

DOCUMENT RESUME

ED 351 023

IR 054 218

TITLE From School Libraries to School Media Centres: Experiences, the Present Situation and Possible Improvement.

INSTITUTION United Nations Educational, Scientific and Cultural Organization, Paris (France). Div. of Educational Sciences, Contents & Methods of Educ.

PUB DATE [87]

NOTE 107p.; A product of the Programme of Cooperation in Research and Development of Educational Innovation in South and South-East Europe.

PUB TYPE Reports - Descriptive (141)

EDRS PRICE MF01/PC05 Plus Postage.

DESCRIPTORS *Adoption (Ideas); Audiovisual Aids; *Change Strategies; Elementary Secondary Education; Foreign Countries; *Learning Resources Centers; Media Specialists; Professional Training; *School Libraries

IDENTIFIERS Hungary; Yugoslavia (Croatia); Yugoslavia (Serbia)

ABSTRACT

This report presents case studies of the role of school libraries and their transformation into school media centers in elementary and secondary schools in Serbia, Croatia, and Hungary. It is noted that the school media center is not conceived of as a simple mechanism for storing books and audiovisual aids, but as an active center for self-directed learning and innovative student-teacher relations. The studies were submitted in response to an invitation from the Unesco-supported Programme of Cooperation in Research and Development for Educational Innovation in South and South-East Europe. The Serbian study focuses on the transformation of school libraries in four primary schools. The study from Croatia describes the factors that prompted the establishment of resource centers and the standards established in this field. The library resource centers of two secondary schools, one for civil engineering and architecture and the other for medical workers, are described in detail. The structure, general policy, and use of the resource center by small groups and classes are discussed, together with the role and work of the library, user training, and effectiveness. The Hungarian study emphasizes the spreading transformation of school libraries into resource centers. A guidebook was prepared in 1987 to promote this transformation, but data included in the study indicate that the transformation has not yet become general. Because the poor Hungarian economy makes acquisition of special equipment difficult, the emphasis must be on good pedagogy. Taken together, the three studies lead to the following conclusions: (1) an increasing number of schools are reaching the point that they have enough audiovisual material to require processing and services; (2) the transformation of school libraries into resource centers is a relatively short process that includes the centralization of printed and non-printed materials in the library, processing, and establishing the school's centralized databank; and (3) the success of the media center depends on changing the attitudes of all people participating in the teaching-learning process, and changing attitudes is time-consuming. (KRN)

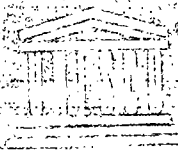
ed 351 023

ED351023

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION
CENTER (ERIC)

- This document has been reproduced as received from the person or organization originating it.
- Minor changes have been made to improve reproduction quality.

- Points of view or opinions stated in this document do not necessarily represent official OERI position or policy.



1R054218

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY

F. Zanuttini

BEST COPY AVAILABLE

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

C O O I E S E E

FROM SCHOOL LIBRARIES TO SCHOOL MEDIA CENTRES

Experiences, the Present Situation and Possible
Improvement

Programme of Cooperation in Research and Development
for Educational Innovation in South and South-East Europe

Published by the National Centre for Educational Technology
(Hungary P. O. B. 260 H-1519)
under contract with UNESCO
Responsible for printing: dr. Jenő Bernáth
Editor: dr. Zsuzsanna Celler

Preface

Two major groups of problem have to be discussed in relation to educational materials and teaching aids: their content and pedagogical application on the one hand and their production and distribution on the other. CODIESEE has tried to address both groups of problems in various workshops and expert meetings. Out of these discussions a more specific co-operation has been developed between Hungary and Yugoslavia aimed at studying in depth the role of school libraries and their transformation into school media centres. The school media centre, as presented in the three studies, is not conceived as a simple mechanism for storing books and audio-visual teaching aids but as an active centre for self-directed learning and innovative student-teacher-relations. At an early stage in their learning career students are being introduced to the autonomous use of learning resources and information systems. All learning resources both print and non print materials are considered as a whole and should be used together. A school media centre can serve as an instrument to integrate different materials and thus making learning more motivating and effective. The three case studies are to be considered as a pilot phase for a more general project among CODIESEE institutions. Please, don't hesitate to comment on these studies and to contribute your own experience. Letters should be addressed to the Regional Coordinator of the CODIESEE Programme, Division of Educational Sciences, Content and Methods of Education, UNESCO, Place de Fontenoy, 75700 Paris, France.

INTRODUCTION

This publication was prepared within the framework of CODIESEE's programme, with the support of UNESCO.

The purpose of the publication was to demonstrate the activity of CODIESEE Member States in the establishment of school media centres, to assess achievements during the last 10 years and to define the possible common modes of development taking the specialities of each country into consideration.

In order to achieve the goals, case studies were requested from CODIESEE Member States on their present situation, research results and development plans:

I. The main objectives of the comparative studies were:

- to focus on the development of the organization of learning resources in the educational process;
- to describe, analyse and evaluate the present situation in the country with respect to the general conditions of organizing learning resources, their services for educational purposes (e.g. for teaching and learning), and the facilities for providing those for the whole country (if there is a system to that effect), and for individual schools;
- to analyse the work of existing institutions providing learning resources - national, regional, district and/or school learning resource centres and/or libraries or media libraries;
- to outline the research and trends of development in this field (use of media libraries and learning resource centres) and to relevant achievements, to present-day and far-reaching programmes;
- to look for optimal solutions for developing learning resource centres and media libraries, and for integrating their use in the learning process.

A description of the following main topics was requested:

Context

The general conditions of educational technology, learning

resources in the country.

(Educational, pedagogical aspects /methods and organization/, present state of educational technology and librarianship, compulsory lists of AV materials /if any, please attach/, use of educational media; their provision for schools; national, regional, district and school level of services in the field of providing educational media for teaching and learning.)

The school libraries

The present situation in schools.

(The number and/or proportion of school libraries in schools /primary, secondary, higher education/; the function and activities of school libraries; their services; their connection to learning resources; storage of educational resources in schools /-if it is not the library itself-/; the facilities /average size, stock of school libraries - proportion of types of documents/ - if there is a standard, or standard-like document, please attach; number and qualifications of personnel there; necessary qualifications of school librarians, etc.)

The media library and school library, and learning resource centre

Their concept, development, research.

(Terminology, definitions, examples; present situation, planned future activities /if any/; plans of area; research activities for developing school media learning resource centres; the integration of the work of learning resource centres in the teaching and learning process etc.)

Work of a given, operating media centre or learning resource centre

Detailed description of a functioning media centre and/or

learning resource centre.

(Plan of area, facilities; acquisition, cataloguing, classifying, storage, usage of book and non-book materials; hiring; information services; qualifications of librarian/s/; other working personnel, description of their work; pedagogical and other activities; the role of the school media learning resource centre in the context of the school and school system, but above all in the teaching and learning process of the given school etc.)

II. The studies received

Replies to the above questions were received from Yougoslavia (Croatia, Serbia), and Hungary. It may be possible that we strived too much for perfection, as theoretical, management, organizing and practical knowledge were all necessary in order to reply to the questions. It is probable that this is why replies were received from fewer countries than expected.

The study received from Serbia is the summary of a three year research conducted by the Institute for the Development of Education. School libraries were transformed into resource centres in four primary schools (one large town, one industrial town, one small town and one village school). The development of the schools in this direction was also different. One did not even have a school library, in another there was need for a large reconstruction of space, in the third not too much had to be changed, in the fourth a resource centre had already been planned. The study correctly shows the course of research from the formulation of goals to evaluation, together with a list of initial and closing tests. It also presents two school libraries that were transformed into resource centres and their operation after their conversion.

It also presents two school libraries that were transformed into resource centres and their operation after their conversion.

The study received from Croatia starts with theoretical questions. It first presents the factors that effected the establishment of resource centres, then formulates the concept of the school library resource centre. It writes about standards in this field in the Socialist Republic of Croatia, although, because of different reasons not all schools have been able to adhere to them. Following this it presents in detail the library resource centre of two secondary schools, one for civil engineering and architecture and the other for medical workers. Among others it presents their structure, general policy, utilization of the library resource centre including small group and class work, role and work of the librarian and effectiveness of the learning resource centre.

In relation to the school for medical workers the study goes on to introduce further theoretical questions in the course of their practical utilization: possibility of many-sided use of media in the learning resource centre, teacher's behaviour concerning resource based and individual learning. It also presents an example of subject matter processed in the frame of annual 10 theme team teaching and experience gained in the course of organizing it.

Naturally, the school library resource centre also prepares pupils to use it. Two phases of this are mentioned: acquisition of fundamental knowledge of use and identifying information in various media, learning how to use them, which pupils can do more independently, with less direct guidance. So the school library resource centre not only helps teaching and learning in school but is also found in extramural activities and its community forming strength can be felt too.

The Hungarian study emphasizes the extent of the concept's spreading, the situation of transforming school libraries into resource centres. It quotes a guidebook issued in 1987 for school libraries with the aim of widespreading learning resource centres. This guidebook was prepared as a goal to be reached by the turn of the century. Libraries have started out towards transformation (the guidebook being based on this), but development has not become general, which is proven by data in the survey.

In relation to the denomination of the new types of school libraries (school library, resource centre, learning resource centre) the notions have been described. Their goals, tasks and functional units are presented in this part. Two school libraries are introduced in operation that work somewhat better than the average but are not experimental ones.

Research is not dealt with separately, but as a summary of research experience the 5th chapter presents the process of transforming school libraries into resource centres. This is composed of two parts: theoretical questions and practical tasks. Experiences related to Hungary are summed up in the conclusions as follows: a bad economic situation is not the beginning of an era for the acquisition of special equipment, but of well-founded and very well-considered pedagogical work. This is also reflected by surveys conducted in 20 school libraries.

III. Conclusions

- An increasing number of schools reach a critical point when they have so much audiovisual media that utilization needs a more detailed processing and regular services. An already existing school library is capable of coping with this task.
- It has been proved for the specialists that up-to-date school libraries, resource centres are needed.
- It has become clear that in spite of numerous hindering factors the transformation of school libraries into resource

centres is a relatively short process, the complete accomplishment of which is urged by pedagogical theory and practice alike.

- On the basis of the three case studies conspicuous differences can hardly be found in the establishment of school resource centres. Development work was started, based on and adapted to the school, then the main phases that can be generalized were accomplished: centralization of printed and non-printed materials in the library, processing, establishment of the school's centralized databank.

Design and operation varies not only according to countries, but also according to schools depending on local conditions.

- Specialists often declare that the establishment of resource centres and learning resource centres is primarily a question of organization. But the so-called "human factor" also has a decisive role. In order to be able to successfully use media centres the attitude of all persons participating in the teaching-learning process must change. (Experience shows that this is the most time consuming task.)

- It has also become evident that much time is needed to change attitudes in spite of the fact that we know the goal and are convinced of its correctness; stages of development cannot be left out, but their deroulement can be hastened. In contrast to media centres, learning resource centres have a long process of development. A change in the attitude of participants is needed as well as a more "liberal" scheduling in education. The transformation of school libraries into resource centres is a much more simple, accepted question as their timeliness is not debated any more.

On the basis of the three case studies it can be ascertained that there are not significant differences concerning principles as our goal is the same:

- to develop organizational units from school libraries that are able to operate flexibly as information centres of whole schools and workshops of methodological innovations simultaneously in order to achieve the main goal;
- that pupils learn to work independently, learn the methods of self-instruction.

Among others in order to select between different types of media and information and choose suitable material they must reach a level of ability. There is a great need for this as many pupils are not even capable of efficiently utilizing the textbook, which is the medium that is especially designed and pedagogically structured for individual learning. What will they do with the many types of media surrounding them every day in all walks of life, how do they select, how do they react to information that is often contradictory and bursts on them like a kind of environmental danger, will they lose their footing? Guidance is needed from teachers and librarians as well as support from school administration in order to learn all these. At the same time methods must also change and be refined so that they will not participate as information resources in teaching as in earlier times but they will act as directors of pupils' individual learning, being able to "retire" in order to create independency for pupils.

Resource centres therefore presume coordinated, common activity of the teacher, pupil and librarian in order to achieve learning and educational goals.

IV. Proposals

- More complex surveys must be conducted in schools concerning the establishment and pedagogical utilization of resource centres, with CODIESEE member states informing

each other about methods and results.

- A more fundamental training of teachers is needed partly to acquaint them with the basic manuals and literature of their subject so that the use of the school library becomes an urge for them, and partly to enable them to transmit this demand and knowledge as well as the resource exploiting methods of their subject to pupils. In order to do this they must learn the methods of organizing pupils' work. In this field the primary task is the development of school libraries in training schools.

- There is also need to demonstrate certain well proven methods and technical solutions in operation to teachers, to help evade the experimenting phase and allow them to learn from experiences gained. Video recordings presenting the use of libraries will be needed in further training in order to demonstrate the organization, running and reaction of pupils at a motivational level. In this way the utilization of ready-made possibilities can be shown to teachers in a much more convincing way than the description of the best research results can do. Demonstration through concrete examples would be very useful and could be grouped in two topics: use of the library and lessons in the library with different subjects, teachers and group sizes, and demonstration of individual work of pupils, starting out with instructions from the teacher, through preparation including a discussion with the teacher and ending with the presentation of completed work by the pupils in front of the class, with the teacher and classmates evaluating it.

- Basic training of librarians should also be modified in this direction preparing demonstration aids for both basic and further training.

