs offered at the University of Zagreb. Students in the researched sample were enrolled either in an Information Science undergraduate program or a GLAM-oriented (Galleries, Libraries, Archives, Museums) professional graduate program as full-time students. Alongside these programs, part of the analyzed student thesis were defended by part-time students enrolled in a graduate professional program mostly chosen by students seeking a career change or students who, due to workforce shortages, are already employed in libraries but do not have the required qualifications.

**Findings**

Results of the study are organized in subchapters detailing findings of quantitative and qualitative analyses. Quantitative analysis was used to depict common documental variables such as the sample structure, the temporal evolution of interest for studied concepts, mentorship and co-mentorship patterns, disciplinary affiliation and interdisciplinarity of studied thesis. Qualitative analysis shows prevalent theses themes, the type of focus on studied topics which can be attributed to studied thesis, to which level of education thesis refer to, theses methodology, as well as presence and kinds of educational interventions reported in the thesis.

**Sample Structure and Temporal Evolution of Interest**

The constructed sample was analyzed and we have found that school libraries are as a topic of a thesis mostly chosen on the graduate level (93.96%), because it is on this level where students choose a particular profession they wish to specialize in. The undergraduate program
is a more generic Information Sciences study program which prepares students for that choice, so this situation is also reflected in topic choices. Interests towards school librarianship get shaped on the graduate level. These findings might suggest that more could be done to motivate students to start studying about school librarianship earlier, but we believe the choice of this focus is better left at the graduate level because knowledge about how the field of information sciences and librarianship are interconnected needs to be passed on beforehand. The occurrence of this specialization at the graduate level is a direct consequence of our curriculum design.

If we look at the publication dates we can get some notion of the temporal evolution of the interest for the topic of school libraries. The sample includes theses from 2016 onwards, following the obligation to publish all undergraduate and graduate theses in open access institutional repositories. Interestingly, in the first years we do not find many theses mentioning the studied concepts. This might be due to a resistance to follow the regulation after it came into force as at that time parts of infrastructure necessary for this were not yet functional. But as of 2019 the data reflects the real state of affairs and it portrays a steady and stable interest in the studied topic. There was a drop last year, and the data from this year is still not complete.

Figure 1. Temporal evolution of interest for school libraries related topics in studied theses
Moving forward, this repository will become a valuable resource for studies aiming to gain insights from thesis publication patterns because many institutions have also started to upload theses retroactively and are creating valuable databases of theses information. Nonetheless, the 182 theses we have covered in this study give a good outlook on how the topics of school libraries and school librarianship have been approached in students' theses and presents, as a transverse approach to research, a valid basis to reflect upon our mentorship and teaching practices.

Mentorship and Co-Mentorship Patterns
In order to answer RQ2 and investigate which non-LIS faculty departments have by publishing thematically relevant theses professionally and scientifically contributed to the field of school librarianship we analyzed mentorship and co-mentorship patterns. The distribution of mentorship patterns (N=51) shows (see Fig. 2.) that most mentors in the long tail contribute with only one thesis showing a sporadic interest in the topic. Expectedly, mentors in the head of the graph are exclusively members of the Chair of librarianship from our Department. Some interdisciplinary and intradisciplinary collaborations are visible in the longtail and we discuss these in the following chapters.

Collaborations in the form of co-mentorships are present in only 6% of studied theses and 55% of co-mentored theses are intra-faculty interdisciplinary collaborations with colleagues in the humanities, namely philological experts. The other 45% are collaborations between experts coming from different GLAM sectors, most prominently archivists and librarianship. However, we have noticed that school libraries and school librarianship are not the main topics of co-mentored theses.
Disciplinary Affiliation and Interdisciplinarity of Theses

Studied thesis were categorized by students who uploaded them into the repository as monodisciplinary in 92.86% of cases. Theses were categorized as multidisciplinary in only 7.14% of cases. However the view of interdisciplinarity in these theses is more complex as some theses combine multiple social science fields. The students' categorization is derived from the top level of scientific field affiliations according to the national classification of scientific fields which students choose as appropriate while uploading their thesis to the repository. Thus, student choices present the thesis as mostly affiliated with social sciences (89.01%), humanities (7.14%) or both (3.30%) and interdisciplinary sciences (0.05%). Specific scientific field are represented in detail with appropriate values in Fig. 3. The interdisciplinary theses, as we call them, are marked in the boxes. At our institution students who are a double major can choose to write a single interdisciplinary thesis. This allows them to combine knowledge and insights about more complex topics and are required to do double the work then what a monodisciplinary thesis would require. In essence, the amount of workload is the same, as other double major students have to do two shorter theses in each of
their majors. The fields shown are actually more closely the majors and minors these students have studied. Information and communication sciences are taking the lead and the runner up is the field of pedagogy as pedagogical perspectives are very important in the context of school librarianship. We might even say that the percentage of theses affiliated with pedagogy is rather low considering that school librarians are considered as valued specialists both in professional terms and in the eyes of the law and educational policy in primary and secondary schools in Croatia. This can also be seen in the very low percentage of interdisciplinary theses combining LIS and pedagogical perspectives. The finding of low levels of interdisciplinarity answers our second research question.

