

Pilot Survey Project on the Information Literacy Level of University Students

The pilot survey project was prepared and carried out with support from [Association of Libraries of Czech Universities](#) in 2004 and 2005. The authors and organizers of the survey were members of the Information Education and Information Literacy Working Group (IVIG), university librarians, and a sociologist. The survey was conducted at eight university libraries:

Czech Technical University in Prague, Faculty of Mechanical Engineering

University of South Bohemia in České Budějovice, Faculty of Science

Masaryk University, Brno, Faculty of Social Studies

Masaryk University, Brno, Faculty of Education

Charles University in Prague, Faculty of Science

University of Pardubice

Tomas Bata University in Zlín

University of Economics, Prague

Authors and organizers:

Library staff

Balvínová, Alena	Faculty of Science, Charles University in Prague
Bělohoubková, Lenka	University of Economics, Prague
Civínová, Zdena	Faculty of Mechanical Engineering, Czech Technical University in Prague
Dombrovská, Michaela	Faculty of Philosophy and Arts, Charles University in Prague
Ešteřáková, Simona	Tomas Bata University in Zlín
Jankovská, Blanka	University of Pardubice
Juránek, Michal	Faculty of Social Studies, Masaryk University, Brno
Křehlová, Jana	Faculty of Science, Charles University in Prague
Landová, Hana	Faculty of Philosophy and Arts, Charles University in Prague
Landová, Helena	Faculty of Science, University of South Bohemia in České Budějovice
Rubešová, Eva	University of Pardubice
Slezáková, Ludmila	Palacký University, Olomouc
Šedinová, Petra	Faculty of Education, Masaryk University, Brno
Šléglová, Irena	Faculty of Social Studies, Masaryk University, Brno
Tichá, Ludmila	Faculty of Mechanical Engineering, Czech Technical University in Prague
Vandrovec, Petr	Computing and Information Centre, Czech Technical University in Prague
Žáková, Hana	Faculty of Science, Charles University in Prague

Sociologist

Bitrich, Tomáš

Intention of the project:

to analyze and define the level of information literacy of university students, identify and describe shortcomings, conditions, opportunities and potentials in order to suggest changes to the information education framework.

Objectives of the pilot survey:

to prepare and conduct an experimental survey of information literacy at universities with diverse research domains and, on the basis of these results, to propose a strategy for information education at universities in the Czech Republic. The main emphasis of the survey was:

- to suggest and test the methodology of the survey,
- to outline a questionnaire,
- to verify the suitability and comprehensibility of the questions asked,
- to suggest and test methods for selecting and addressing sample respondents and test the return rate of questionnaires,
- to process the survey results and check the measurability of information literacy by comparing these results with the IVIG standards for information literacy of university students.

Target group: university students registered as university library users

Reasons for the survey:

- to provide arguments for university managers that there is (or is not) a need to train students in information literacy,
- to provide background data for proposing the implementation of information literacy into curricula,
- to provide conclusions to be presented to the authors of the state information policy in education,
- to observe progress in information literacy levels by repeating such a survey after a specific time period.

Starting points:

Related surveys (as described in the available literature) tend to focus on users' information behaviour, especially on their use of electronic information resources. Such findings, however, do not tell us enough about the full range of the users' information literacy knowledge and skills, as specified by the IVIG definition of information literacy and the standards for an information-literate university student. Therefore, we have no reference model or equivalent comparison available; the authors of this survey had no references to similar surveys conducted in the Czech Republic or abroad.

The background for the survey was the authors' definition of information literacy and standards for an information-literate university student. The two documents were formulated and structured in a way to make them especially useful for devising the questionnaire.

