

School Library Resource Centres and the New Information Technology: The International Perspective

by Tom Rich

One thing that anyone who deals with technology knows is that jargon is king. Thus, an explanation of mine. The short title of this paper is really — **SLRC and the NIT**. I am using the British term "school library, resource centre" (SLRC) for what we still have trouble naming — library, resource centre, learning centre, etc. Secondly, with a bit of discomfort, I am using the term "new information technology" (NIT) now currently in vogue. This encompasses the use of computers and television and the various combinations of the two with an emphasis on the computer aspect.

The very act of gathering and putting together information on this subject involved technology and illustrates some of the changes we all have faced in the past several years. Just a few years ago researching a subject involved hours in the library searching through reference sources and more hours copying the information by hand and using a typewriter. Gathering information for this article was different. My literature search of ERIC and LISA was conducted on-line using a computer. Those items I wanted that were not in the local library were acquired through inter-library loan accessed using an electronic message network. All of the actual writing was done at a word processor, my abominable spelling checked by a spell check program. The equipment involved to do all this can cost as little as \$1500 in total.

Yet, for all this, I found little in the literature to help me understand the impact of the NIT on the SLRC. Certainly,

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there is a plethora of articles extolling the virtues of computers and the changes they may cause in the library resource centre (Boss, 1984; Craver, 1984; Roberts, 1982; Sawson, 1982; to name a few). However, little information exists on exactly what the impact is to date. In fact, one is left with the impression that, outside of one or two small areas, the average school library resource centre is largely untouched by the impact of computers and affected by television in no more dramatic fashion than by the introduction of films to education more than 40 years ago. Although the majority of articles we were able to find concerned Canada or the U.S., the evidence is that this situation prevails internationally as well as in North America.

My initial impressions regarding what is really happening were mostly based on information gathered at the Centre for Educational Research and Innovation (CERI) "International Conference on Education and the New Information Technologies" which took place in Paris in July 1984 and on the multitude of background papers prepared for that conference. Regrettably, although I will quote from several of them, I do not believe they have been publicly released. The lack of international information we found in the publications we had access to led us to gather additional information by surveying a number of countries. Finally, my thoughts were crystallized by a British publication I highly recommend, **Information Technology and the School Library Resource Centre**, published by the Council for Educational Technology (Gilman, 1983).

A large part of the question regarding the impact of the NIT on the SLRC focuses on the fundamental question of the use of computers in education. Without a doubt, the primary impact of computers on education to date is in the emphasis on what has come to be called computer literacy. Although much has been written and said about the potential for the actual process of education being

changed by the NIT, in no country has this come about in any widespread sense. Rather, the computer has become a subject of study and skills training. This in no way changes the role or process of education. It simply introduces a new subject of study.

It is useful to quickly review the international situation relating to the use of the NIT in the school. The CERI (1984) paper **The Introduction of the New Information Technologies in Education: Policy Trends and Developments in Member Countries** reviews the current status and trends for the future in the DECD countries. The area receiving the most emphasis has been the teaching about computers particularly as it relates to the skills needed for work. However, the amount and the specific approach (awareness, literacy, computer science, vocational approaches) vary considerably.

While the introduction of the NIT is well under way in most developed countries, the speed with which it is being done differs. In general, only the earliest stage of use has been reached although in many countries a sizeable investment in both time and money has been made (CERI, 1984). In their review of the situation, the CERI Secretariat suggested, "Looking at the vast amount of problems waiting for solution at all the levels from policy formulation to classroom practices it is difficult to avoid the feeling that if more has indeed been done, much more is still needed to complete the task" (p. 23). They further suggest that much more educational experience and knowledge relating to the NIT is needed before appropriate decisions can be made.

No one country has an overall solution to the use of NIT in education. However, as reported in CERI's (1984) review of policy trends in this area, France and the United Kingdom would appear to be the most advanced by virtue of their unitary approaches. Both have attempted to coordinate the entire process of the introduction of computers to education with a national policy while still leaving room for local initiatives. Both programs also place heavy emphasis on providing equipment to schools, curriculum development and teacher training.

Where do the library resource centres stand in this process? For most countries this is extremely difficult to determine. Some of it relates to the difficulty in finding English language literature on the subject. But it would also appear to relate to a different role for SLRCs in some countries and a virtual absence of SLRCs

COURSES IN MICROCOMPUTERS IN EDUCATION IN CANADIAN UNIVERSITIES

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in others. Little if any mention is made in the CERI report of uses of the NIT in the SLRC or of teaching students about using computers as tools to access information. Access to data banks or telematic networks is usually listed as being at the experimental stage, as in computer assisted instruction.