The further development of international cooperation can be envisaged in the exchange of experiences in a more organized form: in the field of establishing resource centres on one part and their utilization in the pedagogical process on the other. This could be solved with professional meetings, workshops as well as the exchange of learning packages and certain audiovisual media. The exchange of experience and printed and non-printed materials for further training are deemed important in the following main fields: material for school administration (acquaintance with resource centres, extra services for the whole school), material for librarians (establishment of resource centres, organizing work, pedagogical work, teaching about the use of the resource centre), media produced for teachers (efficient utilization of services, the role of the teacher, pedagogical work in the resource centre, tasks of the teacher in preparing pupils), educational materials prepared for pupils (use of the resource centre, lessons about libraries, possible modes of individual, independent work).

dr. Celler Zsuzsanna

National Centre for Educational
Technology, Budapest, P.O.B. 260.
1519. Hungary

FROM SCHOOL LIBRARIES TO SCHOOL MEDIA CENTRES

Experiences, the Present Situation and Possible
Improvement

Case study for Hungary

1. Background

In Hungary - similarly to other European countries - the history of school libraries goes back to the past centuries. The school libraries have to keep up with the times /in their tasks, collection, services provided, use etc./ and that is closely connected with the changes in the field of pedagogy and librarianship on a national and international level.

The latest Guideline No. 203/1986 of the Hungarian Ministry for Education and Culture was published on February 10th, 1987 on the development of school libraries. Its most important basic principles were the following:

"At the present stage of our social development the role of culture has gained on importance and the responsibility of institutions conveying culture, primarily that of schools, has greatly increased. In the interest of further development, the rising generation will have to be enabled to acquire and to improve the necessary knowledge independently. The development program for public education raised the gradual development of abilities and skills necessary for the independent acquisition of knowledge to the level of compulsory requirements.

In order to improve the efficiency of the pedagogical work of the schools, well equipped school libraries are needed with a collection, that would cover, in addition to the printed documents, the pedagogical manuscript material of the schools (competition essays, experimental documentation etc.) as well as the non-printed media/slides, filmstrips, sound recordings, transparencies, videorecordings, software for CAI etc./. The libraries should also be equipped with the technical equipment necessary for their use and occasionally, with the facilities needed for the production of such media. The library model adequate to the requirements of the end of the century would render the integrated and interdisciplinary use of the various information media possible through a high level of work organization and pedagogic activity different from the traditional methods.

The modern school library operates as the information base and resource centre of the given educational institution, with its multifarious services based on a professionally stored and processed collection." (Műv. K. No. 24.p.1357.)

That is, the guideline aimed at the development of school libraries lays special importance on the collection and use of non-printed materials. Yet its most important aspect is that it particularly underlines the application of the services of the school media centres within the teaching - learning process.

We quoted the Guideline of the Ministry for Education and Culture at length because we regard it as a milestone within the process of development.

It is a well-known fact that the development of the school media centres depends not only on the state of the libraries but also on a range of different factors. With respect to these factors, perhaps the ones of the greatest importance are the level of development attained by the teaching techniques and teaching technology of the given country. The changes in pedagogic attitudes to favour individual learning and the nature of the system of education are also determining factors.

Until the mid-seventies, there was hardly any mention of media centres in Hungary.

The use of teaching techniques and technology became widespread in the course of the sixties and seventies in Hungary; that was the time when technical means became familiar teaching/learning aids both in schools and at home. Yet the provision of the schools with such technical equipment was uneven. The Hungarian Government recognized the need for the large-scale development of educational technology, and so established the National Centre for Educational Technology (NCET) with UNESCO and UNDP assistance to ensure the nationwide coordination of such developments.

The main tasks of the NCET include research into educational technology, the testing of equipment, the development and production of information media of a quality and quantity adequate for each level of tuition, the spreading of, and training in,

application methodology, cooperation with partner institutions and the coordination of educational technology centres.

The development and production of the audio-visual media should particularly be underlined. Through this it was possible to compile the list of compulsory teaching aids out of the information media covering the various topics of the uniform syllabus compulsory for the entire country, as well as the application of these teaching aids in the classroom. As the schools had to obtain the prescribed quantities of the teaching aids on the compulsory list, primary and secondary schools now enjoy increasing quantities of more diverse teaching aids.

The tasks of the NCET also include practical and methodological guidance related to the development and operation of learning resource centres.

Naturally, these activities are carried out not only by the NCET. Many audio-visual centres have been set up at universities, colleges, teachers' training institutes, schools, etc and they also contribute to the spreading of the education technological equipment and the methodological knowledge needed for their application in Hungary.

The nature of the Hungarian system of education and the change in pedagogical attitudes are characterized by the fact that up until the 1960s, 1970s organized education took the form of teaching classes under the strict control of the teacher. Presently, however, it is the organizational forms of learning in small groups or individually which are becoming increasingly widespread. The objective is to attain a level of development that would require a confident, learning-orientated attitude from both teachers and pupils. In 1981, the system of optional subjects was introduced in the secondary schools (grammar-schools). This means that in addition to the centrally determined master syllabus the students are able to select the subjects that they are interested in studying more deeply in a fixed number of lessons per week. This also implied an increase

in the significance of the school libraries, media centres and learning resource centres as well as an intensification of their relations to the teaching process.

The following quotation is highly characteristic of the present pedagogical attitudes, and, implicitly, also of the fact that the preconditions of the establishment of media centres exist also from a pedagogical aspect in Hungary.

"'Non scolae sed vitae discimus.' We learn for life, not for the school. Do we know what life is going to be like by the year 2000? The twenty-first century - the world awaiting our children, our pupils - is a mere 15 years away. But did we foresee the problems of 1985 in 1970? Did anyone then foresee the energy problems, the five- and even tenfold increases in petrol prices? That the United States would have to protect herself from Japan with protective customs and precisely in the area of state-of-the-art technologies? That a conservative revolution would overthrow the last - rich and armed to the teeth - empire of the world and the astonishing influence that Iran would have on world politics and history? That video-games and video-recorders would flood the world bringing blessing and danger to the entire area of culture? That there would be more computers in Hungary in 1985 than there were in the whole world in 1970? That learning BASIC would be as trendy as obtaining a driving licence? The school of 1970 was unable to provide us with formulae to use in solving the problems we have to face in 1985. The real challenge for the teaching of natural sciences is not that we are unable to find space for the knowledge necessary in the years after 2000, but that this knowledge does not even exist today." (Marx, Gy. 1986. p.2.)

2. The state of the school libraries according to a 1985 survey and the guideline on their development

The requirements of education already significantly exceed the level that the school libraries, under the present conditions, are able to meet. With the uneven development that has prevailed, a few modern school libraries fully in line with the pedagogical requirements have been set up in virtually every country. These could be the models that developments should follow. The so-called base school libraries operating as the educational, methodological and in-service training bases of their respective districts have evolved from amongst these.

The funds available for the development of holdings, the size of the available premises and the number and qualifications of the librarians are the factors that exert a decisive influence on the operation of the school libraries.

School libraries show a great diversity also in the field of their holdings development. With respect to the funds allocated for this purpose, the national average is HUF 41.7 per pupil. In county Szolnok, however, only HUF 33.9 was allocated per pupil, in county Komárom HUF 36 per secondary school student, while county Veszprém earmarked HUF 82.3 per pupil for this purpose.

The size of the school libraries

Although in recent times the number of rooms available for the school libraries has increased, there still are many schools that are unable to operate their school libraries lacking the necessary room(s). Some 15 to 20 % of the school libraries had library rooms suitable to hold a class (of ca. 30), some of these, however, fell victim to the increase in the number of students. The situation was better in the secondary schools. In 1985, 172 secondary schools had libraries with reading rooms capable of holding an entire class, this represented 34 %; 234 (46 %) had reading rooms with a capacity of half a class.

In the vocational training schools the number of library rooms holding an entire class (of minimum 52 m²) increased over two and a half times in ten years. It is to be feared that their situation would also deteriorate, as large numbers of school-leavers have left the primary schools in recent years. At the same time, a change has taken place in the demographic trend, less children attend the primary schools and so the schools are unlikely to struggle with a lack of classrooms. This should enable them to increase the number and size of the rooms available to the school libraries.

The number of school librarians and their qualifications

One of the basic conditions of the operation of the school libraries is the librarian able to carry out a librarian's duties in a professional manner. The service of the school library require two kinds of expertise: that of the librarian and that of the pedagogue. In the case of school media centres a minimum level of certain technical skills is also required. Unfortunately, we have few such librarians.

According to the personnel standards of the Library Guidelines of 1971, some 1500 librarian posts would be needed in order to carry out the minimum level of library duties at least in the largest primary schools and in the secondary institutions of learning.

"In the 3500 primary schools there are only 308 full-time librarians, the others (951) are either teachers who manage the library in return for having less lessons to teach, or those who receive a minor fee (637 librarians) or voluntary workers (1054 people). The situation is better at the secondary schools, since nearly the half of these schools have full-time librarians (251), 213 have teacher-librarians, but there also are some part-time librarians working for fees (20 people) as well as voluntary workers (8). The situation is similar at the vocational training schools: the number of full-time librarians

is 136, that of teacher-librarians is 56, that of fee-receiving part-timers is 33 and that of voluntary workers is 8." (Az iskolai könyvtárhálózat helyzete /State of the Network of School Libraries/, pp.241-242.)

Concerning qualifications, the situation is as follows: of the 3953 people carrying out library duties in the various school types, 816 (21 %) have librarian degrees, 1585 (40 %) took a course in the basics of librarianship, and 1551 people (39 %) have no librarian's qualifications of any kind. (1985 data). This, however, does not mean that those working in the school libraries do not have a university or college degree, as most of the time a teacher on the staff of the school takes on the management of the school library.

According to the requirements set out in the Guidelines concerning school librarians, a degree in librarianship can only be obtained at the universities and colleges linked with a teaching degree and people with such degrees should be employed in the school libraries.

The previous section presented the basic principles of the Guidelines of the Ministry for Education and Culture. The objective is to implement these by 1995. The Guidelines do not only formulate general principles, they also speak about the tasks of the school libraries, their control system and its organizational solutions, of the main criteria for the libraries of the other educational institutions (students' hotels, boarding schools, kindergartens), of the establishment of double-function cultural and educational libraries, of their holdings, location, services and personnel conditions, and in greatest detail of the further principles related to the primary and secondary school libraries.

The fundamental issue is, what, then, is the task of the school library?

"As an integral part and intellectual base of the educational-pedagogical activity of the school, the school library shall

- ensure the information and informative media needed for tuition for both the teachers and the pupils of the school;
- play a central role in the reading and library pedagogical activity of the said institution;
- with its specific means, lay the foundations for bringing up the pupils to be library-users;
- promote the development of desirable reading habits;
- meet the teachers' demand for basic pedagogical literature and information, and receive similar services from other libraries;
- prepare for making use of the services of the National Pedagogic Information System (NPIS) mediated by the pedagogic institutes of the counties and by the base libraries of the schools, making use of the opportunities offered by the library system and the services based on professionally developed and processed collections." (Műv.K. 203/1986, No.24.p.1358.)

Guideline No.206/1986 presents the basic principles of development also in a breakdown by school types. Some of the outstanding libraries have already exceeded, but most school libraries have not yet reached the level stipulated in the Guideline.

In the following we shall quote the general principles of holdings development and collection organization only, as the non-printed media are mentioned here with particular emphasis, and the principles also reveal the main direction of development.

"The school library shall develop its holdings in accordance with the principles related to collection interests of directive No. 128/1981. (Műv.K.16.)MM, also adjusted to the tasks and needs of the given educational institution, in a continuous and proportionate manner, according to plans. The regular and

professional accumulation and reduction of the collection shall ensure that the collection meet the requirements of modern education with respect to both composition by content and quantity. The school libraries shall procure the work indispensable for school work in the desirable number of copies and shall obtain the basic documents used as teaching aids. The leader of the school library is also responsible for the use of the funds available for procurement. In the course of his/her holdings development and organization activities, he/she shall take the needs and recommendations of the leaders of the school, of the working parties and of the representatives of the pupils in so far as these are in line with the principles of the collection interests of the school libraries.

In addition to printed documents, the school library shall collect, store, record, process and provide the services related to the non-printed audio-visual media and computer software available to the school. It shall have the equipment needed for the use of these documents and, with the improvement of the technical conditions, also the equipment needed for their production. In the course of designing school libraries, the conditions of storing and using these documents should also be taken into consideration. If these documents cannot be stored by the library, the library shall at least solve the problems of their recording and processing.

The size and rate of accumulation of the collection shall be determined by the quantitative and qualitative composition of the books (reference books, fiction and non-fiction literature), journals and other information media related to the subjects taught in the school, by the role taken by the documents in school-work, by the number of pupils and teachers and by the number of separable parts of the holdings (reference stocks and stocks for borrowing, pedagogic collection, audio-visual collection) and of the deposits (special classroom, classroom and day-school materials, etc.) ...

The education of children belonging to the ethnic minorities in their mother tongues shall be promoted with the help of library collections composed of children's, fine and subject-related literature, journals and non-traditional documents published

in the language of the ethnic minority concerned, in the schools and students' hotels of the various ethnic minorities...

The holdings of the school library shall be made available to the users recorded in accordance with directive No. 128/1981. (Műv.K.16.)MM and provided with the basic catalogues (inventory, alphabetic, descriptive and subject catalogues).

The provision of school libraries and of the double-function educational and cultural libraries with documents can be economically solved by way of the library supply systems organized in the district centres." (206/1986, MK.No.24.p.1359.)

The interest for the media libraries is also reflected by the facts that the Audio-Visual Working Committee was established within the Association of the Hungarian Librarians in 1983; that the topic of one of the the two-day training courses of the Youth Librarian Section was the setting up of media libraries and that the School Librarian Section established in 1986 also took similar steps.

The storage of audio-visual documents and the related tasks, the procedure of setting up such libraries and the system of services are also taught at the Department for Library Science of the Lóránd Eötvös Scientific University of Budapest.

3. The school library, the school media centre and the learning resource centre

The above title also reflects the prevailing uncertainty concerning terminology. Our objective is that the school library should, self-evidently for everyone, function as a school media centre; as learning resource centre, that is, the teachers and pupils should be able to make use of the services of the library so that they should feel, they are using a centre where they can draw on the true source of information and information media for the application of their various methods of teaching or learning in the interest of the primary aim, the promotion of efficient learning.

