

Information Literacy Skills: Student Opinions and Perceptions at the University of Lugano

Research proposal

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1. Introduction

This research work intends to explore students' understanding of the role and importance of information literacy skills (ILS), particularly in relation to students' academic learning. It also explores the role of the library in fostering ILS. It finally seeks to know students' feelings about a course on ILS.

The location of this investigation is the University of Lugano.

This study concerns itself primarily with undergraduate and postgraduate students, but it also seeks the opinion of academic researchers and librarians.

The purpose for carrying out a study on student perceptions of ILS is twofold: firstly, it is extremely important to have students' views on the subject, especially if a course on ILS is to be implemented¹; secondly, such a preliminary study is an important vehicle for suggestions for future studies into related fields, such as students' information needs, the criteria to set up an ILS course, and the collaboration between library and departments.

Finally, this study hopes to contribute to existing literature on students' perceptions of information literacy by comparing and discussing the outcomes.

2. Aims and Objectives

The principal aim of this study is to present a clear and comprehensive picture of students' understanding of ILS and of their importance, especially in academic life. This study also aims to gain some insights into important related issues, namely the role of the library in developing ILS and the impact of a ILS course.

The objectives are:

- To assess students' understanding of ILS
- To evaluate students' perception of the role and benefits of ILS in relation to their academic learning
- To investigate students' perspective on the role of the library in promoting ILS
- To examine students' feelings about the introduction of a ILS course

3. Key informants interviews: aims and objectives

Key informants interviews aim to provide a comprehensive picture of the context which largely influence students' study habits and approach to ILS.

The objectives are:

- To investigate informants' views on students' information retrieval behaviour
- To examine informants' perceptions of the importance of ILS in academic learning
- To evaluate informants' opinion on the role of the library in fostering ILS
- To assess the current liaison between library and departments in terms of ILS development

Informants will be recruited among librarians and researchers, for a total of four/six interviewees.

1. Research context

¹ Elizabeth Hartmann, among the others, points out the importance of assessing how students understand and experience information use in order to improve information literacy course outcomes [see Hartmann].

This study stems from the researcher's own interest in investigating students' awareness of what information literacy skills are, and of their importance. This is a crucial starting point for any further investigation into students' own skills, and into the improvement of some library services [see Hartmann; Seamans; Morrison].

The research context is grounded primarily in the literature on:

- definition and discussion of information literacy
- student perceptions of information literacy
- the role of the library in developing information literacy skills

In addition to this, studies on collaboration between academic libraries and departments provide the context for key informant interviews.

The literature on information literacy (IL) is extremely wide. Therefore, it is difficult to pin down a single definition of IL. However, it has become customary to refer to the American Library Association's definition of a literate person as the starting point for any discussion [ALA, 1989]: the information literate person must "be able to recognize when information is needed and have the ability to locate, evaluate and use effectively the needed information". This four set of abilities provide the focus for Heather Morrison's exploratory study of student perceptions of ILS (1997), and they also represent the starting point for this research project.

However, this study also draws upon the issues discussed in the literature on ILS definition, which complicate the clear-cut definition provided by the ALA. For instance, it takes into account the difference between IL and ILS. It also acknowledges that being an information literate person "involves a deeper understanding of how and where to find information, the ability to judge whether that information is meaningful, and ultimately, how best that information can be incorporated to address the problem or issue at hand" [Humes].

Christina Doyle's set of attributes describing an IL person integrates and expands upon ALA's and ACRL's definitions. She sees an information literate person as someone who

- recognises the need for information;
- recognises that accurate and complete information is the basis for intelligent decision making;
- identifies potential sources of information;
- develops successful search strategies;
- accesses sources of information, including computer-based and other technologies;
- evaluates information;
- organises information for practical application;
- integrates new information into an existing body of knowledge, and;
- uses information in critical thinking and problem solving [Doyle, 1992]

Such a comprehensive definition conveniently lends itself for interview purposes. For this reason it will serve as a model in this study.