**Figure 3. Affiliation of studied thesis to scientific field**

**Theses Focus on School Librarianship**

Qualitative analysis was used to uncover the depth of theses relation to studied concepts. Three codes were inductively developed based on thesis analysis. Thesis were coded as *focused* on school libraries if they were mentioning the search terms often and whose main contributions lie in the field of school librarianship. Code for *sporadic* mentions was used to refer to theses where school libraries are not a primary focus but are an important part of authors research, argumentation and investigations. Code for *single* mentions was used for when the studied concept appeared only once in the whole text showing a mere reference to
studied concepts in the thesis. These were interpreted as theses which aren’t focused on school libraries and where their significance or role is merely implied. The code focus was attributed to 40.66% of theses. Theses coded as sporadic (40.66%) usually referred to historical development of a public library, mentions of concept in formal documents, or general referrals to potentials and roles of school libraries. Single mentions were found in 18.68% of thesis occurring in varied contexts referring to school libraries as places of dissemination or application of thesis, research or project results or as general referrals to potentials and roles of school libraries.

**Theses Reference to Educational Level**

Since school libraries operate in educational settings, knowing which of the education levels students have been focusing on seems important as it can reveal advances and gaps in knowledge about school library work. A set of seven codes was derived to map out the educational levels: *preschool, primary* (i.e. elementary school), *secondary* (i.e. high school), *tertiary* (i.e. higher education), *none* (i.e. for theses focusing on more generic topics and not on the educational role of school libraries), *any* (i.e. for theses referring to educational role of school libraries but discussing topics relevant for any level of education) and *nonformal* (i.e. for theses referring to educational role of school libraries but outside of the context of formal education e.g. lifelong learning contexts, trainings etc.). In the sample as a whole (see Fig. 4.), more than half of theses dealt with a topic which was in some way connected to the educational role of school libraries. From these, 17.86% of theses focused on more than one level of education (where each level was counted separately, thus N=196). On the other hand if we look only at theses which we recognize as centrally and sporadically focused on school libraries and related topics (N=120) we can see (Fig. 5.) that a significant amount of generic topics disappears and we see that theses focused on school libraries are on average more focused on educational topics.
Figure 4. Theses reference to educational level (N=182)

Figure 5. Theses reference to educational level (N=120; excl. single mentions)

Theses Methodology
To understand what kinds of academic forms students undergraduate and graduate theses employ we also looked at applied methodologies. Again, a coding scheme was inductively derived to map out the different kinds of methodologies. However, it is important to note that all theses include a literature review, so the code literature review was assigned only to theses who were solely based on a review of professional and scientific literature. The coding process was adjusted for mixed methods approaches which means that all kinds were counted separately if more than one kind of methodology was applied. Most prevalent codes were for reviews and surveys which appear in almost 80% of theses among the identified methodology
types. Codes for some of the less common methodology types warrant additional explication. Under *desk research* we included library collection analyses of different types (e.g. presence of a certain genre in the collection or quality of indexing on a certain topic, library website content analyses and library law content analyses). Under *market research* are user studies that are not based on a questionnaire e.g. a library service SWOT analysis or a visual identity analysis. Other types correspond to common research methodologies in social sciences. More insights gained about the most prevalent types of applied methodologies are discussed in the next section.

**Figure 6. Theses methodology**

### Thematic Analysis of Theses and Presence of Educational Interventions

Finally, to answer both RQ1 and RQ3 we analyzed the prevalent themes and kinds of educational interventions students wrote about in their theses. We know now from the data that our students are focused on educational topics in about 70% of defended theses. But what are we really talking about here? We know that we have a lot of students in our part-time professional program who are already in practice, they already work in libraries, and some of them in school libraries. Naturally, we need to ask in what way are they engaging with this educational angle? Are our students describing their own educational interventions and in
what way? In short, the answer is no. We have found that only 9.89% of theses describe an educational intervention. Furthermore, there are no school libraries focused theses in the sample which describe an educational intervention undertaken as a theses project. However, many theses describe practices of school library institutions in form of practice reviews or as case studies.

In order to understand what this means, we needed to take a look at what these theses are actually about. Thus, Fig. 7. shows data for 60.99% of the sample i.e. the most prevalent themes. Themes were inductively coded, abstracted and re-coded according to upper themes shown. Most prevalent theme in the sample was coded as an institution presentation since most students framed their thesis as a place of dissemination and presentation of work done at a particular school library institution. This presentation of library work was rarely a presentation of work to which the authors of the thesis have contributed themselves. However, we are not talking about case studies as much as we can say that these were special kinds of practice reviews in which students reviewed the practical work done by a particular library institution. A student would for example, pick a topic like information literacy and then report on information literacy programs done by an institution they are familiar with, or have come to know as a user (e.g. their local school library). The choice of institution is rarely explained and is most often based on convenience of access to its staff and information about its programs, activities, etc. Only one thesis defined its methodological approach as a case-study approach.