What is the basic principle of the school media centre and of the learning resource centre?

The basically true opinion is often expressed by experts that the setting up of school media centres and of learning resource centres is primarily a matter of organization. The significance of the school media centre and of the learning resource centre is no more than that of the library functioning in the noble sense of the term in line with the requirements of the age, that provides or can provide adequate conditions for the solution of a range of problems in the different areas of education. In their names, two degrees of their level of development are distinguished: the school media centre and the learning resource centre.

Their tasks. From an operational aspect, the tasks of the school media centre include the procurement, processing and storage of printed and non-printed information media (all the media needed for tuition), making them available to the users, whether by way of lending, whether by reading in the centre, provision of information and the organization of the sources in such a way that the centre be able to make the required information or technical equipment available to the user at any time. This can be achieved by the centralization and decentralization of all of the teaching and learning aids available to the school in line with local conditions. It is, however, a fundamental requirement that the centre be able to provide information (at least at the catalogue level) on all types of learning resources.

The centre shall also be engaged in small-scale production. In this way, the school media centre ensures access to the various information media. Its influence on the teaching-learning process is modest, it only exists on the level of the services. It may occur that the school media centre strengthens traditional teaching methods and renders demonstration an easier task.

The learning resource centre is the advanced version of the school media centre. Use as learning resource centre already implies a qualitative change: thereby the media centre is not only the feeder of the lessons, but also the workshop of pedagogic innovation at the same time. This does not mean that its service functions are terminated, for the fast and selective provision of information, the making of the media available to the users as well as local production remain to be important tasks, yet the pedagogic tasks predominate its activities.

The learning resource centres presuppose the integrated, joint activity of teachers, pupils and librarians in the interest of the main task, of the achievement of the learning.

In this way, the media centre, the learning area and the audio-visual unit have evolved into an integrated organization in the service of learning: this is the learning resource centre. (Figure 1.) With the functioning of this organization, a qualitative change has taken place in the area of promoting the teaching-learning process. It has become the scene of pedagogic innovation in the school, the supercontroller and organizer of which are the teacher and the librarian.

The learning resource centre provides the conditions as well as assistance to the teachers for the introduction of new pedagogic practices (once they have learnt to make use of the facilities offered by the learning resource centre), for a more efficient planning and organization of the part of the teaching-learning process for which they are responsible, for the further development of the team-work of the teachers, for the expansion of the existing organizational framework of both tuition and study and the exchange of experiences with teachers teaching the same or different subjects in the course of their joint efforts.

For the pupils, the learning resource centre provides space for individual study, a complex learning environment and helps them to learn how to learn, to learn what methods are most suited to them and what are the most efficient ways of problem solving.

The role played by the school librarian also changes, its significance increases, as he/she solves not only library and organizational tasks but also takes an active part in the pedagogic activity.

The objectives and tasks of the school media centre and of the learning resource centre

The learning process has to be organized in line with the needs of social production and the socio-political system. Therefore the teacher as well as the librarian shall take the characteristics that promote the development of the pupils into consideration, shall carefully select the equipment and materials in the service of the above objective. That is, they have to be pedagogues in the true sense of the word: the most important consideration already in selecting and developing the collection and the system of activities is to be the extent to which these would assist the process of education. The careful selection of the circumstances helps, to some extent, to determine what the pupil will see of the world that surrounds him and how he would relate to the world.

The efficiency of the operation of the learning resource centre basically depends on the objectives set, on whether the breakdown of the objectives into tasks is done properly and on the extent to which the objectives are implemented.

From the point of view of the pedagogic process, the tasks of the learning resource centre were defined in Hungary in the following way:

1. It shall collect, store and administer the information media and equipment needed for the realization of the syllabus, that is, for the assistance of the teaching-learning process.

Within this:

- It shall have the materials on the compulsory list of teaching aids /SYLLABUS MATERIALS/
- It shall make all the information media (teachware, learnware, informative materials such as reference books, cata-

- logues, etc.) needed for the in-depth study of the syllabus material available to the readers. /SUPPLEMENTARY SYLLABUS MATERIALS/
- It shall aim at always having usable and easy-to-handle technical equipment available for its information media /USABLE EQUIPMENT/
2. It shall provide advice on the selection, procurement, evaluation, utilization, etc. of the above materials. /ADVISORY SERVICE/
 - It shall organize demonstrations with the cooperation of the teachers to give new ideas for the application of the new information media within a pedagogic context. /EXTENDED PEDAGOGIC COUNSELLING/
 3. It shall motivate the teacher to produce simple information media and shall ensure the conditions needed for this activity. /LOCAL SOFTWARE PRODUCTION/
 4. It shall render work in groups as well as individually possible through its services and informal environment. /GROUP AND INDIVIDUAL LEARNING/

The tasks of the learning resource centres can be described in a breakdown by activities for the Hungarian school librarians as follows:

- to make the continuously developing collection of the library set up in a central place through an adequate accumulation of the holdings according to plans and within a well-defined field of interest, available to the teachers and pupils;
- to provide advice and help to both teachers and pupils so that they be able to apply any type of document in an appropriate and professional manner and to handle the technical equipment needed;
- to give advice on the selection, application, production and evaluation of educational materials;
- to help the pupils use all the teaching aids that promote the realization of the pedagogic objectives of the school (including the teaching of library use);

- to hand over practical experience of the quality of the information media used by the teachers (e.g. demonstrations, evaluation);
- to establish the conditions for group and individual work and to assist work through its activities and informal environment.

In summary:

- a. procurement, processing, storage, lending and repair of equipment and documents;
- b. ensuring the facilities for group and individual learning;
- c. advisory service (selection of information media, information, equipment, suitable documents, "production" of simple audio-visual materials, other issues);
- d. pedagogic work in cooperation with the teachers;
- e. ensuring small-scale "production" facilities.

The present study will not present the research related to the application of the school media centres and learning resource centres or the issues of pedagogic application, as the description of the experiment and the summing up of the experiences would exceed the limits of the present study; Section 5 will, however, give an account of the practical experiences gained in the course of their establishment.

4. School media centres in operation

In the following, the work of a few school media centres of different types is described with special emphasis on illustrating the fact that their active and efficient participation in the pedagogic process is possible under different conditions and with different kinds of activities.

Kassa Street Primary School
(Budapest XVIII., Kassa u. 173.)

There are 24 groups of pupils learning in the 18 classrooms of this primary school (attended by children aged 6-14 years). The technical equipment of the school is quite good in comparison to other schools. Every classroom is equipped with a television set, an overhead projector, a slide projector and a tape recorder. In the special Hungarian language room and in the music room a record-player is also installed. The TV-sets in the geography, biology and chemistry rooms (laboratories) and in the library are colour, elsewhere they are black-and-white. Programs are transmitted to the classrooms from the studio operating beside the media centre, on the basis of a prearranged schedule. The teachers request the programs about a week in advance, thus rendering the scheduling of transmission times possible. The studio can transmit simultaneously on two channels. If, at a given time, the studio does not operate at full capacity, it can also meet prompt requests immediately.

The studio stores the video-recordings and the technical equipment - a VHS system - needed for playing. The repair of the faulty equipment of the school and the production of video programs are also carried out at the studio.

The media centre located right beside the studio (its ground-plan is shown in Figure 2.) contains the more traditional media. Its collection includes books, journals, series of slides (177 items), filmstrips (207 items), sets of overhead transparencies prescribed by the compulsory list of teaching aids (58 items), sound tapes (100 items), sound cassettes (59 items), records (98 items), 5 8 mm films (23 items), educational packages including the slide-tape presentations with teachers' and/or students' manuals (82 items) as well as other illustrative material used in teaching, such as a collection of etchings, sets of application cards, etc. (93 items). The processing of the collection is done using catalogue cards. The card catalogue and the loan records are kept by the entrance.

The books, journals and audio-visual media are stored separately according to subjects, - owing to lack of space, this could not be otherwise. According to the general practice in Hungarian libraries, non-fiction books are kept in the UDC order, while fiction books in an alphabetical order by authors' names.

A separate, simplified catalogue has also been made of the audio-visual media, in a breakdown by medium types.

The media centre also provides information on the video-programs kept in the studio with the help of either the card catalogue or the printed catalogue compiled by the studio in a breakdown by subjects, on a PC.

In addition to his teaching degree, the librarian has only got basic qualifications in librarianship, but she carries out her duties with great care and sense of vocation.

Even the 6 years of children in the first grade are familiar with the media centre; they know what to find where and they like to read and browse in books and in non-book materials there. The librarian has also acquainted the teachers with the possibilities, so they frequently send the pupils to the media centre to carry out a task independently. The teaching of how to use the library begins with a general introduction to the library, followed by the presentation of the reference books and practising their use. The teachers frequently set tasks requiring the use of the media centre. In this way the pupils are able to learn how to find an answer to a question in a large collection of information media, how to select the data in order to get the answer needed. This enables them to find their way about libraries more easily and also to learn more easily. This is also of assistance in the course of their later studies and in the self-instruction and further training of their adulthood.

Two operators work in the studio. They transmit the programs during lessons to the classrooms through a closed circuit TV system. In the course of this, there is a two-way connection between the teacher and the operators, so that the teacher can ask to have a part replayed or to make a pause at a certain picture for the purposes of explanation at any time. The operators repair the equipment of the school, they record selected programs from TV and produce the video-programs needed for tuition on the basis of the scripts written by the teachers.

The leader of both the video-studio and the media centre is the deputy director of the school, who also teaches geography to one of the classes. In addition, she is also the leader of the informatics base of the XVIII. District of Budapest. (19 primary and 2 secondary schools belong to the base.) In Budapest they were the first to set up a training course, where every 8th grade pupil of the primary schools of the district (14 year olds) can take part in an 8-week computer course, during which the pupils can learn to use a PC, can learn the BASIC language and can write minor programs. 70 % of the schools of the district participate in this basic computer training course free of charge.

No. 54. Endre Ságvári Vocational Secondary School and Vocational Training School for the Printing Trade
(Budapest XVI. Kavicsos köz 2.)

The students of the vocational secondary school and vocational training school (aged 14 to 18) study the subjects necessary to attain a fair general knowledge in addition to the subjects related to the printing trade. This also determines the collection of the media centre. It contains a great deal of literature and other media on printing.

Over 90 % of the media kept here are books, the rest is made up of audio-visual documents.

The media centre stores the information media according to document types. Non-fiction books are kept in the UDC order, fiction books in an alphabetical order and non-printed materials are stored by acquisition numbers, separately, according to types. The processing of the documents is carried out according to the ISBD standard; ISBD/M is applied to books and a simplified ISBD/NBM (International Standard Bibliographic Description for Non-Book Materials) to the non-printed materials.

The media centre consists of two parts (See Figure 3.): the bookshelves are located to the left of the entrance with separate individual desks by the walls; the other main part is the reading-room capable of holding an entire class.

The lending desk is located right beside the entrance. Some of the students (every class has a class librarian) help the librarian in lending the books and also in the use of the technical equipment or when these are given on loan to the classrooms. In the vocational secondary school a video-set has only been installed in the library, thus it can only be used during the lessons held there. The other equipment of the media centre is frequently borrowed for lessons held in the classrooms, as that equipment always operates: the librarian has all faulty equipment repaired just as she sends torn books to be backed.

The media centre takes in over 50 periodicals and papers, which can be read during breaks or after classes.

The students become familiar with the collection of the library in Form I. They often use reference books, the role

of which gains on importance in the secondary school, also during breaks.

The work in the media centre is carried out by a teacher with degrees in Hungarian language and literature and library science, who, on occasion, also takes part in the tasks of tuition (e.g. substitutes missing teachers and gives lessons in his subject, etc.)

5. The transformation of the school library into school media centre (Summary of experiences)

Having prepared several transformation function plans and having set up media centres, we now regard the following considerations as of primary importance:

(By way of introduction we have to note that there are few schools in the country at the planning of which the fact that a media centre should later be set up there would have been taken into consideration. That is why we have to think in terms of transforming the existing libraries, of creating the conditions necessary for that transformation.)

First, even before starting the work of transformation, the targets to be satisfied by the media centre to be set up immediately and those that are later to be realized will have to be defined. That is, the short and long term targets and tasks are to be defined.

Taking an already functioning library as the point of departure, the media centre would have the following additional tasks:

- collection and keeping central records of audio-visual documents;
- keeping records of and lending technical equipment, selecting units in need of repair and having them repaired (once an additional technician is employed);

- ensuring demonstration facilities for the audio-visual documents (for large group programs);
- ensuring the conditions for individual learning (by providing printed and non-printed documents, by setting up suitable study areas /boxes/);
- developing the lending system for audio-visual documents;
- setting up facilities for a minimum level of "production" (e.g. possibilities for re-recording from record to cassette or tape, recording radio-programs, producing simple sound recordings locally, re-recording and mixing various sound recordings, etc.). This could include copying and multiplication of written documents, photography as well as setting up the facilities for the local production of overhead transparencies;
- ensuring the documents for evaluation by the teachers, initiating information work on the new information media and making teachers and pupils/students familiar with the already existing facilities. These constitute the first tasks after the implementation of major transformation projects.

The long-term objectives include the basic conception that the present library be turned into a learning resource centre that would imply, in addition to the assistance given to the learning process, the assistance for the development of individual learning skills as well. This is only possible at a later stage, it also presupposes a change in the attitudes of librarians as well as teachers and in the organization of education in the right direction.

The first task is to process all equipment and information media at least at the informative level (central catalogue). For this the information media will have to be handed over to the librarian on the basis of the central school records, in order to be able to prepare an inventory and the catalogue entries of the documents. (In most cases, this would require the school director's behest.) This is how the central cata-

logue can be compiled. After this the documents used constantly or very frequently in the individual classrooms (e.g. sound recordings made for the purposes of teaching languages in the language labs) are given in long-term loans. If the given document can claim wider interest or can also be used for individual learning, it becomes a matter of individual decision whether to have that document copied for the media centre (sound tapes) or further copies be purchased.