Indeed, many studies on student perceptions of IL confirm the use of ALA's definition, the Association of College and Research Libraries' indicators and Doyle's set of attributes as models to gather information from interviewees [see Morrison; Hartmann; Seamans; Ivey]. Literature on student perceptions of IL also investigates related issues, like students' study habits, academic requirements - both Seamans and Hartmann confirm that the latter influence students' needs -

and the value of IL in students' academic life. Some of these features are part of this study, and inform the questions asked to the students. Specifically, the data collection will include a warm-up session on students' information retrieval habits, in order to make students reflect upon their academic requirements. Then, a session on IL definition will follow, where students will be asked about Doyle's attributes (main session). Finally, there will be questions on the role of the library in developing ILS (main session) and on the impact of a course on ILS (closing session). Following examples in previous studies [see Morrison], the role of the library will be examined in relation to the skills outlined by Doyle. The impact of the course on ILS will be explored in relation to students' academic needs and requirements [see Hartmann; Seamans].

This study shares the common view, underpinning most studies in the field, that IL is an essential part of higher education, and that libraries, and particularly librarians, play a crucial role in fostering it. Studies on the role of the library in IL implementation strongly support the view that only librarians have the knowledge and the expertise to teach IL [see Owusu-Ansah, 2003 and 2004; Kuh].

However, it remains to be seen whether students share the same perspective. For this reason, although it is grounded in the literature, this study endeavours to remain unbiased towards the interviewees.

Finally, the context in which key informants' interviews are grounded also includes studies on IL definition. Doyle's list of attributes will be used with key informants as well, to see how they view the importance of ILS in academic learning. The exploration of collaboration between library and departments in terms of ILS development is done in a small session which investigates informants' views on current state of collaboration and on who should teach ILS [see Ivey].

2. Methodology

➤ *Research methods review and choice*

The research methods employed in science are either quantitative or qualitative.

Broadly speaking, the quantitative approach is used when data can be measured and analysed numerically. Research methods were developed in the natural sciences with a view to studying and measuring phenomena. Quantitative methods are scientific, formal, precise and reliable.

Qualitative methods are applied when the research focus is on people and their behaviour. As Hancock puts it, "research which attempts to increase our understanding of why things are the way they are in our social world and why people act the ways they do is 'qualitative' research." [Hancock, 1]. Qualitative research is user-centred and inductive. Its theories and conclusions are mainly drawn from the data collection process itself, and not imposed from the researcher before starting the project. As a result, there is no right or wrong results in our analysis of the data, since we are assessing respondents' opinions.

The choice of one method, or of both, depends on the research purpose. Since this research project is concerned with students' ideas, views and opinions qualitative methods are more appropriate. Such data, in fact, require an interpretative and descriptive approach. Moreover, the number of students examined is relatively small, which again makes a qualitative approach more desirable.

➤ *Research strategies review and choice*

Among the strategies used in qualitative approach there are ethnography, sociometry, action research, hermeneutics, and case study.

Ethnography is applied in large socio-cultural studies, where populations are examined and described in their own environment.

Sociometry is a “means of assessing group relational structures, such as hierarchies, friendship networks [...]” [Berg, 160]. In social scientific research it is used to examine classroom interactions, and the affinity and disdain among group members.

Action research is employed to test the results of a new program, while hermeneutics “is primarily concerned with the *meaning* of a text or text-analogue” [Myers].

Case study is an “in-depth study of the cases under investigation” [Hamel, 1], it is descriptive and detailed. The object of the study is defined within the context of the “social actors” taking part in the study, who are at the heart of the study with their own experiences and the meanings they attach to them [Hamel, 33].

Since this project aims to gather detailed data concerning students’ opinions at the university of Lugano a case study is the strategy that suits it best.

