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Mara Slajpah  
*University in Ljubjana*

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# EDUCATION OF STUDENTS AS USERS OF SCIENTIFIC AND TECHNICAL INFORMATION IN YUGOSLAVIA (WITH SPECIAL REGARD TO CONDITIONS IN SLOVENIA)

M. Slajpah

Central Technical Library, University in Ljubljana, Yugoslavia

## 0. Synopsis

The short report on training of students as users of scientific and technical information in Yugoslavia, with special regard to conditions in the republic of Slovenia, has shown that more than half of the total number of universities have already introduced organized study of informatics/documentation based on several programmes, yet training of students, in university libraries did not become an integral part at the very beginning. The Central Technical Library at the University in Ljubljana (CTK) has been organizing noncompulsory training of students which follows recommendations of UNESCO, IATUL and IFLA, since 1972/1973. So far, training programmes for freshmen and postgraduates, library guide, lists of reference materials, several test papers, a translation of the FID manual and testing and evaluating the draft of the UNISIST manual have been done. CTK continues the work and is preparing a study for the Yugoslav UNISIST committee now.

## 1. Preamble

The aim of this report is to show that recommendations to introduce lectures about "Introduction to informatics/documentation" (IID) as a compulsory subject to all universities of UNESCO members as suggested by UNESCO, IATUL, FID and IFLA, have already given positive results in Yugoslavia. Besides, although later, part of this task has been gradually taken over by university libraries. The need to start IID student education at universities arose from the awareness of the fact that in spite of the recommendations suggested by international organizations to educate and train all active agents of information flows simultaneously, "the ability of users themselves can become the main obstacle to the development of modern information systems" (1). The previous conferences and seminars on user training of the UNESCO/UNISIST programme have confirmed the belief that training of users of scientific and technical information (in further text: scientific information) has become an integral part of national information systems. (2).

## 2. Development and references

2.1 Stronger encouragements for introducing IID education of students as users of scientific information to Yugoslav universities in the years 1959/1960 were given outside universities, the introduction being linked to and backed up by economy and its claim that future experts should become familiar with information documentation activity through faculty departments for informatics. The first conference on ID held by the Association of Yugoslav Engineers and Technicians (Zveza inženirjev in tehnikov Jugoslavije) in 1971 in Belgrade revealed the fact that the IID courses at faculties were unsatisfactory and that the key problem for this inefficiency lay in the shortage of pedagogue-documentalists. (1), in spite of the fact that there exists every possibility in Yugoslavia for gaining the appropriate knowledge in postgraduate studies at The Centre for Studies of Library Science, Documentation and Information Science in Zagreb, and that part of the training should be carried out by university libraries. (3). The suggestion to use the FID manual by Mikhailov/Giljarevskii and an obligatory introduction to the UDC system for the different branches together with a review of national and international specialized ID services was very important. Universities themselves were becoming aware of the importance of educating students as users of scientific

information only after the above-mentioned conference, and from then on lectures have been given also on ID at more than half of all Yugoslav universities at least at the postgraduate level under different names. (1).

2.2 Inactivity of university libraries to engage in user education at universities in the past decade most probably rises from the fact that several documentalists associations were established throughout Yugoslavia and that connections among libraries and documentalists were very loose at that time. Another reason lies in the rejecting attitude of some older librarians towards establishing ID services at their libraries, in spite of the urgent need for such service in studies and research. They were also opposed to engaging computers as an aid and obvious step towards modernization of libraries. (4). Perhaps the main reason lay in two, hardly connectable functions of national libraries in Yugoslavia - they are all but one both national and university libraries, performing as their main duty the functions of national libraries. They gained esteem being good national libraries in spite of taking the side of the traditional university library management. Only from the second half of this decade things started to go better as modernization started to enter national libraries too.

2.3 A study by J. Spanring (Biotechnical Faculty) (5) already gives evidence of increased interest for student IID training in the Republic of Slovenia in the year 1972/1973. Prof. Spanring was the first in Slovenia who started lecturing on introduction to informatics/documentation as a recommended and later as a compulsory course during ordinary studies in the 8th term in the year 1964. He has been connecting lectures at the faculty with visits to and practical exercises at the Library of the Biotechnical Faculty and at the Central Technical Library as the latter holds rich collections of reference tools from the fields of science and technology. The above study on the Slovene situation also emphasises the lack of ID trained pedagogues.

2.4 The majority of IID teachers are trained for some other subject and lectures on IID come to their obligation only as a kind of side lectures. Slovene students are getting acquainted with some IID almost at all faculties and also at some colleges at least at postgraduate level. Study programmes differ in volume and contents. In general, there are two programmes. The first includes several varieties of the subject of informatics/documentation in its broader sense, as elaborated in "An introductory Course on Informatics/Documentation" by A.I. Mikhailov and R.S. Giljarevskii. The later includes informatics in its narrower sense (automatic data processing) with short information on informatics/documentation. As no one is appointed to teach postgraduates only this subject, lectures are given as a kind of side obligation at the Medical Faculty and at the Biotechnical Faculty. By the year 1974 most faculties had begun with regular lectures on ID for students and postgraduates. Introduction to computer science is taught at 5 technical and 4 other faculties, and at one faculty for postgraduates. Lectures on library facilities and on the use of sources of scientific and technical literature are given at 5 faculties (colleges) and are organized by the University Library at the University at Maribor. The lectures are followed by exercises in the library.

