## Exposure of Students and Teachers to Computing and Databases in High School Libraries in Israel/ Ben-Tovim Lea

## **Abstract**

The future school is one that is first and foremost able to qualify a new breed of graduate, who will be equipped with capabilities, skills and high quality tools that will ease the task of coping with future challenges to deal with data requirements in a technological and scientific environment quite different from the existing and familiar one. For this purpose the student, as well as the teacher must be introduced to a new way of thinking and be equipped with tools that will enable them to learn efficiently in a way more suitable to the newly created conditions.

The communication revolution makes it essential for the school to provide new skills and capabilities such as locating and processing of information. In a world where wide accessibility to data exists and networking is rapidly growing the emphasis hitherto put on data in it is now direct towards information skills, locating and processing data. In schools, the center for accessible and available data is the school library.

To address the topic, this research presents a wider view of what is taking place in the world and in Israel on the subject of computers and databases in high-school libraries. The aim of this research was to attain an assessment of the state of students and teachers exposure to computing and databases in high schools libraries in Israel, on a number of levels: operational, activity spectrum, and computer usage.

- 1: The following points were examined:
  - A: Computerized administration in libraries:
    - •1 Computerized index: A dedicated work-station for organizing the library contents on computer database.
    - •2 Library management with the aid of a computer lending, retrieving, identifying late returns, reminders, a queuing system, Reports, stock-taking.
    - •3 Computer index for the use of students and teachers computer stations for the use of the library public.
  - B: Computerized data resources:

- •4 Databases on discs, computer workstations fitted with disc drive.
- •5 On-line databases computers connected to remote data resources.
- 2: The usage made of library computers was examined:
  - •6 Computer usage in the library by the students to what extent are the library computers being used by the students and towards which goals.
  - •7 Computer usage in the library by the teachers to what extent are the library computers being used by the teachers and towards which goals.

To address the purposes of the research as defined a survey was conducted in a typical cross-section of Israeli high-schools with the exception of the Jerusalem District (the Jerusalem District director refused to authorize the survey from being carried out in the District). The survey was distributed by way of direct mailing to the school masters in the Central, Tel-Aviv, North and South Districts. They were asked to hand out a questionnaire to their library managers (for questionnaire see appendix A). Of a total of 300 questionnaires sent, 59 completed questionnaires were returned - N = 59.

Number of high schools in those Districts is approximately 600.

The survey was conducted in a way that would allow an unbiased reflection of all Districts except the Jerusalem District.

The results of this survey suggested the following:

- A: 76% of the high-school libraries (45 Libraries) had at least one computer.
- B: 93% of the computerized libraries (42 Libraries) were managed by a dedicated management program.
- C: In 60% of the computerized libraries (27 Libraries) had a computerized network within the library.
  - D: 71% of the computerized libraries (32 Libraries) worked with computer based databases (54.2% of all libraries taking part in the survey), 97% of those on CD/ROMs (31 Libraries).
- E: the most commonly used was the educational disc 86.7% (29 Libraries).
  - F: 34.3% of libraries working with databases are connected to the Internet (11 libraries)- 18.6% of all libraries taking part in the survey. The Internet is used in those libraries primarily for data search (91%-10 libraries) and for

general surfing (72.7%-8 libraries).

- G: Additional uses for computers were mainly word processing.
- H: Average time library computers were used by teachers was 1.25 hours per day.
- I: Average time library computers were used by students was 4 hours per day.

The main conclusions from this survey results are:

- A: Library management computer precedes the database computer there was no recorded case where computers were utilized as a database facility in a library that had no library management computer.
- B: Teachers did not tend to use the library computer significantly unless the library had several CD/ROM stations.
- C: Students appeared to use the library computer to a far greater extent than the teachers.
- D: The extent of computer usage by the students increased in direct proportion to the range and variety of the educational and databases available.
- E: Availability of communication programs in the library seemed to encourage students to make increased use of the library computer.
- F: School libraries that put an emphasis on a larger variety of facilities such as cassettes, charts and subject files tend to put an emphasis on computerized data on CD/ROM and in communication networking thus effectively endorsing the idea of the library as a resource and information center.
- G: The CD/ROM technology precedes the Internet technology only one library had Internet installed prior to installing a CD/ROM, whereas 99% of the libraries had their CD/ROM's installed first.

In view of these results and conclusions there seems to be a tendency towards incorporation of technology and various media into high-school libraries. However, assuming libraries that failed to respond to the questionnaire were in a less favorable state (Shoham, Yitzhaki, 1985), the overall view attained by this research was quite unsatisfactory, and (hopefully) this research may serve as an incentive towards further advancing the subject.

This, however, is but the start of a very long journey, and there is still a vast potential for developing the research subject in order to identify the areas that may call for outside involvement, either from the educational or the financial aspects, and deal with them in a way that will ensure school libraries are kept

up to-date, ready and fully equipped to cope with the data revolution in education, even if it demands radical changes in our concepts and function.

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