➤ *Data collection techniques review and choice*

The methods employed in qualitative research are diverse. Due to time constraints and to the nature of the research (evaluation of opinions), diary and observation are neither suitable nor possible. Other methods are:

- questionnaire, a common method used in qualitative research as it is relatively easy and quick for respondents to complete, especially if questions are closed. Its main drawback is that the line of enquiry cannot be modified, since questions are fixed.
- interviews, which provide rich illuminative data about respondents and are flexible, since the line of enquiry can be modified according to the respondents’ answers. It is also a cheap way to gain information. Interviews must be carefully recorded. The main drawback of interviews is that they are very time consuming.
- focus group interview, which is a group brainstorming on one or more areas of investigation, and questions are generally left open. The main drawback is that it is up to the interviewer’s skills to have all participants take active part to the interview.

In order to gather information about students’ views interviews and focus groups are the most suitable and convenient tools. Since the sample population is quite small, a questionnaire is not particularly useful in this project.

➤ *Use of methods*

As stated in literature, interviews and focus groups can be used together. In this project focus groups will be used as the primary method to gather information. In fact, focus groups are good to generate ideas, which is particularly important when the subjects of investigation are not well known to the group participants – hence, participants have never had the chance to think about the topics. Group views and idea-generating discussions are particularly appropriate to this project. Interviews will be carried out before focus groups, and primarily as a means to identify issues which then will be explored during focus groups.

Interviews and focus groups will be audio-taped, with participants’ consent.

➤ *Question design*

Questions will be designed taking into account the project's objectives and the points and issues outlined in the published literature. Both individual interviews and focus groups will be semi-structured.

Although questions will be tailor-made for each group, they might be similar. In fact, since the aim is to explore research topics using different methods, individual interview and focus group questions focus on the same topics.

➤ *Focus group and interview length and venue*

Ideally focus groups should last from one to one and a half hours, depending on the number of issues investigated and the students' response.

Interviews should last approximately one hour each, in order for all subjects to be investigated.

The venue for the interviews and focus groups should be a room in the library.

➤ *Sample population and number of participants*

This project targets both undergraduate and postgraduate students. The two groups will be treated separately since they attend different courses.

Individual interviews will be carried out with two/three undergraduates and two/three postgraduates. Interviews will be followed by two focus groups, one with undergraduates and one with postgraduates. The group size can vary from five to seven participants.

The number of participants has been devised following examples in the published literature.

Samples will be chosen randomly among the population. Ideally, students should be representative of the different departments. However, recruitment issues must be taken into account which may make representative sampling difficult.

➤ *Research issues, limitations and resources*

Issues to be taken into consideration in planning and doing the project are:

- the place is entirely new to the researcher
- the time to carry out the project is relatively short (the researcher will be on the spot only for two months, which will be mainly devoted to perform internship duties)

This entails the following limitations:

- the investigation doesn't allow for multiple methods to be employed and for more than one researcher to be involved in the study
- since the university is not known to the researcher it might be difficult to carry out a thorough case study investigation (little time to get to know the institution, its people, organization and policy). Hence, it is possible that this project becomes an exploratory study.

Since this is not a study requested by the university the latter is not interested in investing resources in this project (not at this stage). Hence, resources are limited to the researcher's will and initiative. Therefore, all interviews and focus groups will be conducted by the researcher, as well as data transcription and analysis.

➤ *Recruitment*

The issues just outlined may affect recruitment, in particular regarding the number of students which can be gathered. The fact that students may not be particularly interested in the topics or motivated in taking part in a research study

adds to recruitment difficulty. This may be especially true considering that interviews and focus groups take up a considerable time.

However, the head of the library's project approval has been obtained, which should make it relatively manageable to receive help from the library in order to recruit students.

In addition to this, it is possible to receive help from some academic staff members, who have agreed to advertise the project during their lessons.

➤ *Pilot*

Due to foreseeable difficulty in gathering a large number of students who can, and are willing to, take part in the study, it is realistic to plan one pilot interview with one student, whereas it is not feasible to have a pilot focus group. However, one pilot interview should be enough to test whether questions are clear and understandable.

