

## **Project and results of a nationwide survey on information literacy of university students in 2015**

The working group IVIG (Information Education and Information Literacy Working Group) surveyed the information literacy of university students in the Czech Republic. The survey was supported by the Association of Libraries of Czech Universities (ALCU) and it was carried out by university libraries.

The support of ALCU involved recommendation to Czech universities to conduct the survey, and financial provision for the professional sociologist who guaranteed the preparation of the questionnaire and processed the results.

### **Analysis of the situation in the Czech Republic and abroad**

According to the available literature, similar surveys focus mainly on the information behaviour of users and how they search in catalogues and databases. This does not cover the whole range of knowledge and abilities as the working group IVIG formulated in information literacy definition and standards of information literate university students. Members of IVIG had no model nor comparison, they didn't know any similar survey in the country and abroad. The survey conducted in 2015 was based on methodology and results from the pilot survey of information literacy of students carried out in 2004-2005 by IVIG.

### **Project intention**

The objective of the survey in 2015 was to learn the state of information literacy of university students, to find out gaps, conditions, and occasions to change in information education, and also to compare results with those from previous pilot surveys in 2004 and 2005.

### **Survey reasons**

- to gain arguments for university managements to emphasize the need for information education of students
- to simplify the implementation of information literacy to curricula.
- to present the findings to the creators of national information policy.
- to track the progress by regularly repeated surveys.

### **Target group**

In pilot surveys in 2004 and 2005, the target group was students registered in the university libraries and the sample of respondents was extracted from the library users database using a random sample method. In 2015 the target group was university students of bachelor, master, and doctoral degree, and they were selected from university students' databases who studied in Czech.

### **Survey goal**

To obtain an overview of the behaviour and motivation of students when searching and using information for their study, and to determine their information literacy level.

### **Survey process (proceeding)**

- Update of the questionnaire from 2004 and 2005 surveys and confirmation of its appropriateness and clarity,
- determination of the method of selecting respondents and their number,
- acquirement of acceptance to conduct the survey at the universities and addressing respondents,
- monitoring of return of completed questionnaires and preparing of information for respondents on the survey process,
- result processing and comparison with the results of the pilot survey in 2004 and 2005.

### **Survey hypotheses**

What influences the information literacy level of students:

- Information literacy courses
- Personal interest in information using
- Obligation to work with information in classes

Which level reaches information literate student:

- 70 percent at least in every component of information literacy – advanced level
- 50 percent at least for basic level

### **Survey contribution**

The results of the survey help the participating libraries (universities) to adjust and optimize their information education. It means to support students' searching, evaluating, and ethically using information for study and future profession.

### **Survey extent**

Seventeen universities participated in the survey. The number of possible respondents was estimated according to the number of students at faculties. There was stated a sufficient number of filled returned questionnaires.

### **Support from university management and ICT departments**

Faculties agreed with survey conducting, selection of respondents from university databases, and distribution of invitation to the survey participation by e-mail message through faculty network administrators.

### **Base, documents and tools for the survey**

- goals of the survey,
- basic hypothesis,
- definition of information literacy,
- standards of information literate student,
- questionnaire,
- characteristics of study fields,
- analysis of the results.

### **Characteristics of study fields as the description of conditions at faculties for supporting information literacy**

- number of students and teachers,
- education methods,
- information literacy of teachers and their demands on students,
- support from teachers and faculty management,
- literature and information resources available,
- offer of information literacy courses,
- possibilities and abilities of librarians to support information literacy of students (number of librarians involved in information education),
- technical equipment.

### **Preparing and organizing of the survey**

- There were 3 meetings of representatives of all participating university libraries and 2 meetings of working teams. Preparing works proceeded from January to April 2015.
- Testing and finalizing of the electronic questionnaire in April 2015.
- Selection of possible respondents and distribution of e-mails asking for participating in the survey in April 2015.

### **Organizing of the survey at universities**

Faculty administrators selected a given number of e-mail addresses of the students by the random method and distributed message with the link to the questionnaire. Results from the survey were processed by universities and were sent separately to the libraries. Particular results were not published, they were intended for internal use. Summarized results were published.

### **The motivation of respondents to complete the questionnaire**

- presents for respondents selected by lot (participating libraries decided if so),
- promoting on Facebook of faculties and universities,
- graphs following the increase of filled questionnaires displayed on faculty (library) websites.

### **Workflow and extent of the survey**

The survey was carried out at 17 universities /118 faculties (not all faculties participated): Czech Technical University in Prague, Czech University of Life Sciences Prague, University of South Bohemia in České Budějovice, Mendel University in Brno, Masaryk University, University of Ostrava, Silesian University in Opava, Technical University of Liberec, University of Hradec Králové, Jan Evangelista Purkyně University in Ústí nad Labem, Charles University, University of Pardubice, Tomas Bata University in Zlin, University of Veterinary and Pharmaceutical Sciences Brno, VŠB – Technical University of Ostrava, University of Economics, Prague, Brno University of Technology.