### 3. ID education within the Central Technical Library, Ljubljana

3.1 The Central Technical Library is the only independent university technical library serving both university and industry. According to the Slovene Library Act the library also performs the functions of a methodological centre for technical university and special technical libraries and of an interlibrary loan centre for the fields of science and technology. It has also developed information documentation service for the same branches and a specialized centre in civil engineering and energetics within the same service. Information retrieval started several years ago in the classical way (manually) and in 1976 the library changed over to using magnetic tapes, COMPENDEX, for providing SDI. The Central Technical Library, although part of the University in Ljubljana, does not meet the needs of Slovene users only, it also gives full use of its facilities and services to users in other Yugoslav republics. The librarians from the Central Technical Library have noticed that the present generation of students as well as the previous generations are not aware enough of the constant need of scientific and technical information in their studies, research and technology. Their ability to make use

of information flow is also low. This is why the library wanted to increase the level of constant need and habit of using information among the studying youth, the future teachers, researchers and experts who would also become generators of new information. In this endeavour the library staff were encouraged for active work by the recommendations of UNESCO (reports at 4th IATUL conference at Loughborough, 1970) and especially by the report by R.G. Rhodes and A.J. Evans at the IFLA Congress in Budapest, 1972. Besides accepting the permanent obligation to start organized training of users of scientific and technical information into the annual programmes of work since 1972, the library's ID services paid the same attention to users from universities and industry. The library worked out training programmes, in which studies and experiences gained by a librarian from the Central Technical Library during a 7 day course for librarians of university libraries at The British Lending Library, Boston Spa (6), were of great help and which take into account freshmen, seniors and postgraduates. The programmes were discussed in two reports and a practical presentation of the first year programme (engaging slides as aid) was given at the seminar of the Slovene Librarians' Association at Skofja Loka 1973 (6, 7) and they arose great interest in a broader circle of Slovene librarians, although there was some disagreement expressed too. The discussion was closed a year later when a special section within The Association of Librarians of Slovenia was established for the training of users of scientific information and a seminar held on this subject.

### 3.2 Training programmes

#### 3.2.1 The programme for students' training (freshmen and sophomores) offers:

- a representation of the necessity for students to use library facilities regarding the continuous increase of various types of scientific and technical literature
- a representation of the functions of the Central Technical Library
- a representation of the faculty library and librarians by names
- a representation of different types of documents (primary, secondary, tertiary)
- a representation of library catalogues, taking the viewpoint of a user retrieving information, i.e. appropriate literature
- a representation of the holdings of the Central Technical Library and information on the great possibilities of interlibrary loan from Yugoslavia and foreign libraries
- getting acquainted with the library publications on library holdings. Lectures are illustrated by graphoscope projections, examples of catalogue cards, graphs of structural system of UDC and detailed explications of the sub-classes corresponding to a faculty's profile.

A visit to the library and practical exercises in search in the author, title and UDC catalogues follow. All participating students are supplied with a short guide to the library, which has been published for this purpose.

#### 3.2.2 Programme for seniors and postgraduate students:

- a representation of the facilities of the Central Technical Library - special attention is paid to information-documentation service and to interlibrary loan
- lecture on the structure of scientific and technical literature
- lecture on general and special sources of literature with a special emphasis on the study profile of students
- information on patents, standards, technical specifications and administrative regulations for the individual branches

- practical exercises in how to search for literature on a definite topic. Students are given a guide to the library, and lists of reference materials and standards regarding their branch of study.

3.3 In the year 1975 the Central Technical Library was given another encouragement to proceed with user training when a three day course for testing the UNISIST manual (draft) for the training of users of scientific and technical information was organized by the library; the initiative for this came from the Yugoslav commission for cooperation with UNESCO. While examining and evaluating the manual the library got confirmation that the work hitherto was efficient, and realized that organizers of users' training at universities and university libraries very frequently come across the same problems (compulsory study, insufficient time available, lecturers). Some very useful instructions were also obtained, i.e. testing of knowledge before and after the course.

Due to a very severe lack of space the library could not take whole flow of students, therefore it only sends messages concerning student training to the deans of technical faculties and heads of individual departments at faculties every year. For the time being the number of participating students depends on the proficiency of tutors who organize lectures at the Central Technical Library and on the degree of interest students themselves show. The library has repeatedly suggested that the university should introduce this training among regular study subjects as a compulsory or at least recommended subject, recently also at the end of the three day course intended for testing the draft of the UNISIST manual.