3. Data analysis

Recorded data will be carefully transcribed. Data analysis will be carried out taking into account project objectives and features outlined in previous studies. Keeping this in mind, coding and analysis will actually proceed from the data themselves, and any following discussion will be grounded in the data.

A systematic indexing process will be applied to data, searching for topics/sentences/mentions related to the themes (objectives) of the project. For instance, broad themes may be "understanding on ILS", "importance of ILS", "role of the library in implementing ILS", and "importance of having a course on ILS". On a separate index sheet a list of all types of information found in the transcript should be prepared, with reference to transcript page and paragraph. Information will then be coded into categories describing what they are about (ie. "information retrieval"). Categories will then be compared and divided into main categories and, possibly, sub-categories [Hancock, 17-18], and will be accompanied by excerpts from interviews/focus groups.

Individual interviews to undergrads will be compared to one another, in order to set up categories. The same will be done with postgrad interviews. Similarly, undergrad and postgrad focus groups will be analysed separately, just like librarian and researcher interviews. Comparison among different groups and individuals will be part of the data discussion.

➤ *Data presentation*

Dataflow diagrams will be prepared, including main themes, categories and excerpts (might be used as appendixes). Interview excerpts will be integrated in the discussion. Key informants data will be analysed and presented before students' data analysis.

➤ *Reliability, validity and generalization*

Although in this project it is not possible to use more than two different data collection tools, mainly because of time constraints and lack of familiarity with the place, focus groups will be carried out with two groups, in order to ensure some repetition and comparison of data. Moreover, individual interviews to students will produce crucial preliminary data which will be compared to focus groups results. Finally, individual interviews to key informants will add important contextual. In this study, therefore, triangulation is primarily a way "of gaining

different insights into the same situation” [Lacey and Luff, 23], and it has to be taken into account that comparing different data could result in different, possibly contradictory findings. If this is the case an explanation will be attempted.

In order to ensure reliability the approach to and the process of data analysis will be carefully described and justified within research context, so that it could be reproduced by other researchers. Moreover, evidence from other studies regarding the use of methods and the conclusions of the analysis will be provided [Lacey and Luff, 22]. As for validity, data analysis and presentation will consistently refer to data, for instance by providing quotations.

Since the population sample is relatively small, the results of the study cannot be generalized. However, results may be transferable, and other research studies in similar settings might confirm the conclusions of this project.

4. Timetable of Activities

Since this is a work in progress, and it involves people, it is must be taken into account that plans and timetable might change as the research work proceeds.

Activities	Sept	Oct	Nov	Dec	Jan	Feb	Mar
Literature review (methodology and research context)	✓	✓					
Project design: <ul style="list-style-type: none"> ▪ Aims and objectives ▪ Choice of methodology ▪ Use of methods ▪ Timetable of activities ▪ Interview and focus group questions design ▪ Data analysis planning ▪ Desired outcomes 		✓	✓				
Data collection: <ul style="list-style-type: none"> ▪ pilot ▪ recruitment ▪ interviews (key informants; students) ▪ focus groups ▪ data transcription 			✓	✓			
Data analysis Data presentation Data discussion				✓	✓		
Project report					✓	✓	✓

5. Outcomes

This study aims to provide a preliminary view on students’ approach to ILS, and on their feelings about the role of the library in implementing ILS.

It endeavours to provide some guidelines/suggestions on:

- how to introduce ILS to students (knowing what students know and how they feel about ILS greatly helps teachers to handle the subject matter)

- how to handle collaboration issues between library and departments in terms of ILS implementation

It also hopes to produce suggestions for further research, especially in case the university decides to set up a course on ILS. For instance, if some results appear to be contradictory, further research may want to investigate issues which underlie such contradictions. Successful findings, as well as mistakes, limitations and reflections on possible improvements will be highlighted.

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