Project documents:

- objectives of the pilot survey
- essential hypotheses
- [definition of information literacy](#)
- [standards for an information-literate university student](#)
- questionnaire
- characteristics of the research domain of the university / college
- results analysis

Essential hypotheses

Hypotheses of the impact on information literacy of the students:

- information literacy course completed by the respondents
- personal interest in working with information
- necessity to work with information
- information literate student reaches the rate of at least 70 percent in each component of information literacy

Questionnaire

- electronic questionnaire
- overall 40 questions
 - basic data about a student and his/her studies
 - 5 sets of questions according to the structure of the definition of information literacy (prose, document, numerical, language, and ICT literacy)
- questions investigating the common practice, frequency, and the level of usage of tools, information resources and languages
- respondents evaluate their own skills themselves
- respondents choose from a scale of answers to each question in the particular set

Characteristics of the research domain of the university / college

Characteristic of the research domain as a description of faculty/department conditions for the support of information literacy from these points of view:

- number of students and faculty members
- teaching methods
- information literacy of the faculty members and their demands of the students
- support from the faculty members and faculty/department management
- accessibility of literature and electronic resources at the university/faculty
- offer of information literacy courses
- opportunities and abilities of the library and library staff (number of librarians in information education) to influence information literacy of its users
- technical equipment

Preparation and organization of the survey

Schedule:

1st pilot survey 2004		2nd pilot survey 2005	
Preparatory activities:	22.3. - 4.5.2004	Preparatory activities:	21.3. - 25.4.2005
Questionnaire testing:	19.4 - 27.4.2004	Questionnaire testing:	13.4 - 22.4.2005
Data collecting:	4.5. - 21.5.2004	Data collecting:	25.4. - 17.5.2005
Analysis of results:	16.6.2004	Analysis of results:	15.6.2005

Preparation:

- specification of survey intentions and a statement of key principles and hypotheses
- formulation of standards for an information-literate university student
- conditions for information literacy support at a particular university and in the university's specific research domain
- preparation of a questionnaire based on the definition of information literacy
- random selection of a sample of respondents
- specification of the method for organising data collection
- specification of prizes for respondents and methods for selecting prizewinners

Organization:

Prior to the beginning of the survey each participant received an authorizing letter from the chair of the Association of Libraries of Czech Universities (ALCU), represented by the executive committee of ALCU. We presented the authorizing letters to the rectors or deans of the university/faculty, and asked them for the permission to conduct the survey at the university /faculty. Thus the survey received official approval. The respondents were chosen by a random procedure, and were asked by the library management to cooperate in the project. The electronic questionnaires were filled in anonymously, and any respondent could win a prize based on a randomly generated numerical code. The return rate of the questionnaires was 45% (900 respondents were invited to participate).

The survey process:

A web-based tool was used to manage the survey process, to collect, store and classify data. This tool provided functions such as:

- Statistics administration
- MS Excel output
- Winning code validation
- Setting the number of prizewinners
- Filling out a form

Survey results:

The project fulfilled all its intentions and objectives. The methodology of the survey was defined, the comprehensiveness and usability of the questionnaire were verified and the organization and process of the survey was tested (focused above all on the selection of sample respondents, addressing prospective respondents, and the return rate of the questionnaires). All defined hypotheses concerning impacts on the information literacy of the students were confirmed. The results also clearly indicated the positive influence of information literacy education courses.

Another major finding was that the overall index of information literacy of students was on an average 55 percent. The expectation that the score would be at least 70 percent in each component of information literacy was not fulfilled.

The second pilot survey confirmed the findings of the first pilot survey conducted in 2004. The overall results were analyzed and will be used to formulate a concept for the information education strategy at universities in the Czech Republic.

Findings:

The level of information literacy is influenced by:

- length of studies
- attendance of information literacy courses
- frequency of library use
- level of ICT skills
- subjective perception of the importance of information literacy
- language literacy is related to document literacy and prose literacy
- the field of study influences numerical literacy

What does not correlate:

- efficiency and effectiveness vs. a preference for consulting colleagues
- efficiency and effectiveness vs. asking questions of librarians
- subjective evaluation of the importance of information literacy vs. ICT literacy, numerical literacy or language literacy

Further findings:

- acquisition of data in support of information literacy

Preferences in order:	Effectiveness in order:
Colleagues	Courses
Courses	Questions asked to librarians
High school	Library materials
Questions asked to Librarians	Publications
Library materials	Colleagues