3.4. The Central Technical Library had to find some preliminary solution to the room problem in order to provide additional student ID education. The Faculty for Architecture in Ljubljana suggested that the library may give lectures on information retrieval for sophomores on selected topics (discussed or to be discussed in their lectures) in faculty classrooms (e.g. on motels). A documentalist from the Central Technical Library has lectured on sources for scientific information on the sample subject: "street furniture" at the same faculty this year again. It has been settled between the Central Technical Library and the Electrotechnical Faculty that lectures for the freshmen will be held in faculty classrooms and that they will be included into the subject "technical documentation." The practical work could of course be done only at the library itself in smaller groups.

The task of student education is difficult, it takes a lot of time and requires good knowledge of reference literature for individual branches and the best librarians and documentalists with good teaching abilities. This work is now becoming an integral part of library management. It appears as though the Central Technical Library has become a real university library only now when it directly engages itself in training of students as users of literature so that they would become better teachers, researchers, engineers who will come back to the same library to obtain literature and scientific information continuously. It is evident that ID training of students as users of scientific and technical information has already resulted in increased interest for articles (the library provides xerox copies) and standards and students do not stick to books and manuals only, as it has been observed so far. The department for scientific and technical information pays a lot of attention and time to students and gives them good advice on information (literature) retrieval for their research papers. The reputation of the library has grown on account of their work to such a degree that university students seriously engaged in the endeavours to build up a new library, the construction of which should start in 1978.

#### 4. Further prospects

In the next decade the effectiveness of student ID education should be increased in volume and quality in Yugoslavia. We are of the opinion that the hardest days of spreading the idea of the importance of student education and its introduction in universities and university libraries already lie behind and we do not expect further obstacles in admitting informatics/documentation to university curricula as compulsory subjects soon. The Central Technical Library has translated and published the FID text-book by Mikhailov, Giljarevskii to help students at their study of

informatics/documentation. This work has turned into a precious aid to lecturers too, because this happens to be the first methodological text-book in Slovene at all. The library decided to translate the UNISIST manual for training of users of scientific and technical information too. The Central Technical Library is going to write a survey on the situation of user training at Yugoslav universities and university libraries on behalf of the Yugoslav UNISIST committee. A special inquiry, carried out also with the assistance of permanent collaborators from other institutions, will be sent out and when completed it will become a perfect basis for the above-mentioned study, and consequently suggestions for more effective and coordinated ID student education will undoubtedly be derived from it and recommended to the committee. The library will also prepare an ID programme for librarians at technical libraries, so that they will be able to take part in the task of training users of scientific information. As soon as the Central Technical Library has received a terminal, information retrieval by this means will be included in the programme of ID training. All the endeavours for better ID training of users of scientific information at universities are directed at a single aim, i.e. making the information system better and increasing the level of its efficiency in Yugoslavia.

#### References

1. Spanring, J. "Razvoj in oblike primarnega izobraževanja tvorcev, obdelovalcev in uporabnikov znanstvenih informacij v Jugoslaviji. /Development and types of basic training of generators, documentalists and users of scientific information in Yugoslavia./ Prva konferencija o informacijama Saveza inženjera i tehnicara Jugoslavije "Radna organizacija i sistem naucnih informacija", Beograd, 1971.
2. Obrazovanje korisnika u programu UNESCO/UNISIST. /User education within UNESCO-UNISIST programme./ Beograd, 1977. 3 str. /Razmn./
3. Subotin, L. "Permanentno obrazovanje korisnika - nastavnika visokih skola i studenata u univerzitetskim bibliotekama. /Permanent education of users - teachers and students within university libraries./ Prva konferencija o informacijama Saveza inženjera i tehnicara Jugoslavije "Radna organizacija i sistem naucnih informacija". Beograd, 1971.
4. Kilgour, F.G. "Izvodljivost kompjuterizovane bibliotecke mreze u Jugoslaviji. /Feasibility study on computerized library network in Yugoslavia./ Bilten jugoslovsanske komisije za saradnju sa UNESCO, /2/ novembar/decembar 1975, str. 95-99.
5. Indok centar za biotehniko, Biotehniška fakulteta /Spanring, Joze/. "Ugotovitev razmer na podroccju izobrazevanja in izpopolnjevanja delavcev v informatiki vkljucno z vzgojo uporabnikov informacij v SR Sloveniji v studijskem letu 1972/1973 /Survey of the professional and permanent training in field of informatic (users included) within SR Slovenia, School-year 1972/1973./ 12 str. Raziskovalna skupnost Slovenije, Sklad Borisa Kidrica. Ljubljana 1973.
6. Tovornik, S. "Uvajanje studentov visjih letnikov in podiplomskih studentov v vire literature. /Introduction of seniors and postgraduates in use of literature sources./ Knjiznica 18 (1/2) 1974, str. 40-47.
7. Slajpah, M. "Uvajanje studentov prvih letnikov univerze v uporabo knjiznice in primarne vire literature." /Introduction of freshmen at University of Ljubljana to library and primary literature use./ Knjiznica, 18 (1/2) 1974, str. 48-57.