To take an inventory and to produce the catalogue entries, the librarian has to have not only the documents themselves, but also the technical equipment at his/her disposal. To begin this work, the librarian shall have the equipment appropriate to each type of the existing media.

If there is a separate reading room, it should be equipped with certain technical equipment for use in frontal demonstrations and presentations in large group programs (such as slide projector, overhead projector, sound equipment such as record player and/or tape recorder depending on the type of the existing sound recordings, and perhaps a 16mm film projector with screen and/or TV-set and video-set).

For the purposes of selection, a few simple technical devices appropriate to the existing information media should also be installed in the library.

It is preferable to evaluate and weed out the information media available to the school even before collecting and entering them and producing catalogue entries. This is important in order to avoid having useless and fully obsolete materials entered into the collection. (Note: experience shows that teachers are most willing to get rid of these superfluous media and hand these over to the librarian for the purposes of the central catalogue immediately upon request.)

The central registration of the technical equipment can follow upon the entry of the technician. For this, a small store-room is needed to store the non-built in equipment together with the spare parts and to carry out minor repairs. "Production" should also be carried out here or in the vicinity of the store-room. If there is no elevator in the building, it may become necessary to install a rack on each floor to hold all the required audio-visual equipment, such as the overhead projector (although this piece of equipment should be installed and included in the standard equipment of each classroom), slide projector, tape recorder, extension cords, connecting cables, etc.

The above call attention to the tasks that can be carried out with little change and with the employment of just one technician, yet these are the tasks that require the most and least spectacular work.

Having compiled the central catalogue and having re-grouped the technical equipment the foundations of a media centre truly able to function have been laid.

So in the morning, when the teacher arrives, he/she first selects the information media needed, or else submits his/her requirements to the librarian who will have them prepared; the technician can prepare the technical equipment, or, with the help of the children, the teacher can simply roll the equipment placed on the rack into the classroom. Thereby audio-visual documents become easy-to-use, a wider range of information media can be applied (as the teacher can now learn of everything available to the school) and tuition becomes more efficient.

To sum up, the procedure of transformation is as follows:

1. The director, together with the librarian, informs the teachers of the planned changes and requests them to evaluate an hand over their materials to the librarian for setting up an inventory and preparing the catalogue entries. In order to ensure continuity, the process of handing over materials should take place according to a schedule approved by the director.
2. The library is provided with the technical equipment needed.
3. The technician is employed and an auxiliary worker is placed at the disposal of the librarian.
4. The teachers, the librarian and the technician together evaluate the existing audio-visual documents. The main objective is selection for discarding.
5. The librarian prepares the inventory and the catalogue entries.
6. The librarian compiles the catalogues in the UDC order and according to medium types. These will now contain all the documents available to the school.
7. Collection of the technical equipment and assessment of their technical state.
8. Doing the necessary repairs and redistribution of equipment according to requirements.
9. Acquisition of the necessary store-rooms for the equipment and the information media.
10. Establishemnt of the work rules and setting up working areas in accordance with the new services.
11. Installation of the technical equipment needed in the library.
12. Presentation of the newly established media centre to the staff and students of the school, announcement of its services.

This is only an outline of the work process; some of its components can best be carried out simultaneously.

These services constitute a transition between utilization as media centre and as learning resource centre. To achieve the latter, the technical conditions of setting up facilities for individual learning (boxes) and for small-group programs would also have to be provided (space requirement). In addition, the entire teaching-learning process should be organized so as to give scope to the new activity within the process.

Conclusions

In Hungary, there is now no need to convince school librarians of the need to collect non-printed materials, nor of the fact that the media centre is able to provide more services and that, with such a transformation, the standard of the school library can be raised.

Yet every librarian will have personally to find out, how these operate in practice and that he/she would also be able to bring about such a more up-to-date unit in his/her own field. Presently it is the school directors and the teachers that have to be convinced that such investments (special furniture, technical equipment) and the organizational changes are worth doing.

The first steps, when the teachers have to hand over the non-printed materials in their possession for compiling the inventory and preparing the catalogue entries, are not easy to take. Later, when the teachers are already used to the fact that they can borrow the required documents whenever they want them, they are more willing to hand over those materials to the library that are not needed every week.

At the same time, the library also has to get accustomed to providing these services promptly and accurately. This is an impossible task where the library is open only for a few hours a week, since then the documents stored there are inaccessible.

To realize the above objectives it is imperative that the number of libraries with full opening hours are increased as much as possible in the schools and that the required number of full-time librarians or teacher-librarians teaching greatly reduced number of lessons are available. Part of the reasons for this personnel problem is that the salary of librarians

is low relative to that of the teachers. An increased appreciation of librarianship would provide valuable additional staff members for the cause of education.

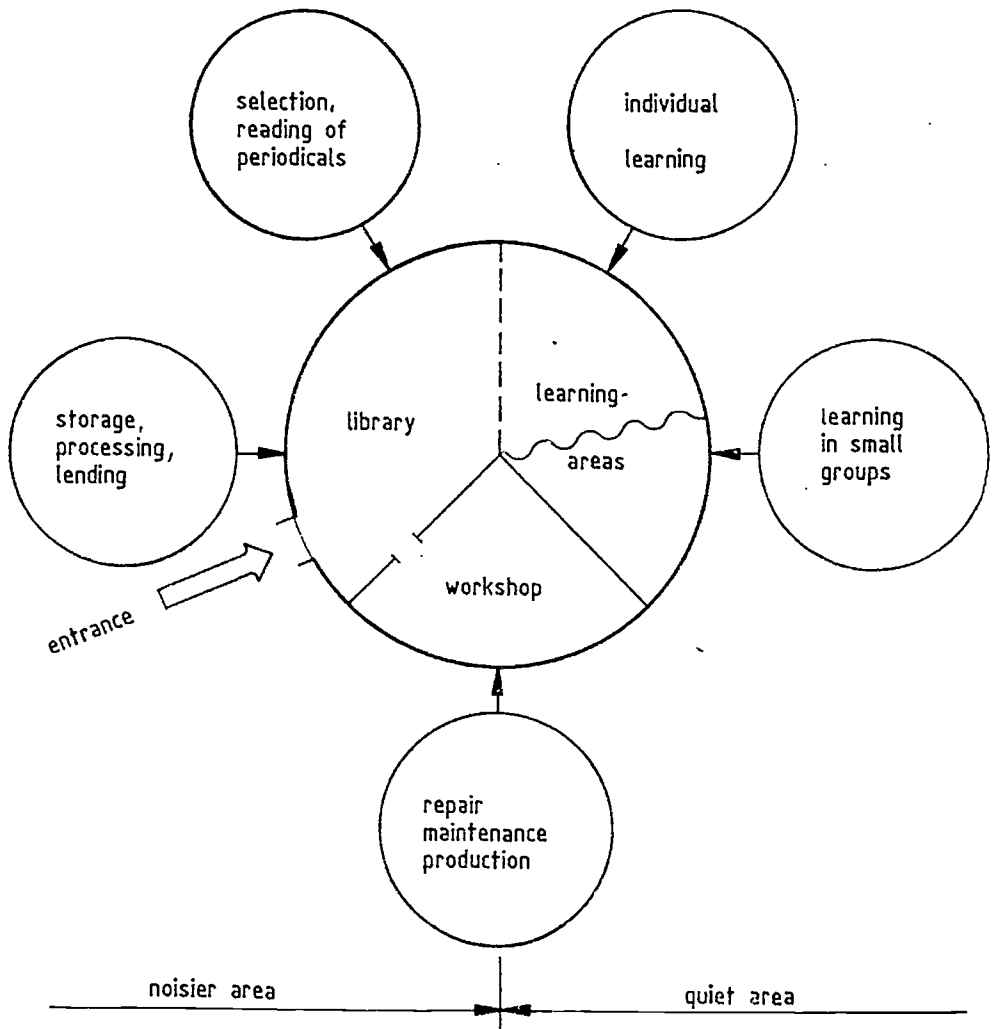
The other issue is the education of teachers for the use of the library and the media centre and for the application of the audio-visual documents. These issues appear as recurrent problems for those compiling the university and college syllabi.

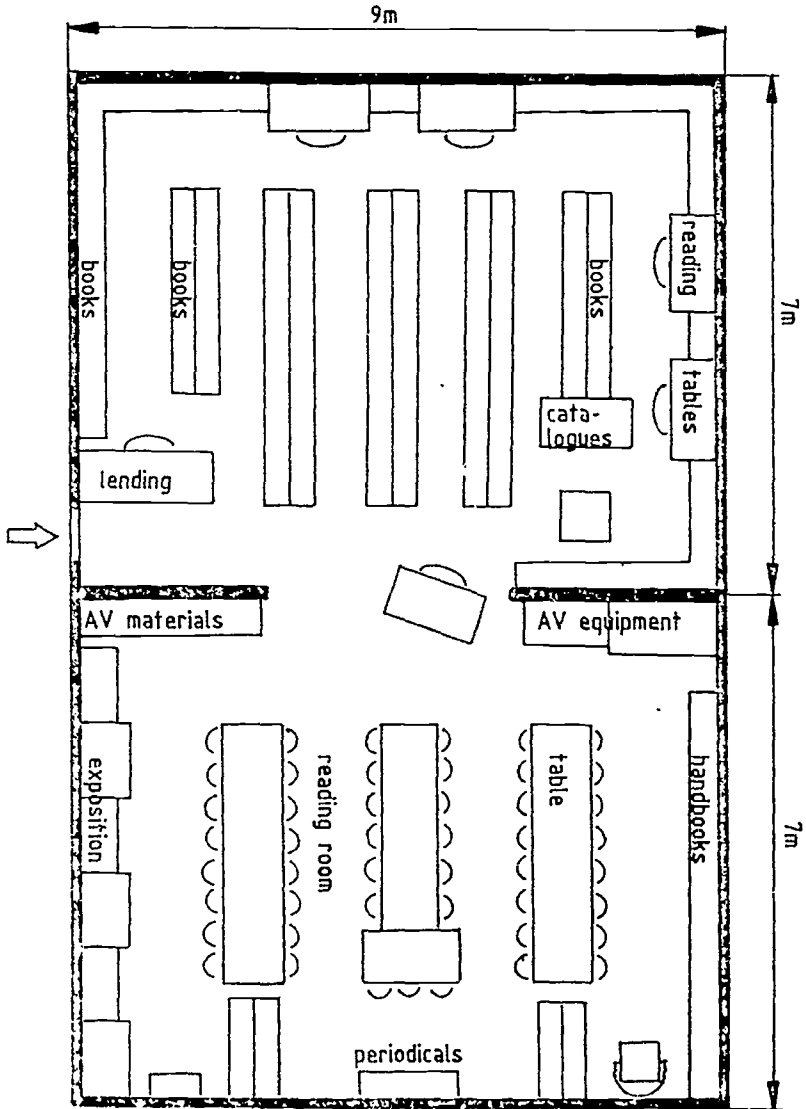
Further changes are needed in the attitude of teachers for a wider spreading of the forms of individual and small group learning. It would also be necessary to replace the teachwares which are the only constituents of the compulsory list of teaching aids, with learnwares more frequently, to make full use of the possibilities. Although some teachers and some schools do experiment with the development and production of such materials by way of transforming older information media, which requires a great deal of effort, these experiments are isolated, and so the efficiency of this type of development work lags behind the possibilities.

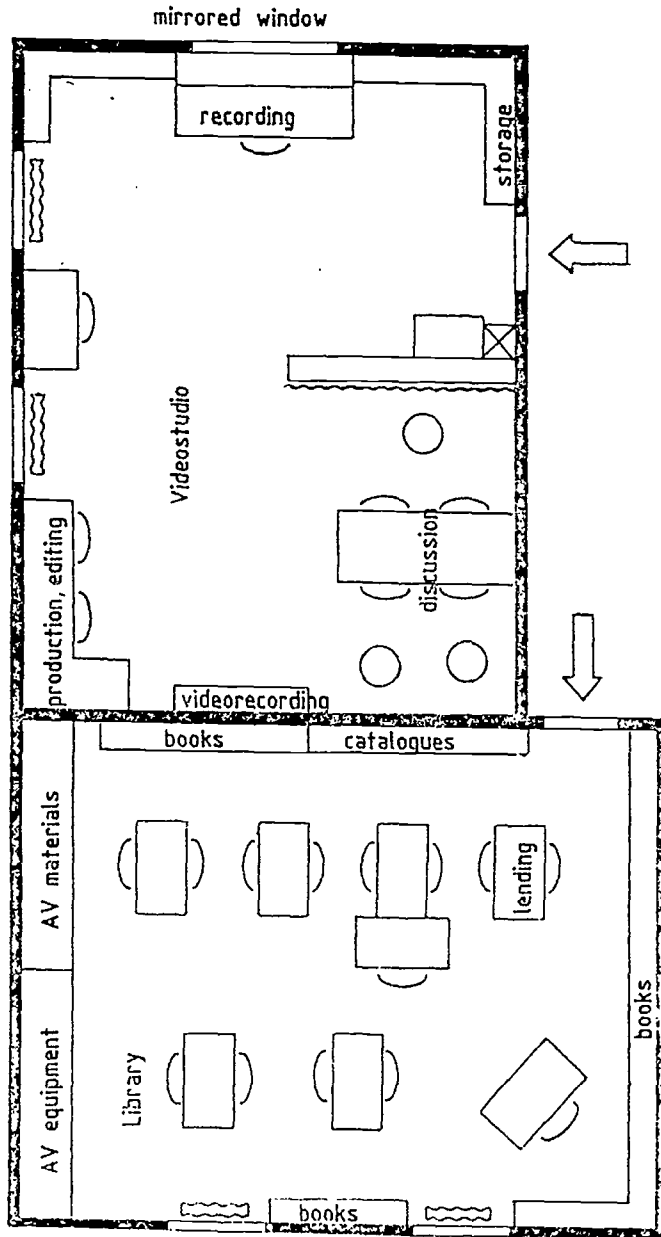
Under the present severe economic conditions, we cannot recommend particularly expensive equipment for the purposes of spreading media centres in a wide range. Rather, "do-it-yourself" solutions should prudently be considered. Attention should be focussed on those issues of content and methodology that do not require much by way of investment.