This situation is also evident in educational programs outside the school. A summary of case studies on the **Information Society and General Education** (Lariccia, 1984), also prepared for the CERI conference, listed no projects which directly supported the use of computers in a library setting. The projects reviewed included computer camps/plays/festivals, computer centres and exhibitions, computer or telematics in the home, and computer clubs. Although several projects describe setting up computer centres for both student and general public use, these are either special centres or those set up at museums or exhibitions. Projects in both France and the U.K. focused specifically on telematics and the provision of on-line information sources but both of these emphasized in-home use of this service; none mentioned libraries.

Some of the difficulty in getting information about the use of computers in SLRCs relates to the absence of school libraries in various countries. Although library resource centres exist in secondary schools in certain countries, they often do not exist in elementary schools. In many other countries all resource materials needed are located in the classroom. In some cases these are supplemented with resources from public libraries or regional resource centres. In a number of instances these city or regional centres are not run by the educational authorities but are the responsibility of municipal or regional governments.

Thus, those systems with well-developed school library resource centres are giving at least some attention to the use of the NIT in them. Where the resources are the responsibility of the teacher the approach is different and more concern is placed on their use in the classroom. In some cases this situation is complemented by a higher degree of central control over curriculum. If the same set of resources, both required and supplementary, is used throughout the educational system in a country, there is less need and reason for a school library as a resource centre for classroom instruction. It is entirely possible for regional centres or public libraries to fill the resource functions necessary.

In order to get a grasp on the specific impact of the NIT on SLRC the need for more data became obvious. In an attempt to fill in some of the gaps, a brief 15-item questionnaire was developed. This was then distributed to the central education authorities in 12 of the countries which had attended the CERI conference. Responses were received from 7 - the United Kingdom, Ireland, South Australia, Belgium, Denmark, Sweden, Finland and Australia. The questionnaire focused specifically on the use of the NIT in school library resource centres, the training of staff, and the perceived long range impact of the NIT on SLRCs. Although certainly not comprehensive, the results are interesting and provide at least some measure of international trends in this area. A summary of the findings follows.

Where school library resource centres existed, they did generally hold AV materials in addition to books and periodicals. The exception was the U.K. where there was no evidence that secondary school libraries "generally" held AV materials and the practice in primary schools was varied and little documented. In Sweden, Finland and Denmark schools do not usually have libraries but are rather served by municipally run libraries and/or regional AV centres.

The situation with regard to the presence of computer software in SLRCs was much different. Only South Australia stated that many had computer software while the U.K. and Belgium stated that some had computer software. In Denmark the regional AV centres had computer software while in the other countries software was held at the classroom level.

Based on this, it is obvious that the responsibility of SLRC personnel was primarily to loan traditional print and AV materials. In addition, involvement in previewing/reviewing print and AV materials was listed by South Australia, Denmark, Finland and Belgium. The U.K., South Australia, Belgium, and Denmark suggested at least some involvement of SLRC personnel in accessing information databases via computer. Only South Australia, Sweden and Belgium listed any involvement in media education programs through the SLRC.

Several questions focused specifically on the use of computers. It seems evident that comparatively few of the SLRCs in the countries responding to the survey had computers. The country with the most was the U.K. where 70% of second-

dary SLRCs had computers. In Belgium about 25% of SLRCs had them while 10% did in South Australia. In Denmark all regional AV centres had computers. Elsewhere the computer presence was in the school generally, not in the resource centre. For instance, in Ireland all schools have a computer and in Finland all secondary schools do.

Because of the small number of SLRCs with computers, the use is obviously still developing. In South Australia, Denmark and Belgium the primary use appears to be for administrative purposes. However, in South Australia and Belgium local computer-based bibliographic databases are being developed while in the U.K. and Belgium computers are used, to some extent, to access on-line databases. The U.K. and Belgium indicated computer-based networking system are being used in at least some schools. Denmark and South Australia mentioned experimental uses of such system.

As might be expected, the level of training of personnel reflected the existence, or lack, of a well-developed SLRC program. In most countries responding, the SLRC personnel had teacher education plus some level of additional training in library technology. Additional training related to NIT ranged from one-day training sessions to short courses. When asked what additional training SLRC staff should have in relation to AV materials, the answers were very similar and related to equipment operation, use of AV resources and production of materials. The answers were somewhat more variable when computer training needs were addressed. The U.K., Ireland and Sweden suggested that training in using computers for information storage and/or retrieval was needed. In Sweden and Belgium the need for training in using and/or adapting existing software were listed.