Definition of groups of respondents according to personal motivation and the demands of teachers:

- A – have no personal motivation, teachers do not require them to work with information (6%)
- B – have their own personal motivation, teachers require them to work with information (55%)
- C – have their own motivation, teachers do not require them to work with information (35%)
- D – have no personal motivation, however teachers do require them to work with information (4%)

Recommendations:

The results have led to two recommendations for future surveys:

- to better specify questions regarding the field of study
- to better specify questions regarding the information literacy course (type, range and focus) attended by the respondents

Conclusions:

The pilot surveys proved the usability of such a survey. It is however necessary to repeat the survey after a certain period of time to be able to observe changes in the level of information literacy and to conduct further analyses to reveal impacts and changes over a period of time. It may also be useful to extend the questionnaire with further modules.

Publication of results

Requested presentations:

IVIG seminar

TICHÁ, Ludmila. Pilotní průzkum stavu informační gramotnosti na vysokých školách. příprava a organizace. Vyžádaná přednáška na seminář *IVIG 2004, Praha, 23.9.2004*. [online] 2004. [cit. 19.6. 2007]. Dostupné z WWW: <www.lib.jcu.cz/cpvsk/prezentace/ticha2.ppt>.

DOMBROVSKÁ, Michaela .Pilotní průzkum IVIG II. Výsledky a závěry. Vyžádaná přednáška na seminář *IVIG 2005, Praha, 22.9.2004*. [online] 2005. [cit. 19.6. 2007]. Dostupné z WWW: <http://www.sprig.cz/ivig2005/prezentace/Dombrovska-IG_ivig2005.ppt>.

CPVŠK - Czech University Libraries Annual Meeting

TICHÁ, Ludmila. Pilotní průzkum stavu informační gramotnosti na vysokých školách: organizace, průběh a výsledky. Vyžádaná přednáška na *CPVŠK 2004, České Budějovice, 3.-4.11. 2004*. [online] 2004 [cit. 19.6. 2007]. Dostupné z WWW: <<http://www.lib.jcu.cz/cpvsk/>>.

DOMBROVSKÁ, Michaela. Pilotní průzkum IVIG II: výsledky a závěry. Vyžádaná přednáška na *CPVŠK 2005, Praha, 9.-10.11.2005*. [online] 2005 [cit. 16.7. 2007]. Dostupné z WWW: <<http://www.sic.czu.cz/?r=3135#ID3434>>.

Publications:

DOMBROVSKÁ, Michaela. Informační gramotnost na vysokých školách: pilotní průzkum 2004. [online]. *Knihovnický zpravodaj Vysočina*. 2004, roč 4, č. 4. [cit. 19.6.2007]. Dostupné na WWW: <<http://kzv.kkvysociny.cz/archiv.aspx?id=270&idr=2&idci=3>>.

DOMBROVSKÁ, Michaela. Výzkum a měření informační gramotnosti na vysokých školách v České republice: pilotní průzkum v roce 2004. In *Informační gramotnost 3. Sborník příspěvků z konference, konané 2. prosince 2004 v Moravské zemské knihovně*. Brno: Moravská zemská knihovna 2005. s. 68 - 76.

DOMBROVSKÁ, Michaela. Pilotní průzkum úrovně informační gramotnosti vysokoškolských studentů zaměřené na služby knihoven - IVIG 2004 (1. kolo) & 2005 (2. kolo). In *Informační gramotnost 4. Sborník příspěvků z konference, konané 24. listopadu 2005 v Moravské zemské knihovně*. Brno: Moravská zemská knihovna 2006. s. 74-83.

TICHÁ, Ludmila; DOMBROVSKÁ, Michaela; LANDOVÁ, Hana. Informační gramotnost a vysokoškolské knihovny. In *Podpora informační gramotnosti ve veřejných knihovnách - cesta k budoucnosti*. Uspořádal Miroslav Ressler ve spolupráci se Zlatou Houškovou. Praha: Národní knihovna 2006. s. 21-40. ISBN 80-7050-500-1. [popis průzkumu na str. 25 - 30].