The issue for the coming years should be the use of media centres as learning resource centres, that is, the questions of pedagogic application.

F I G U R E S







References

Celler, Zsuzsanna·Audiovisual documents in libraries. The school library as the information centre of the school. Pedagogical Institute for the Capital, Budapest, 1986. 45 p.

Guideline No.203/1986 of the Hungarian Education and Culture on the Development of School Libraries. In: Bulletin for Education, Vol. XXX. No.24. 1357-1364. p.

Marx, György: The Physics will be the Latin of the modern days? in: Bulletin for Physics, 1986. No.1. 1-7.p.

State of the Network of School Libraries. in: Book and Education, /Könyv és Nevelés/ 1986. No.6. 238-250. p.

Gordana Zindovic-Vukadinovic
Institute for the Development
of Education, Belgrade

TRANSFORMATION OF THE SCHOOL LIBRARY INTO MEDIA LIBRARY

Case study for SR of Serbia

This study is the result of the authors three years experimental work on the transformation of the school library into school media library. *

Experimental work was carried out in the frame of the programme of the Institute for the Development of Education in the SR of Serbia. Four Serbian primary schools were involved in this project.

THE PROJECT OBJECTIVES:

To develop an adequate primary school media library model which could be applied on a large-scale of primary schools in Serbia.

THE RESEARCH OBJECTIVES:

1. Development of the media library model and its experimental try-out in terms of efficiency, rationalization and effectiveness.
2. Study of the effects of media library on the students' ability for independent work and self-instruction.
3. Assessment of the actual needs (teachers' and pupils') for independent work and utilization of the various sources of information.
4. Evaluation of the existing teaching materials from the point of view of their application in teaching and learning.
5. Study of the role, possibilities and correlation of the existing organizational units for storage, processing and utilization of book or non-book materials.
6. Study of the influence of the media library on teachers' and students' performances.
7. Identification of different conditions, environments and circumstances in which the school media library has to be introduced.

* This is the condensed version of the final report.

For the model of the media library being introduced as an experimental factor the following techniques and research means have been applied:

1. Method: experimental and descriptive
2. Techniques: observation, interview, questionnaire and school documentation analysis.

The following means of exploration were used at the initial and final stages of the project:

- a) A questionnaire concerning the school staff, the financial situation and the general conditions for the creation of the school media library (librarians' working hours and professional background, space available for the school library, equipment, teaching materials according to school subjects, arrangements for the storage and use of the book and non-book materials). This questionnaire was intended for the head masters and the school librarians.
- b) An attitude-scale elaborated to measure and compare the evolution of the teachers' attitude towards the media library. (Likert type scale). The scale was focused on the teachers' point of view concerning the value and the advantages or disadvantages of the specialized class-rooms as compared to the media library, on their attitude towards the students' independent use of the teaching materials, as well as towards the improvement of their educational work.
- c) A two-part questionnaire, designed for teachers, to test their acquaintance with methods, study technics and utilisation of various data resources. The first part tests their familiarity with teaching means available, and the second, refers to their knowledge of the structure of the school library funds, - media library funds and the ways they can be utilised.
- d) A questionnaire for the students, grades three to seven, contains the following information: Utilisation of the school libraries-media libraries, students' knowledge about resources in the school and the students' desire to use various educational resources in the class and in their independent work.

Librarians, media librarians, were submitting regularly their annual reports, with description of their work. The role of the media library was important, as the source of information and follow up.

The sample:

The experiment was performed in four primary schools, in different environments and with different organisational and technical conditions.

They represented four types of school groups in Serbia. The big city-school (O.S. "Vuk Karadzic", Belgrade).

The school in the industrial city (O.S. "Edvard Karmelj, Nis)

Small town school (P.S. "Ivo Lola Ribar", Veliko Gradiste)

Village school (O.S. "Vuk Karadzic" Potocac).

The students, one class form each grade (three to eight), the complete teaching team, director and librarian, were tested. The choice of grades (three to eight) was based on the assumption that starting from grade three, pupils are already capable of using the library.

The total of pupils tested in the initial interviewing was 685, and in the final 598.

157 teachers were interviewed in the initial stage and 124 in the final stage.

The number of teachers and students in the initial and final stage differs because of their fluctuation.

Director and one librarian from each school were independently interviewed.

They are not included in the total number of teachers.

For the purpose of the experiment, the main characteristics of the selected schools were the following:

1. Primary school "Vuk Karadzic" Belgrade, operates in an old school building, only partially rebuilt and adapted.

The library area consists of two small rooms, 18 m² and 12 m². The first was pupils' library and the smaller was teachers' library.

Two part-time librarians, worked in the library at the beginning of the experiment. Their duty was to hand out the books. They did not have any card-catalogue.

The teaching-aids were stored in specialised cabinets and some of them in a small storage room next to the office.

There were no records about existing equipment.

The school had one shift only, morning classes.

2. Primary school "Edvard Kardelj" Nis, is situated in a newly constructed building.

The library is functionally designed and occupies the area of 92 m².

The media-library space was not originally designed for that purpose. It was storage-room for the technical instruments.

The area of the media-library occupies 50 m².

Two full-time employees performed the duty of librarian and media-librarian. The school treated these two positions separately.

The didactic material is stored in cabinets, specialised classrooms, even in the small rooms attached to the cabinets, serving as a storage for teaching materials. No central evidence about didactic materials existed. (There was a card catalogue on book materials, organised according to general library rules.)

At the beginning of the experiment the school operated in two shifts.

3. Primary school "Ivo Lola Ribar" Veliko Gradiste, is situated in a new building. The space for the media-library had been designed functionally for this purpose and for other

innovative activities on the level of the community. It consists of the following sections:

- a) library section (63 m²)
- b) an area for reading, group and individual work (165,50 m²)

c) the area where the distribution of didactic materials takes place, and where the card catalogue is stored (20,16 m²)

d) storage room (23,76 m²)

At the time when the experiment was started, the space was empty and without any facilities.

The book-stock was not classified according to the existing library regulations.

The librarian was a teacher and one third of her time she would work in the library, with sporadic assistance of two other teachers.

Teaching aids were stored in specialised classrooms, with incomplete information about their number and variety.

The school operated in two shifts.

4. Primary school "Vuk Karakzic", Potocac, is a village school in a new school building. The area for library and media library was functionally designed for that purpose and divided in three sections: The first 21 m², second 22 m², and the third 47,5 m², in total 90,5 m².

Due to the fact that the school was new and still in the process of assembling, there were no records about existing equipment.

The school had one, full time librarian.

Experimental factors - media library model

This is a description of the main characteristics of the experimental model introduced in the four observed primary schools. In spite of the apparent differences, the main characteristics of the experimental model were strictly respected.

The first characteristic is that the media library is an organisational form which combines all information in the school, including book and non-book materials. *

* According to international standards, non-book materials are the visual, auditive, and audiovisual types of materials.

The second characteristic is based on the idea that the majority of didactic materials (particular visual and audio-visual) can be equally used in different subject-matters. The polyvalent value of visual media is stressed by this idea.

The third is to ensure equal opportunities for all pupils and teachers in their access to information resources.

The fourth characteristic is the advantage of free access to all sorts of teaching materials, at any time, for all potential users.

The fifth is the existence of one universal data-center. This is the central catalogue of book and non-book materials, with all relevant information. The educational materials listed in the central school - catalogue could be centralised in one location or scattered all around the school in various rooms and offices.

The sixth; the media library was intended as thought-provoking working environment, for the students as well as the teachers.

It should provide a fast and easy selection of required information, and comfortable utilisation of available space and technologies.

Hence, the media library must have a suitable location and technical equipment.

Finally, the media library provides an assembly of the book and non-book materials, but not the apparatus which enables the same materials to be presented in the classrooms. Those specialised apparatuses are kept in separate cabinets (specialised cabinets for physics, chemistry and biology).

Catalogue card - data base

According to the international standards accepted in our country the card model, with some modifications has been designed to serve the needs of the mentioned schools.

This modification is manifested in the reduction of the data, referring to the processing of existing materials (visual, audio-visual, printed materials etc.), technical characteristics (length, colour) and information about the date of production.

The second section of the catalogue-card contains the abstracts of the book and non-book materials.

The third section proposes to the users a variety of possible utilisation of the materials.

The format of the card was 23x23 cm, which exceeds the common standards, but was necessary for practical reasons. The size of the cards is also more convenient for handling, considering the age and capability of primary school students. Finally, the selected format is convenient for the media librarian to fill in new data, and to mark the changes if necessary.

The cards were filled in by hand (students, teachers, or librarian wrote them), since the school had no typing capacity. Three types of card-catalogues were made: by alphabetical order, by the school subjects and by subject-matter.

Each piece of material had three cards of a different colour. The content was the same, but with a different arrangement. In the catalogue by alphabetical order, there is a card for each non-book material too. This is the main catalogue of all existing materials in the school. The cards are arranged in alphabetic order by their titles.

The second card-catalogue is arranged according to school - subjects, the way they are in the curriculum.

Each school-subject has several cards, whose titles are arranged by alphabetical order. Here, each pupil and teacher can find information about the content of any teaching material relevant to the discipline they are interested in.

In the cards one can also find guidance for further research and reference to the title catalogue.

The (Subject-catalogue) keyword catalogue should provide easy and fast insight into all educational resources, which are concerned with a certain topic. This card catalogue is crucial in directing the school population towards an interdisciplinary and multimedia-approach in the exploration of certain subjects and phenomenon.

Creating the third kind of catalogue was the greatest problem of all. The details were thoroughly discussed among the teachers and librarians. Finally the topics were selected according to the subject disciplines in the curriculum. The teachers of the different subjects were requested to check once again the list of the topics and complete it. In the end, there was a list of themes which formed the card catalogue.

The following example should illustrate the function of the third, and by our opinion the most significant card catalogue.

Behind the divider marked "cosmos" are lined up in alphabetical order all cards containing information either from book or non-book materials about the cosmos (texts about the cosmos, video tapex, films, about the exploration of the cosmos, the cards of cosmic atlases, etc.). Students and teachers could very efficiently find everything that exists in the school on that particular subject. They can find out what sort of material it is and where it is located in the school.

The simplest marking had been selected: acquisition numbers beginning with one and further. The same number appears on all cards as well as on related materials.

Preliminary phase

What we call preliminary phase here were the first steps undertaken to create the conditions for founding the media library. We will exhibit here the most interesting information. First of all, an inventory of all non-book materials in the school was necessary. It was demanding work to sort out all materials by their technical and essential values. This work-load required the participation of all teachers, particularly in the part where quality and content value had to be evaluated. The inventory taking was carried on in order of the school subjects and advanced very slowly.

No matter what decision the staff meeting took about participation and individual communication with participants, teachers resisted this work, considering it as a duty of the librarian and media librarian. The success of this stage depended fully on the attitude of the school master.

This preliminary phase lasted a year and a half.

In the card production, there was one particular technical problem, - filling in the cards.

Simultaneously with this work there was another action going on: Collecting the materials and storing them all in one room.

In this phase, the space for the media library had to be organised.

Since the conditions in each school were different, four individual organisational models had to be designed. This happened with the cooperation of the school director and librarian.

In the Primary school "Vuk Karadzic" in Belgrade, the available space was modest (dimensions in the sample description) so a compromise was made:

The central card catalogue was placed in the pupils' library, and all the non-book materials were concentrated and stored in the classroom connected with the above. With regular language classes taking place in this classroom, it would be used by all the pupils as media library. It was planned to employ one full

time teacher as media librarian.

There was significant resistance against the withdrawal of some non-book materials from specialised cabinet classrooms to the media library. Another compromise had to be made.

The withdrawal of materials was only partial and from the holdings of the first four grades. The other materials remained in their previous locations, but they were marked and registered in the central card catalogue.

In the primary school "Edvard Kardelj" in Nis, the main focus was on the actual territorial connection between rooms assigned for library and the media-library complex.

The next task was to establish the central card catalogue and to arrange the space for group and individual work (individual work with students, and work in pairs).

There was an attempt to collect all non-book materials and functionally relate them to book-materials (eg. popular science, dictionaries, encyclopedias etc.).

In their model, a job load would be divided between the present librarian and a new media librarian. Both librarians would work in shifts performing the same duty, which results in a media library open all day.

The main problem arose at this point, from their specialised classrooms to the media library.

The compromise here was in transferring to the media library only materials which had two copies.

The central card catalogue became the main database of the school.

In the Primary school "Ivo Lola Ribar" in Veliko Gradiste, according to the existing model, the complex specially designed for this purpose should become a central municipal media library. Unfortunately there was nobody qualified to take over the media librarian's job. They had to compromise, as the other schools did. Only one part of the media library complex was used as library equipment and non-book materials

storage. There was possibility for individual and group work, with students and teachers.

The search for a full time, qualified librarian continued during the wxperimental period.

The same resistance to the concentration of the didactic materials emerged as a problem.

The program designed in the Primary sxhool "Vuk Karadzic" in Potocac, consisted of the following steps:

- organizing the space
- total concentration of all materials
- central card catalogue
- full time librarian
- the media library was open during lessons and for two more hours after.

Experimental stage

It was difficult to determine a borderline between Preliminary and Experimental stage. Creating the media library was also the subject of research, and separation of these two phases was only formal. There was a practical reason for that, though. It was easier to handle the operative steps of the project this way.