![Figure 7. Most prevalent themes in studied theses](image-url)
This practice was not present in theses which applied a more refined research approach such as a survey or an interview-based methodology. Prevalent themes in such cases skew towards topics traditionally researched via accepted methodologies for their investigation. These are most notably information literacy surveys but also those dealing with reading habits and services for minorities (i.e. different kinds of inclusive services). Fig 8. shows most prevalent themes for 61.55% of theses defined as surveys and which were coded as either centrally or sporadically focused on studied concepts.

Figure 8. Most prevalent themes of survey-based theses (excl. single mentions)

Discussion
So to return to our question from the title of this paper. What do student theses tell us about the educational role of school libraries? We have learned that school libraries have an important role in reading promotion, providing information and media literacy and that there is a keen interest in studying these phenomena. Also, theses show the school librarian as a partner who works in collaboration with other experts to facilitate the implementation of the school curriculum. These conclusions are quite expected. However, we have also learned that student theses don’t provide in-depth information about the educational activities and interventions school libraries are daily involved in and rather predominantly present institutional practices on a more generic level. On the level of our own practice we conclude that we need to provide more precise guidelines to these students in terms of how to study, present and reflect upon their educational activities in school libraries. That being said,
students need to be encouraged more, or in more formal ways, to go into practice and start early collaborations with practitioners through volunteering in real library settings. These theses show that the educational role of the school library in terms of it being a place for professional development of new librarians is underused and that our role in stimulating this should be approached in a new way. In light of new concerns about the authenticity of student written work in the context of artificial intelligence, action research projects and other authentic participatory involvements of students in actual practical work might be a way to challenge the generic nature of their writing.

Reported findings make us ponder students' readiness to effectively report on their own complex experiences of taking up a teaching role. A mere report describing the layout of an educational intervention doesn’t really grasp the authentic and lived experiences of a teacher role. Such a report presents the student as detached and uninvolved with an educational situation which most certainly stimulates varied psychological and pedagogical, cognitive and emotional, professional and personal responses in both students and new teacher librarians. These facets remain largely unreflected upon if educational interventions in school libraries are reported in purely denotational ways.

The quality of student reporting on educational interventions in Croatian higher educational settings would improve by implementing more learning content on narrative and reflective writing, narrative and qualitative academic forms of research methodologies and research reporting as well as qualitative data analysis. Social science research approaches evocated here are not something which should be reserved for LIS researchers working in higher educational institutions, instead the logic of scientific thinking, in the tradition of social sciences, should also be perceived as a valuable professional tool in analyses of practical work done daily by (school) librarians worldwide. This conclusion, should also be broadened by a Sherian sentiment that a librarian “must be a scientist” (Shera, 1972, p. 132) especially since, in the elapsed time when it was expressed, LIS have only expanded their ambition to play a useful role in society, in which its educational role has reached paradigmatic, if not epochal levels of importance in the guise of information literacy.
Implications and Conclusions

Presented research uncovered the thematic structure of theses related to school librarianship and contributes to our understanding of the structure of their professional and research contributions to the field of school librarianship in general. It uncovers the characteristics of educational interventions students described, developed or researched in theses related to school librarianship and enables understanding of their pedagogical sophistication as well some necessary avenues of development. In the local institutional context the results of the study could guide the topic choices and mentorship decisions towards more focused, coherent and practically relevant thesis proposals related to school librarianship.
References


## Biographies

**Denis Kos Ph.D.**, is an assistant professor at the Department of Information and Communication Sciences at the University of Zagreb Faculty of Humanities and Social Sciences. He teaches courses on the undergraduate, graduate and postgraduate levels and explores such subject areas as epistemological foundations of information sciences, interdisciplinary and transdisciplinary knowledge organization, domain analysis, critical librarianship, information and data literacy and subject analysis. As an author, reviewer and organizer he participates in domestic scientific and professional symposia. He is a member of the Organization and Program Committees of the European Conference on Information Literacy since 2018.

**Mihaela Banek Zorica Ph.D.**, is a full professor at the Department of the Information and communication sciences at the University of Zagreb Faculty of Humanities and Social Sciences, Head of the Chair for Media and communication at the Department and previous Head of the Department (2019-2021). She teaches at the undergraduate, graduate and postgraduate level and her main research and teaching focus is on e-learning, information and media literacy, school libraries and knowledge organization. She has participated in international and national conferences either as an author, reviewer or member of the organization or program committees. She was a co-chair of the organizing committee of the ECIL 2014 conference. She served as president of IASL (International Association of School Librarianship) for two terms (2014-2021).