Data gathering: 27. 4. 2015 to 18. 5. 2015  
 Students addressed: 89.015  
 Returned questionnaires: 25.389 including duplicate and incomplete  
 Returned valid questionnaires: 23.834  
 Average response rate per institution: 29%

The data set was representative of public university students in the Czech Republic.

Particular types of literacy were examined (based on categories used in international surveys IALS/SIALS). Functional literacy was defined as the ability to participate actively in information world.

The questionnaire consisted of 45 questions: basic data on the student and his/her study, and questions related to particular components of information literacy:

- Document Literacy information searching
- Prose Literacy experience in academic writing
- Language Literacy terminology in a foreign language
- Numerical Literacy using numerical and technical data
- Computer Literacy ICT experience, preparing of computer presentations

#### **Tools to control and follow survey progression on the web**

- Statistics of returned questionnaires
- Excel output of results
- Winning code validation (to select winners of presents)
- The setting of prize number

#### **Results**

Data analysis of participated universities (faculties) was delivered to university libraries. Separated reports were not published, they were used to support information education at given universities. A summary report was distributed to all participating universities. The results are perceived as a fundament for information literacy development and support of information education at specific universities. The global results were interpreted at the IVIG seminar 2015, at the conference Bibliotheca Academica 2015, and at the international conference ECIL 2016.

#### **Findings**

A probabilistic model of a student exceeding 50 points of level scores of Information Literacy ordered by most influencing predictors:

- passed a course working with information,
- motivated to reach a higher level of education,
- understands the significance of information sources knowledge and skills,
- a man,
- uses online services provided by the university library and outside the library,
- uses different information sources other than just textbooks,
- several years in university studies.

A probabilistic model of a student exceeding 70 points of level scores of Information Literacy ordered by most influencing predictors:

- a man
- passed a course working with information,
- motivated to reach a higher level of education,
- understands the significance of information sources knowledge,
- studies at more universities
- uses different information sources other than just textbooks,
- uses online services provided by the university library and outside the library.

#### **Conclusions**

In comparison with the pilot survey results (2004-2005) some differences were found:

- prose literacy increased: from an average score of 49.83 to 68.59.
- language literacy improved from 58.55 to 66.12.

- document literacy remained at the same (low) level from 39.78 to 39.73
- numeric literacy decreased from 55.33 to 50.86
- ICT literacy decreased from 63.67 to 58.17.

The use of the academic library and information resources for academic purposes increased from 52.48 to 58.16.

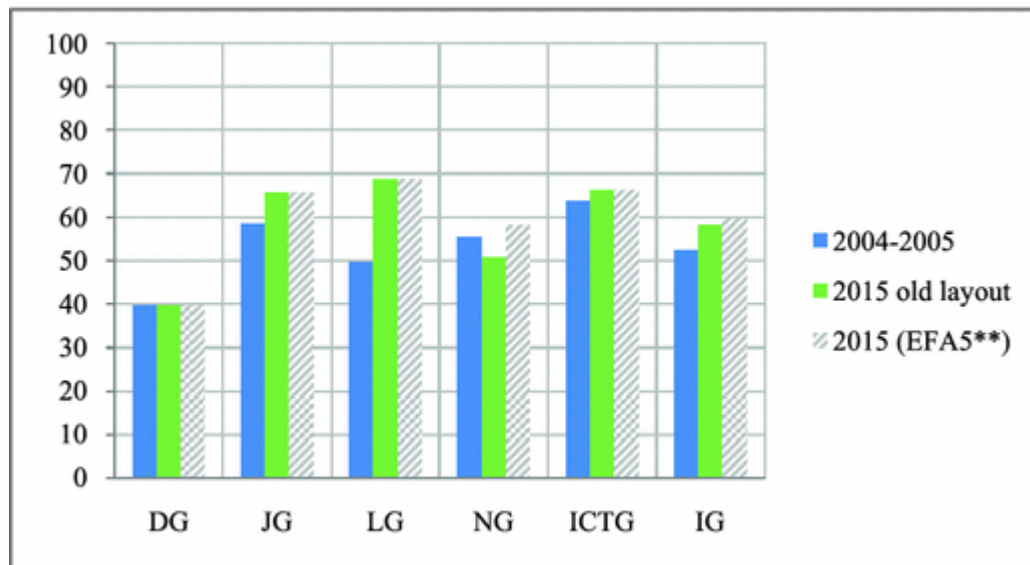


Fig. 1 (Landová, 2015)

The results were compiled in reports for particular universities in detail. They serve as a tool for analysing and improving the information literacy of their students.

### Survey results presentation and publishing

PRAJSOVÁ, Jitka, Ludmila TICHÁ a Lenka BĚLOHOUBKOVÁ. Celorepublikový průzkum IG VŠ studenta 2015. In: *Seminář IVIG 2015* [online]. Praha, 24. 9. 2015. [cit. 27. 11. 2018]. Dostupné z: <http://akvs.cz/wp-content/archiv/ivig/prezentace15/Belohoubkova.pdf>

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