In this phase, which we call experimental, the efforts were directed to assiting students and teachers to become accusto-
med to the use of the media library.

In all observed schools there were organised instructions for teachers and students on how to use all three card catalogues how to operate the equipment and to become familiar with the procedure of book lending and the use of the entire book and non-book store.

The work with teachers was etremely important, whercwer resistance existed and teachers did not want to cooperate with

the idea to concentrate materials and to accept the polyvalent application of non-book materials.

The utilisation of materials was regularly monitored. How the teachers and students used and worked with the media library collection was also observed.

The important action in this phase was a visit to all experimental schools during the school years 1983/84 and 1984/85.

The necessary assistance had been given to media librarians and teachers.

The more developed media libraries needed more assistance, because there arose some problems with the students' independent work. The students were more interested in using the media libraries, than their teachers. So they would come more often to the media library to borrow materials, or to work there. As a novelty it was more attractive for the pupils than for their teachers and the increase of student users was obvious.

This phenomenon was welcomed by the teachers and at the same time they were concerned about students leaving the classroom and going to the media library, collecting the related material and returning to class, to use it on the subject the teacher was presenting.

One particular problem was more emphasized in Primary school "Vuk Karadzic" in Potocac and it was agreed to allow the students to leave the classroom and come back with material or to stay and work there. Generally though pupils would use the media library teaching material during the breaks or after classes.

During this Experimental stage students would receive assignments or select one, by their own choice, and then work on it, using the media librarians' materials. This work was per-

formed in groups or individually.

This exercise was a part of the program's objective, to train the students in self-instruction.

The significant step forward in working with the teachers, was to activate the department teams of teachers and to relate them to the work of the media library.

The objective of their meetings was the preparation for utilising and teaching the utilisation of the media libraries' collection.

Typical for this period was a greater cooperation of school libraries - media libraries with city libraries.

It was very important to give adequate support to media librarians, since their status in the school was not yet clearly defined. Hence, they did not have equal status with other teaching staff.

Conclusion

Taking in account that work had been monitored and followed up for three years by the adequate means, we came to following conclusions:

1. The transformation of a library into a media library is a long process and depending on the circumstances lasts from one to two school years.
It includes monitoring of all details related to school equipment and materials, with full participation of all teachers and the media librarian who selects materials to be registered.
2. For a correct functioning and successful service to all users, the media library should have one full-time employee for a one-shift school, and two full time employees for a school which operates in two shifts.
3. The space necessary for the media library is: storage room for book and non-book materials, space for the central card catalogue, a room for individual and group work, both teachers and students, and an office for the media librarian.

4. The media library greatly influences the general level of awareness of educational resources in every school.
The central card catalogue plays a very important role even when the actual concentration of materials was not complete.
5. Collecting all book and non-book material in one location allowed for a complete utilisation of materials, for any subject, to be taken to any classroom.
6. The examination showed that a media library does not affect the way the school is supplied. There was no influence on the in-school production of didactic materials.
7. The existence of a media library, in the given period, had no significant influence on teachers' ability to use teaching materials. There was no evident improvement in teachers' personal performances in the selection and utilisation of available materials.
9. The media library has other advantages in terms of organisational solutions:
The improvement are evident in the individual work and in the self-instruction of all students.
The experiment also showed that the existence of an actual media library resulted in the teachers' and students' positive attitude towards the media library in general.
The very important change in the teachers' opinion occurred in their relations to students, who were using independently teaching materials.
The media library had a greater influence on pupils' than on teachers' activity. The results show that the media library as a novelty was more significant for pupils than for teachers. That was confirmed through an increase in number of assignments given to students, or chosen by themselves, for which they had to use the educational resources only found in the media library.
10. Wherever the media library reached a certain level in its function and development, making it easy to select material and other conveniences, there was positive response from all teachers to the existence of the media library.

11. There was definite evidence that the hypotheses about media library were right.
The media library is the most efficient way to activate students and teachers, to acquire knowledge and information.
12. The media libraries' basic characteristics, established and observed in this experiment could be used as a reliable source for development of other new media libraries.

- Annex (1) School media librarians' job description.
(2) Available equipment
(3) Available audio-visual material and book material.

Description of a school media library

The school media librarian is a person performing professional work in the media library.

By definition the school media library consists of book and non-book materials as a source of information, utilised, processed and classified in a specific manner.

The media library collection is available to all users, teachers and students, during the working hours.

The media libraries' stock is one of the tools in conducting the educational school program.

These materials are used by teachers to prepare for their classes and by students in their independent work.

Duties of a media librarian

1. Data processing, by the ISBD (book materials) and by ISBD (NBM) rules for classifying and storing the materials.
2. Filling in the register cards for book and non-book materials (separate card for each item) and sorting the cards into alphabet, title, and subject catalogues.
3. Keeping up to date inventory books and users' membership cards and other materials.

4. One of the librarians objectives is to be informed about new publications, to give suggestions for purchasing and updating the media library's collection.
5. Collecting suggestions and requests for completing the stock and purchasing new items, in cooperation with the different school departments and the school director.
6. Organising the production of and encouraging teachers and students to create and multiply teaching materials themselves. Processing and storing these materials in the media library.
7. To instruct students how to use card catalogues, reference collection, and audio-visual facilities.
8. Keeping updated the inventory of all technical equipment in the school.
9. Distribution of materials within the media library and outside it as well as keeping accurate inventory about it.
10. Advisory role, in the process of the selection of adequate materials.
To promote a massive use of the existing materials.
To assist teachers in their preparation for teaching in the classes.
11. To guide and control individual and group work with students (circulations, borrowing, advice as "what to read" and which materials to use).
12. Collecting pedagogical literature and processing it for permanent use in the media library.
13. Organisation and realisation of various cultural activities. (Exhibitions, book reviews, lectures, film projections, etc.)
14. Borrowing materials from other sources, like municipal, or city public library.
15. Promoting innovations and organising demonstrations of new equipment, new media, or new teaching methods.

In order to perform successfully all the above mentioned duties, the librarian should develop good cooperation with all tea-

chers, school psychologist, and other members of the educational team.

The librarian must follow the work of the Development Department programs and of experiences of other schools involved in the use of media.

The important goal of the media librarian is to continually work on self-education, and to be informed and challenged by novelties and advances in the field of media libraries and other related areas.

Available Equipment Inventory

	Belgrade		Nis		V.Gradi.		Potocac	
	P	F	P	F	P	F	P	F
1. Radio set	17	15	1	14	10	11	3	9
2. Record player	17	16	6	17	14	17	8	18
3. Tape recorder (reel)	4	8	4	6	2	2	4	8
4. Tape recorder (cassette)	1	2	4	13	-	13	4	14
5. Slide projector (manual)	3	4	2	4	13	10	3	16
6. Slide projector (autom.)	10	13	4	13	10	13	10	8
7. Overhead projector	1	-	4	4	1	2	1	4
8. Epidiascope	1	-	2	2	1	-	-	-
9. Overhead projector	11	9	7	11	4	10	12	14
10. Roto: projector	1	1	-	-	-	-	4	7
11. 8 mm Film proj. (reel)	2	1	1	1	-	-	1	1
12. 8 mm Film proj. (cassette)	1	2	2	3	-	2	12	15
13. 8 mm Camera	1	1	-	1	1	1	1	1
14. 16 mm Filmprojector	-	1	2	2	1	1	2	3
15. TV set (B.W.)	7	7	-	-	2	1	1	10
16. TV set (colour)	1	1	1	1	2	1	-	1
17. Magnetoscop	-	-	-	-	1	-	-	-
18. Computer	-	1	-	-	-	-	-	3
19. Xerox (paper)	-	-	-	-	-	-	-	1
20. Xerox (transparency)	-	-	-	-	-	-	-	-
21. Memeograph	1	1	1	1	2	1	1	1
22. Projection screen	3	3	3	2	11	10	2	3
23. Earphone	-	-	-	-	-	-	-	1
24. Indiv. slide proj.	-	-	-	-	-	-	-	-
25. Synchroniser	-	-	-	1	-	-	-	-

In the total number, the equipment out of order is included.
The number of equipment varies.

P = Preliminary

F = Final

Audio Visual Materials and Books Inventory

	Belgrade		Nis		V.Grad.		Potocac	
	P	F	P	F	P	F	P	F
1. Books (prof.liter.)	471	814	7677	8000	1789		204	420
2. Records	9k	37k	26k	26k	973	15k	24k	11
3. Tapes (recorded)	4	10	4	8		39	-	12
4. M. tapes (recorded)	-	-	*	30	*	-	-	10
5. Filmstrips	*	230	-	-	*	149	107	350
6. Slides (series)	*	174	87	87	*	72	19	34 6k
7. Photog. grafics	*	*	-	32	*	-	-	1k
8. Transparencies	*	12k	224	224	*	4k	15k	24k 46
9. Roto proj. pict.	-	-	-	-	*	-	-	-
10. Wall charts	*	5k	554	554	*	125	65	55
11. Geography maps	51	*	65	65	*	41	40	49
12. Films 16 mm	-	-	-	1	*	54	-	-
13. Films 8 mm	24	23	35	*	*	28	-	88
14. Videotapes	-	-	-	-	*	1	-	29
15. Sapmie coll.	-	-	2	2	*	89	-	-
16. Models	57	*	20	20	*	25	4	-
17. Computer progr.	-	-	-	-	*	-	-	8

* = Uncertain data not incl., missing pieces

k = Sets

= Pieces

P = Preliminary

F = Final

School literature not included.

Jasmina Lovrinevic
Ana Stojevic
Visnja Seta

THE LIBRARY RESOURCE CENTRE IN THE SCHOOL CURRICULUM

Case Study of Two Secondary School Library Resource
Centres in the Socialist Republic of Croatia

1. Educational Reform in the Socialist Republic of Croatia

A period of reforming the system of education in Croatia started in 1974 based on some important political documents: the Constitution of the Socialist Federative Republic of Yugoslavia in 1974 and documents and conclusions of the 10th Congress of the League of the Communist Party of Yugoslavia. The starting presumption for the Reform grounded on social, economic and political principles were:

- " -permanence of education in the contemporary society, which means that education does not end with youth but is extended so as to englobe the whole working life;
- unity of the system, meaning the development of various forms, contents and institutions of school and extramural education based on the unique social objective of education in the socialist self-management society in Yugoslavia;
- democratic character of education which means ensuring the possibility to acquire under equal conditions a broader and higher education than the one received through the vertical and horizontal linkage of the system or, in continuity, with work or from work;
- flexibility i.e. adaptability, which means adaptability of the system to meeting the needs of the society and labour and satisfying various abilities and possibilities of learners (youth and adults) in the education process;
- graduated character of the system after elementary education, i.e. vocationally-directed education which means that the education completed after elementary school is assessed in terms of the level of education attained and not in terms of the type of school attended and that, therefore, the present traditional levels - i.e. secondary, two-year college and higher education - should be replaced by levels corresponding to levels of complexity of work;
- linkage between education and work in the system of associated labour through planning, programming and conduct of the educational process on the basis of the principles

of self-management-based socio-economic relations in which labour between educational and other workers is freely exchanged and resources pooled." (1.)

The new educational programmes based on the new approach were first introduced in Croatia, starting with secondary, or according to the Reform terminology "vocationally directed" education. Reflected in the curriculum the Reform stressed the importance of pupil-centered approach, self-directed learning, enquiry, independent study, integration and correlation of subject matters and methods of teaching, practice oriented learning, learning for continuing education, new education technology. The programmes are based on Marxist approach. The Reform tried to overcome the dualism of high school (gimnazija) with general programmes preparing pupils for higher education and vocational schools with stress on vocational subjects preparing directly for the world of production. The new "vocational oriented school centres" (the new uniform term for all secondary schools) have common general programmes and a range of specialised vocational programmes. The penetration of education and work has been also realised through a specialised institution of "practical training" carried out in various factories, firms and institutions.

After a period of fourteen years the Reform is being analysed in a democratic political debate whose purpose is giving new proposals and prospects for education in the light of results and experiences of the Reform. Regardless of some serious deficiencies and drawbacks in the existing educational system and practice in Croatia (the link of education and work is often mechanical and formal based on the present state of art of economy and production which is rather unsatisfactory; the educational system is not oriented enough to modern science and technology - i.e. education for tomorrow and not today; inadequacy of general education in the programmes: too

narrow specialisation of the so called "pupil's educational profile" with poor possibilities of re-training, inadequate financing in a rather complicated administrative system), the basic pedagogical principles of the Reform also called "the inner reform of education" remain unchanged and inherent in educational development.

2. New conception of school library resource centre

On the basis of the Educational Reform and modern approaches in library and information sciences a new concept of school librarianship started to be introduced in the late seventies.

If the basic shift in the new school is from direct instruction to self-instruction, from memorising to understanding, research and discovery, from text-oriented study to integration of all educational media in the curriculum; it is inevitable to organise a modern multi-media library resource centre as a basic presumption for any modern educational reform.

According to one of the first declarative texts on modern concepts of the school library resource centre in the educational system of the Socialist Republic of Croatia the new role of the school library is defined as follows: "The library resource centre in the secondary (vocational) education with its resources, facilities and programmes enables the regular acquisition of professional and scientific information, serves to improve the quality of instruction, gives conditions for self-instruction and in-service training, promotes general and vocational education in curricular and extra-curricular programmes. In the library resource centre a pupil can master skills of individual research and use of multi-media resources as well as instruments of information retrieval like card-catalogues, bibliographies, reference books, indexes as basic skills for individual intellectual work." (2.)

If we summarize basic ideas of quite a number of documents, standards, guidelines, monographs and articles on modern school libraries in Croatia that appeared in the period of 1980-1985, we may point out some common elements of the new concept:

Multimedia conception

All the materials for study, instruction and leisure situated in the school library resource centre should be selected and purchased on the basis of their educational and artistic value regardless of the media. Audio-visual and computer media are considered equal to print media. The selection of the media for instruction, learning, reading, listening and watching depends on their methodological and educative value and advantages.