Finally, the questionnaire considered the overall effect of the NIT on the SLRC. When asked what the impact of the NIT, particularly computers, was or would be on SLRCs, the answers focused on three areas. The U.K. indicated it would be on training students in how to use computers to access information. Ireland, South Australia, Denmark and Belgium all suggested the general use of computers by schools to access information. South Australia, Finland, Denmark and Sweden listed the administrative uses of the computers as a major impact.

When asked what was the single most important role that SLRCs had to play in

the use of NIT in education, the answers took two general forms. The U.K. and South Australia both emphasized the importance of students learning to use computer-based information sources. The other countries responding were not as specific and listed as most important the provision of information and/or "resources" to schools.

From the results of the survey the developing nature of the use of the NIT is obvious as are the different approaches to school library resource centres. In those countries without a tradition of local school libraries the impact of the new technology is felt mainly in the classroom. It also follows that the NIT are likely to be incorporated in regional AV centres in much the same way that film and other resources have been. The developments in these countries do not seem as relevant to the Canadian situation where library resource centres commonly play a more central role in the school.

In countries where the school library resource centre is common, more questions are raised about the specific role the NIT should play. Most interesting is work going on in this area in the U.K. and, to some extent, France. What is emerging in both of these countries is a new category of teacher, one who is the coordinator for the application of the NIT in a school (Gwyn, 1984). In France this is the result of a teacher training policy which provides an extensive year-long program for select groups of teachers who will then have the responsibility for training other teachers. In the U.K. it is a condition of provision of hardware. Although not specifically aimed at SLRC personnel in either country, it would seem a natural extension of the work of those personnel. As outlined in the CERI (Gwyn, 1984) paper on **New Teaching Functions and Implications for New Training Programmes** these "NIT Coordinators" would:

- Be identified as resource persons, knowledgeable about the NIT, to whom their colleagues can turn for informal advice;
- Take a lead, more formally, in school-based in-service training;
- Be responsible for the management of NIT hardware and software resources and of technical support staff;
- Contribute to software design and development;
- Advise headteachers and school managements on acquisitions policy as well as on longer-term education development. (p.6)

In Canadian terms, this would certainly seem an approach that conforms with our concept of the services that should be provided through the SLRC.

The approach in the U.K. adds one

other essential element which also concerns the SLRC. Although the U.K. government's Microelectronics Education Programme primarily focuses on developing "a steady stream of new employees ready and able to work with information technology as it is found in the real world" (MEP, 1983), the program includes as one of its topics the instruction of students in the use of the computer as a means of information retrieval from databases. Certainly SLRC personnel are the logical people to carry out this instructional task.

Perhaps most interesting of all is an approach for the U.K. suggested by Gilman (1982) in a paper prepared for the Council for Educational Technology titled **Information Technology and the School Library Resource Centre**. The approach is two-fold and well summarized in the following quote:

The computer is a school-wide resource rather than the preserve of any one particular subject area. As such, its use needs to be organized and managed on a school-wide basis, and its software integrated with the school's total collection of book and audio-visual resources. The department within the school most suited to such a role is, I suggest, the school library resource centre, on the basis of its existing involvement with the servicing of the requirements of the school's overall curriculum . . . Additionally, the school library resource centre's normal responsibility for the in-service training of staff in the use of audio-visual equipment, together with the instruction of pupils in the use of the library's bibliographical tools (catalogues, indexes, bibliographies, and the like), makes it the obvious department to be made similarly responsible for the provision of instruction and practice in information retrieval skills and techniques to both pupils and their teachers. (p.73)

Accomplishing these tasks within the SLRC will not be easy. For instance, as suggested by Gilman, one of the first difficult tasks is acquiring a computer for the SLRC. Yet this is essential if the centre is to achieve centralized control of the administration of the school's micro-resources. The second problem, although perhaps easier to overcome, is the decision to include a component on instruction uses of databases in the curriculum and a recognition of the appropriateness of the SLRC as a logical location to carry out the instruction.

Perhaps one final comment is necessary. The reader will note in this review an absence of emphasis on any suggestion of a radical change in the fundamental nature of the library. This is not for lack of writing on this subject. For instance, Lichman (1982) suggests:

Much of what we normally call the

library's holdings will constitute the computing center's holdings . . . or a network to which we belong . . . What has passed for librarianship, and for acquisition, cataloguing and circulation of books surely will be substantially different in the future. (p. 9)

While current in some circles, particularly universities, this view is not reflected in what is actually happening in school library resource centres. This, in large measure, arises from the teaching role school libraries play as opposed to the research role university libraries play. However, I would also hope it reflects the sentiments so well expressed by Kanes (1982), "Libraries have been able to provide spaces where thinking is optimized" (p. 32). As he points out, the library is a place for wrestling with ideas and meaning and important **tangible** sources of history, science, dreams, etc. Libraries allow browsing in a fashion not possible with a database. Nothing compares to eyeing a book, picking it up and immersing oneself in other worlds, in the mysteries of science, the delight of history and myriad other subjects. It is not just the ideas, words and pictures but the physical surroundings, even the silence, which are conducive to thought, imagination and wonder.