Because of the accessibility and availability of library funds, it is logical and economical if all the educational media of the school are centrally kept in the school library resource centre.

The school library resource centre plays a very important role in the computerisation of the school. The computer in the school library resource centre covers a wide range of functions: routine library work (acquisition, cataloguing, classifying, circulation, overdues...) CAI, CAL, creation of various data bases, word processing etc.

Multi-disciplinary approach

As far as content of the resources is concerned, the school library resource centre should provide up-to-date, high quality print and non-print media. Unlike traditional school libraries oriented primarily to fiction, modern school library resource centres supply relevant information for all the subject fields with special accent on the field of the vocational orientation of a particular school. According to the Standards for secondary school library resource centres

accepted by the librarian and educational authorities of the Republic, 50 % of the materials in the library should be fiction and 50 % non-fiction (scientific and professional literature with special care for reference collection and periodicals from various fields).

Learning laboratory

While the traditional school library is a lending library is a lending library with perhaps a study hall, the modern school library centre has become a "learning laboratory" for pupil's individual and group work. It has become a place where learners being quided in practicing information research and study skills. They are supposed to learn to locate information, acquire information through reading, listening and observing, interpret information orally and in writing, work in team and are able to communicate ideas with others.

Teacher's centre

The school library resource centre is a focal point for in-service education of teachers and is supposed to collect exemplary pedagogic documentation and didactic materials.

The schoo library resource centre can be the site of teaching lessons of various courses and combined syllabusses actively using print and non-print materials available.

Local production of materials

Beside commercially available non-print materials all the quality AV and computer materials created in the school should be compiled in the school resource centre. The librarian can also give impulse to team work on the production of new educational media needed for the curriculum.

Cultural centre

The school library resource centre is very naturally the core of cultural activities: performances, book talks, film-sessions, exhibitions, lectures.

Leisure centre

It should not be disregarded that the school library resource centre is the place where the pupil can relax and be comfortable in an attractive, lively, warm and thought-stimulating milieu.

Community centre

The school library resource centre is the communication channel with the local community that through many activities take an active part in the community life.

New role of librarian

The librarian is no longer a "curator" but a "promotor" of library resources. "Today's librarian serves in the triple capacity of educational generalist, materials specialist and media programming engineer." (4.)

Centre of library network

The library resource centre is in active relations with district school libraries as well as with other types of libraries in the local community (public libraries and special libraries). There is also a vertical cooperation, that is with the regional and republic acquisition, beginnings of central cataloguing services, educative and cultural activities. Since the National and University Library has computerised its processing and started since CIP, there are prospects for computerised library network in the Republic.

STANDARDS FOR LIBRARY AND RESOURCE CENTRES IN SECONDARY EDUCATION IN THE SOCIALIST REPUBLIC OF CROATIA

The Standards, proposed and accepted by the authorities in 1986, are the first document to regulate the functions, services and facilities of the modern school library resource centre according, to the postulates of the Educational Reform and new concepts of school librarianship.

Unfortunately, the document does not have firm legislative strength and serves more in the sense of recommendations and guidelines. Although the library and educative authorities have accepted the document it is not effectively implemented in short range and long range programmes. There are no systematic and regular financing projects to support the Standards.

A brief discription of the structure of the Standards will give an insight into the basic requirements for a modern secondary school library resource centre. The Standards are structured in the following subdivisions:

1. Concept of modern school library resource centre
 - the new role and organisation of the school library resource centre and its position in the Educational Reform (basically in correspondence with the beforesaid)
2. Structure and quantity of funds
 - the structure of the funds (50 % fiction, 50 % non-fiction with an emphasis on reference collection, pedagogical literature and literature related to the orientation of the school)
 - the number of periodical titles (at least 30)
 - the number of books per pupil (10-12 books)
 - annual renewal of the stock is 0,5 to 2 books per pupil
 - non-print media are only listed without quatitative parameters because they are only sporadically available on the market

3. Professional library management
 - open access to the stock
 - obligatory use of the standard cataloguing (ISBDs) and classifying (UDC) rules
 - keeping up-date inventory books and catalogues (alphabetical, UDC, subject and title catalogues)
4. Personell
 - the number and profile of the personell vary according to the number of pupils, stock and programmes run in the library
 - the minimum number of the employed is two full-timers in order to have the school library resource centre open all day
 - professional requirements (beside the basic education obligatory librarians qualifications)
5. Librarian's job description
 - administrative work (40 %)
 - educational work (60 %)
6. Facilities
 - basic parameters and dimensions for space and equipment of a modern school library resource centre
7. Computers
 - their functions, number and hardware requirements

The majority of secondary school libraries in Croatia fall short of the demands of the Standards.

The Research and Development Department of the National and University Library together with the Republic and regional education authorities have organised a number of courses and inservice training for librarians, teachers and head-teachers on the new conception of school librarianship and transformation of traditional school libraries into modern school library resource centres. Several model school library

resource centre have been organised. In many schools long-range plans include the transformation of libraries into modern resource centres according to the Standards. Depending on many circumstances (current school library policy and situation, budgets, interest and motivation of teaching staff and the head-teacher, professional profile and special interests of school librarians, general school policy...) school libraries have improved their services and organisation in many different ways. The practice shows many ways of possible transformations and integration of library resource centres in curriculum. It indicates that transformation of school libraries is a creative and innovative process with no unique prescriptions and endless possibilities.

The fact that the majority of school libraries fall short of the Standards requirements does not mean for modern school in modern information society and school libraries must keep up with the postulates of social and educational development. There are indications that the budgeting of school libraries will be improved in the framework of general educational policies and changes.

Considering the situation with school libraries in Croatia, despite general criticism regarding the state of funds, facilities, professionalism, it can be registered that, although sporadic, innovative and highly professional activities in some school library resource centres is inspiring and praiseworthy.

We shall now present two, out of eight, model school library resource centres in Croatia: Secondary Technical School for Civil Engineering and Architecture in Osijek and Secondary Medical School in Rijeka. (5.)

LIBRARY RESOURCE CENTRE IN SECONDARY TECHNICAL SCHOOL FOR CIVIL
ENGINEERING AND ARCHITECTURE IN OSIJEK

IDENTIFICATION CARD

1. Name, address and telephone number of school
Secondary Technical School for Civil Engineering and
Architecture
Drinska bb
54000 Osijek
tel. (054) 44-188
2. Name of headteacher
Branko Spanic
3. Name of head librarian
Jasmina Lovrincecic
4. Education authority
Regional Institute of Education for Slavonija and Baranja,
Osijek
5. School library authority
University and Public Library, Osijek
6. Number of school population
1000 pupils, 70 staff (52 teachers)
7. Size of library space
250 m²
8. Number of study places
11 carrells, 25 ordinary study places
9. Size of stock
Books: 7000
Periodicals: 25
AV and other: auditive material: 20 cassettes
films: 20 8 mm films, 158 element-films
video tapes: 165 hours
slides: 98 sets
computer programmes: 50 discettes
transparencies: 110 sets
documentary materials: 110 maps
brochures

Organisation and general policy

The name of the school indicates that it is a specialised vocational school offering educational programmes for technicians in civil engineering and architecture. It also has all the obligatory general educational programmes and thus gives opportunities for higher education.

The school is situated in a new (6 years old) and very functional building. Instruction takes place in specialised classrooms and cabinets.

The school library resource centre occupies the central position in the school, next to the big entrance hall. It consists of three rooms in a semi-circle. The mobile walls between the rooms and between the library and the hall enable many possible space arrangements. The walls opposite the hall are mainly transparent (glass) overlooking the garden. The space is functionally and aesthetically very successfully realised. (Picture 1)

The general principle in the selection of the materials for the resource centre is to provide materials that will enrich and support the curriculum and also meet special interests, concerns and abilities of pupils. The choice of media depends on their quality and pedagogical values. Besides books and periodicals, the library resource centre has a rich collections of films, video-tapes, slides, transparencies, micro-fiches, brochures, documents, specially in the field of civil engineering and architecture.

Although the library policy is to provide all formats of materials for special collections of different media, teachers and librarians try to create lots of resources on their own because they are quite expensive and/or not commercially available.

All the library stock is classified and in open access according to the UDC scheme. It is catalogued after the ISBD standards - ISBD (M), ISBD (S), ISBD (NBM). Beside card catalogues, it is possible to search on-line computer base (Apple II computer) according to author, title, UDC number, key words, subject headings. The computer base covers non-book materials and articles in periodicals.

Use of school library resource centre

All the users of the library are encouraged to use instruments of retrieval (various card and computer catalogues and reference literature) by themselves. The librarian is at hand and ready to help with more complicated demands. However, she is primarily an educator concerned with developing pupils information and independent learners and researches.

The library resource centre is accessible throughout the day (8 a.m. to 7 p.m.) to give the opportunity to develop habits of using the library.

Since the school library resource centre is highly professionally organised (concerning acquisition, processing, information retrieval, circulation), it can develop a whole range of activities closely connected with curricular programmes.

Although various educational activities in the library are actually intertwined, they could be roughly sorted into:

- individual work with pupils
- work with pairs
- work with smaller or bigger groups
- direct instruction with a whole class
- extracurricular activities.

The school library resource centre is primarily in the function of individual and small-group research and learning activities but also considerable results have been achieved in various curricula programmes and direct instruction of several subjects.

Individual work with pupils

All the resources in the library are in open access and at disposal to every pupil. The library resources provide information for the regular curricular programmes, but they offer much more - a superstructure, a great wealth of information for a curious, interested and motivated learner. There are twelve carrels well-equipped with AV materials and learning packages. Very attractive for individual use are computer carrels where pupils can work according to their interests, wishes and given assignments after they have mastered the regular programme.

In individual work pupils very often go through a part of the programme they missed in the classroom (syllabus of all subjects are kept in the school library resource centre). In the library pupils go through regular assignments, but also analyse, synthesise, search deeper the material.

The librarian's role in individual learning process is crucial. She helps pupils to acquire the methodology of research and learning and guides them in all the stages of the work: selecting information, using various media, choosing the methodology of work, making and realising the plan of work and study. The librarian must be neither too persistent nor too omnipresent. Sooner or later, harder or easier, every pupil must master the information and research skills and should be able to transfer them i.e. apply in every new situation.

The places for individual work are not in an isolated study room, but integrated in the library. It is a part of the concept - to motivate and provoke the pupil to use the instruments of information retrieval and library materials on his own.

The school librarian must work closely with all the teaching staff and should be well informed on syllabuses, methods of work, innovation in teaching. The themes of assignments and seminar works must show teachers' knowledge of library resources and possibilities. Only teachers' and librarians' team work show results in improving pupils information and

learning skills.

Work in pairs and small groups

It is very important to help pupils work in teams. Almost every professional and scientific work nowadays is realised in teams and it is important for pupils to acquire methods and behaviour for such work.

The architecture of the school library resource centre allows flexible adaptations for group work.

The themes for group work should be well selected - creative and innovative. The pupils learn how to organise their work according to:

1. the structure of the given assignment
2. exploitation of various media.

The practice shows that pupils are inclined to work together, they like to discuss and solve problems together. Group work is especially convenient for work with computers.

Here are two examples of well designed and realised group work units:

1. Osijek Old Town

On the basis of exploring various visual and written media (monographs, articles in periodicals, video-tapes, slides, photographs, architectural designs...), the pupils point out and acquire various characteristics of the style and architecture and come to conclusions. The theme provokes correlations between different school subjects: history, geography, fine arts, architecture, engineering.

2. Tin Ujevic (a modern Croatian poet and essayist)

The group is divided in subgroups who study original work, biography and social activities of the author, compile bibliographic notes, analyse essays and critiques. Finally, through group discussion and exchange of ideas and information a group comes to a synthesis. They are expected to present their results in the class, again with divided duties in the team.

Whole class instruction

Teaching oriented to problem-solving and individualisation must rely heavily on the school library resource centre. Either preparation of the student for the class or the class itself can take place in the school library resource centre. The organisation of using the resources in the library depends on the adequacy and choice of various media. New educational media enrich the teaching process but they are primarily in service of the purpose of the class and particular assignments and in accordance with the teacher's approach. New educational media demand new methods of teaching whose aim is to individualise instruction more than to make it more vivid and concrete.

Picture 2 presents the multi-media approach in individual and group work in the school library resource centre, while Picture 3 is an algorithm expressing assistance in teaching using the resources.

Extracurricula activities

The aimable atmosphere and thought-provoking and well organised materials are challenging for the pupil not only as far as his direct assignments are concerned.

Intellectual curiosity motivates pupils for further reading and using new materials. Interested, especially gifted, pupils demand extra attention and care. Such pupils can get new assignments and be directed to further exploration of the themes that might interest them. They can even help the librarian and teachers in production of new resources (video tapes, sound tapes, especially computer programmes). Almost the entire software collection has been produced by gifted pupils.

Acquisition and Production of Non-Book Materials

Due to the very active engagement of the staff of the school, the library resource centre can be proud of the considerably big collection of non-book materials.

The Yugoslav market does not offer enough AV and computer media for the secondary school curricula, so it is necessary to orientate to local production of AV materials and educational software.

These materials are specially valuable because they are created according to the direct demands of syllabuses and directly tested in practice. As far as formats are concerned, teachers are specially interested in films, video-tapes, slides, computer programmes and combined thematic learning packages.

Visual materials are particularly valuable for instruction of civil engineering subjects. Team work (librarian, media specialist, teachers of relevant subjects) should be well organised and thoroughly worked out in advance. A creation and production of a film, for example, has the following phases:

- selection of the theme taking into account needs of a syllabus and advantages of the material
- working-out of a plan
- writing a synopsis
- writing accompanying text
- indoor and outdoor shooting
- mounting cadres
- sound recording
- mounting soundtrack.