The new information technologies are having and will continue to have an impact on school library resource centres. The approach suggested by Gilman for the U.K. and the results of the survey done suggest two fundamental roles for the SLRC in dealing with the NIT. One is the management of all educational resources, including those associated with the NIT; the other is the instruction of students in the use of those resources and others new to the school, such as on-line databases. Both arise out of the traditional role of the library resource centre and thus represent an evolution in its development rather than a radical change. Let us hope that this is an accurate assessment and that, while taking on new functions, the library does not lose its essential function as a place for thinking and imagining.

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STANDARDS

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teacher-librarians and principals report satisfaction. This approach is now documented in a publication entitled "Collection Development in School Libraries" (Educational Media Team/Media Services Group; Calgary Board of Education, 1984).

There is little good rendered when the school library and its staff spend the major portion of their time dedicated to inform acquisition. It is of little comfort to select the most apparently useful book, periodical, photograph, or videodisc if the students are unable to apply independent critical judgement to their use of the resource and determine its application to their study or their life. There is every need in the development of new standards to rethink and re-present the concept of scope and sequence. This concept must be one that sheds the information locational approaches taken within traditional library skills programs. It must rather integrate the broadest information

needs of students with the total curriculum and program expectations of the school. Far too many teachers and teacher-librarians have neglected scope and sequence and its relationships to the resource oriented program when good teaching is dependent upon it!

There is definitely a need for new standards — standards that will outline the developmental steps needed to ensure the provision of appropriate facilities — facilities that provide access to systems of resource networks, quickly providing information about the latest news developments and that blend the best elements of computer technology with other modes of image and voice delivery.

But the development of new standards will be of little meaning unless placed in a societal context. Jane Anne Hannigan expresses these concerns well when she talks of overriding principles that must accompany any revisions. She calls for an understanding of personal freedom and its concomitant requirement for a commitment to the respect of privacy. She calls for a sensitivity to guard against in-

formation overload and to know that "human beings must still be recognized and respected as the orchestrators and controllers of that information" (Jane Anne Hannigan, "School Media Standards", *Library Trends*, Summer 1982, p. 53).

The development of new standards offers a new opportunity to examine the essential role that the school library — and its human and material resources — occupies in the educational environment. Standards that concentrate too much upon the nature of the facility, the size of the collection, or the faster delivery of information will do a disservice to students. The essence of the school library lies in its integral relationship to the school program and in the integral relationship of the teacher-librarian to teaching and learning. It is time to stop saying that the school library "supplements" and "complements" the school program. The school library is not the tablecloth on a well-graced table. It is the basic food offered for the educational sustenance of all students.

LETTER TO THE EDITOR

Editor:

It was with a good deal of concern that I read Marvin Duncan's "Preparing Personnel for School Media and Library Service Positions: Some Observations" in the March, 1985 issue of the **Canadian Journal of Educational Communication**. Not only was Duncan's analysis of the American situation superficial but it was just that: an analysis of the American situation without any indication in the article or by the editor that the role competencies and terminology in Canada are quite different. Readers unfamiliar with the current direction and thrust of teacher-librarianship in Canada, consistent with **Resource Services for Canadian Schools**, would draw the conclusion that Duncan describes the Canadian situation rather than the American one. Without knowledge of the Canadian con-

text it would be difficult for a reader to recognize the inherent differences from the situation described by Duncan.

We certainly have our own set of problems in providing effective resource services at the school and district levels in this country but they are **not** the same problems as necessarily exist in school districts south of the border. We are inundated by the American professional literature; surely our own professional literature can address our own issues and help debate their resolution.

Yours truly,
Ken Haycock

Editor's note: In retrospect, a preliminary statement identifying the author's viewpoint as American might

have been useful. It was simply an editorial decision that the paper stood alone without such identification. Certainly any confusion which may have arisen among readers thinking that Mr. Duncan was referring to or extrapolating to the Canadian scene is to be regretted.

On the second point, Mr. Haycock suggests that perhaps CJEC should restrict itself to Canadian issues and topics. Again, the policy of this editor is to accept submissions from any source, within the domain of educational technology.

Finally, Mr. Haycock should be more pleased with this issue of CJEC which does precisely what he has suggested, in providing a forum for a Canadian viewpoint on issues which jointly confront the media and library professions, including Mr. Haycock's own useful analysis.

D. Hlynka