A special field of producing new media is transferring from one medium to another in order to prepare more convenient materials for teaching and learning (for example: film-video tape, transparencies-slides, book-transparencies...).

As far as computer programmes are concerned, it is important that all the software produced in the school is available to all the pupils. Of course, a certain level of proficiency is demanded. The computer programmes are also products of team work, beside teachers and librarians, pupils are actively involved (very often they are individual authors). Some of the computer programmes (chemistry, civil engineering...) have gained considerable reputation on the regional and republic level. The library is responsible for protection, information retrieval and dissemination of the software kept in the special software collection.

The Role of the Librarian

The personell of the school library resource centre consists of a librarian and a media specialist.

The modern conception of the school library media centre demands a new role of a librarian. Beside his professional work, the librarian is an organiser and promoter of various activites of the school library resource centre concerning curricular and extracurricular areas.

Many aspects of the librarian's work has been broadened or changed. Even the librarian's acitivity in the narrowest sense (adquisition, inventarisation, cataloguisation, classifications, circulation, statististics, administrative work) is becoming more complex. Application of the new cataloguing rules, especially for the non-book material demands high proficiency and continuing education of a librarian. The analytical processing of periodicals that gives accurate and uo-to-date information to users, is also quite new in the area of school librarianship in Croatia. The computerisation of the processing and retrieval of information is also pioneering. The National and University Library has computerised these functions but the use of microcomputers for the purposes is in practice sporadic and unfortunately unstandardised as far as future network is concerned.

The role of the librarian as educator has become focal and it covers integration of curriculum and individual and group work in the library. It can be divided in various categories:

- individual work with pupils (circulation, borrowing and advices "what to read" are just smaller part of the work; the individual instruction in the library means primarily help with the organisation of learning and promoting research and study skills)
- small group instruction (with special accent on developing sense of organisation and "culture" of team work and correct social behaviour)
- whole-class instruction (relied as team work with teachers; specially in introductory classes and for synthesis)
- work with teachers and other staff (in selection and acquisition of library stock, production of various didactic materials; in supporting continuing education and in-service training of teachers, promoting innovations and organising demonstrations of the use of new equipment, media and methods of teaching)
- active participation in the school policy (the librarian is a member of the Development Department of the school which is responsible for curriculum development and for short and long range planning of the school's educational policy).

A special field of the librarian's work is organisation, preparation and realisation of many cultural activities (exhibitions, lectures, book promotions, film sessions etc.).

The librarian of this school library resource centre together with the media specialist is very much involved with the already mentioned activities concerning non-book media. This is an absolutely new field for school librarians for which they are not adequately educated and trained during their regular education. The National and University Library will organise a course for using computers in school libraries this year as an initial course of the in-service training programme for using new technologies in libraries.

The results of challenging and innovative work in the library resource centre of this school prove how school librarianship can be improved regardless of many organisational and financial difficulties.

Effectiveness of the School Library Resource Centre

The effectiveness of the school library resource centre is evident in many ways.

All the pupils who have attended the school in the last six years since the library resource centre is in operation, have acquired the necessary knowledge about the organisation and use of the library and information and study skills through special sessions and individual and group work. In this way they have become educated and demanding users of different kinds of libraries and information centres (this is already evident with today's students and technicians who attended the school).

A great majority of the entire population of pupils are prepared for self-education and continuing education after they have mastered the methodology of individual and group work and usage of different media.

The teaching process is enriched with the active involvement of the school library resource centre in the process of preparation and realisation of syllabuses.

Owing to the great variety of programmes in the library, gifted students are recognised and guided being offered creative ways to develop their intellectual curiosity.

The local production of AV and computer materials has not only enriched the school library resource centre funds but has also initiated and developed effective cooperation and team work of teachers, pupils and the librarian.

Pedagogically specially effective are humane and very close and direct relations established between pupils and teachers and the librarian. Pupils, on one hand, develop their individuality (special interests, attitudes and methods), while, on the other hand, their sense of belonging to a group in developing social behaviour is also practiced. They become responsible when working in a team, and also expect others to be responsible.

However, the greatest effectiveness and recognition of the new concept of the school library resource centre is spontaneous, willing and frequent use of the library resource centre by the pupils who have acquired the habits of studying and searching in the space that is meant for it.

Picture 4 shows through a set of photographs everyday atmosphere in the school library resource centre.

SCHOOL LIBRARY RESOURCE CENTRE IN THE CENTRE FOR SECONDARY EDUCATION FOR MEDICAL WORKERS

IDENTIFICATION CARD

1. Name, address and telephone number of school

Centre for Secondary Education for Medical Workers "V. Lenac"
Gajeva 1
51000 Rijeka
tel. (051) 424-770

2. Name of Headteacher

Zora Murvin

3. Name of Headlibrarian

Visnja Seta

4. Education authority

Institute of Education for Rijeka Region and Lika, Rijeka

5. School Library Authority

Publik Library Rijeka

6. Number of school population
Number of pupils: 1131
Number of teachers: 70
Other staff: 18
7. Size of library space
130 m2, 4 rooms
8. Number of study places
60
9. Size of stock
Books: 19871 items
Periodicals: 192 titles
Non-book materials: records: 220
 auditive tapes: 68
 transparencies: 66
 dia-films: 673
 element films: 74
 computer cassettes: 10
 video-tapes: 2
 graphic works: 177

Documentation
10. Equipnemt
Dia-film projector, film-projector, record-player, tape-recorder with earphones, TV set, over-head projector, micro-computer, video recorder
11. Classification scheme used
UDC
12. Type of catalogues
 - alphabeth, UDC and subject catalogues for books
 - subject catalogues for:
 - periodicals
 - documentation
 - syllabusses performed in the school library resource centre
13. Library staff
1 full time school librarian
14. Opening hours
8 a.m. to 2 p.m. in alternation with 1 p.m. to 7 p.m.

15. Services

Photo-copying

16. Publications

Regular issuing of school annual reports, some sporadic publications (exhibition catalogues, monographs)

17. Exhibitions

- exhibitions on the occasion of the School Day
- thematic exhibitions
- cultural exhibitions

18. Additional basic information

The school library resource centre also possesses valuable old funds that belonged to the first secondary school in Rijeka founded in 1627. A special old and rare books collection is going to be organised.

A Short History and prospects of the School Library Resource Centre

The Centre for Secondary Education for Medical Workers celebrated last year its 360th anniversary. It started in 1627 as a Grammar School which was a part of the Jesuit College. It is the oldest secondary school in Rijeka and on the eastern part of Adriatic Coast.

After the Jesuit Order was abolished the College was closed down, but the Grammar School remained under the name "Liceum flumiense". The instruction was in Latin until 1863 when the Croatian Government ordered Croatian as the teaching language. In 1871 the Italian Grammar School was founded as a part of the same style designed by a team of architects was erected in 1895 respecting very modern educational concepts of the time (12 classrooms and 9 specialised cabinets).

Many famous Croatian and Yugoslav scientists, artists, writers, and politicians attended this school of high reputation.

Like the school, the library has an equally long history. From the start it was an indispensable part of the school. Obviously, the moving into the new building had bad effects on the library funds. The regular evidence of the library activity can be traced from the last quarter of the last century. The library then actually consisted of two parts: "Gymnasial Bibliothek" - teacher's library and "Schueler Bibliothek" - pupil's library. A part of the Pupil's library was the library for poorer pupils well supplied with textbooks that could be issued on long loans. In 1885, for example, the library had 2844 books - textbooks, fiction and also valuable reference literature (especially rich with dictionaries and atlases). The books were in Latin, Croatian, German, Italian and a few in French. The sources of acquisition were purchase and, quite considerably, donation.

The school reports give evidence about the "life" of the school library. The funds were enlarged a great deal in twenties and thirties (around 7000 books) and the library was much used. According to the renewed reports in sixties, the library had the same organisation and services as before. With only two teachers who worked in the library for just two or three hours per week little could be done.

In 1970 a professional full-time librarian was employed and it gave impulse to better organisation and also innovative activities in the school library. The library stock was reclassified according the UDC scheme, the new catalogues were organised, exhibitions took place, a theatre group and a group of young librarians were formed, the library became involved in many cultural events of the school and the town.

From 1978 on the process of transformation of the rich but traditionally organised library into the modern multi-media school library resource centre has been taking place.

Two full-time librarians have improved and enlarged many aspects of activities in the school library resource centre. A number of new educational media items have been added to the impressive stock of books. New and some very special catalogues are formed; beside alphabet, classifying and subject catalogues for books, there are subject catalogues for periodicals, documents, AV materials, school reports and also special catalogues for curriculum programmes held in the school library resource centre.

A special field of innovative activities is team work (teachers of various school subjects and the librarians) in combined syllabuses and synthetic introductory and final classes and also in individual work with pupils.

Book promotions, book talks, film sessions, various activities to promote leisure reading have become a part of the school library resource centre programme.

Although the library is situated in the old building and the space is not purpose-built, the school library resource centre is organised to suite the purposes of the new role of the library in the curriculum. (Picture 5 shows the organisation of the space in the school library resource centre).

Multi-media concept of the school library resource centre

Introducing new media in the school library resource centre does not mean only new media as carrierst of information, but primarily greater availability and educational effectiveness of information. To make non-print media really available it is necessary to have the instruments of research, primarily good subject catalogues. All the documents, auditive, visual, audio-visual and graphic materials are searchable through subject catalogues. In this way a teacher or a pupil can easily get the data on a certain topic or theme regardless of the media. Very

often a slide, a reproduction of a painting, a photograph, a computer programme, a transparency can be more effective in teaching and learning than traditional print media. Educational-ly specially important is the catalogue of the curriculum programmes performed in the school library resource centre. A catalogue card from this catalogue consists of the following items: the theme of the teaching unit materials and media used in preparation and during the class session, the teachers and librarians involved, didactic instructions, a brief description of the class and crucial remarks; every new class session of the theme can be changed, broadened, given new remarks.

Interdisciplinary team teaching

To make teaching process more effective instruction should be resource-oriented and individualised.

According to the remarks of one of the librarians involved in the team work in the school library resource centre, the team work has many advantages and also some drawbacks:

"Teachers working in a team coordinate their work cooperate effectively, they have unique criteria in evaluation of pupils, exploit maximum use of educational technology, more experienced teachers help the beginners.

Pupils take an active part in team instruction, develop thinking skills, master techniques of learning and using the available resources, acquire independence in their work and study, apply the knowledge in practice. The assignments in team instruction are measured according to the abilities and interests of the pupils. The teacher organises and manages instruction, but more like a councillor or a more experienced member of the group. The team instruction combines subjects from two or more curriculum fields and thus the themes are treated interdisciplinary and closer to life.

There are also some drawbacks in team instruction: difficulties in handling bigger groups of pupils in individual work, the problem of constant motivating the pupils and keeping their attention and discipline, long lasting and very thorough preparation for the class session, complexity in planning and programming the lesson etc.

However, with great possibilities of rationalisation of instruction, recurring innovation and creative work of teachers and pupils, these drawbacks, that can be also eliminated, cannot diminish the effectiveness of team work in the school library resource centre." (7.)

Team instruction has been organised in the school library resource centre since 1978. Teams consisting of teachers, librarians, experts, pupils prepare some 10 themes every school year. A whole range of interdisciplinary team programmes have been successfully carried out in the school library resource centre.

Here are several examples of successful cooperation. The diversity of themes shows how this type of innovative work is practically unexhaustible.

EXAMPLE: CROATIAN NATIONAL AND LITERARY REVEAL

(explanation: political, linguistic and literary movement in Croatia in the second quarter of the last century)

Resources: books, periodicals, photographs, photocopies, slides, auditive cassettes, computer programmes

Coordinators: teachers of history and Croatian or Serbian language and literature, librarians

Remark: This is the final unit after four periods dealing with the theme

Purpose of unit: to activate pupil's learning skills, recognition of concepts, recapitulation

Methods: The multi-media packages are in function of repetition of the taught contents as illustration, argument, association, document. The pupils are supposed to present ideas on the principle "question-resource". They get precise assignments and should give answers with arguments and understanding. The general structure of pupil's assignments is to:

- choose resources
- search through resources
- formulate answers
- structure and restructure remarks

The class is divided in four groups and each group gets specific assignments and relevant resources.

The first group gets questions relating to general political and social conditions in Croatia in the first half of the 19th century.

Resources: Photographs, maps, transparencies, photocopies of excerpts from reference literature and documents

The second group treats question of the Illyric Movement - the political and literary movement, the most important figures of the movement, the analysis of the orthographic innovations in the new orthographic manual.

Resources: slides, photocopies

The third group analyses the importance and ideas of the newspaper of the Movement "Novine Hrvatske" and its literary supplement "Danica Hrvatsko-slavonsko-dalmatinska". They are asked to analyse the history of the newspaper and to study some typical poems/songs intended to arouse the feelings of the national identity (so called "budnice").

Resources: original periodicals, photographs, slides, auditive cassettes with the related poems on photocopies

The fourth group is concentrated on the literary outcomes of the Movement (epic poems, plays, fiction, essays)

Resources: books (each of the mentioned literary kind, history of literature, criticism)

Each of the groups give reports using effectively all the resources at their disposal. Through conversation the teachers and the librarians analyse the answers, the quality and quantity of information, add explanations, create new relations and generalisations. After group analysis the teacher coordinates the process of synthesis drawing conclusions, outlining the key concepts, finding correlations between literature, linguistics, politics, music, arts.

Finally, the pupils work in groups on the locally produced computer software (authors are librarians and pupils).

Effectiveness of team work

- multimedia approach to a theme
- exercising research and thinking skills
- acquiring habits and culture of group work
- individualisation of learning process
- correlation between different subjects, themes, disciplines

The possibilities of team work are numerous To get some ideas about the diversity of thematic units and rich experience, here are enumerated some of the successful themes performed in team work. Very often such periods are accompanied by thematic exhibitions.

- Medieval age
- Realism in literature
- "Moderna" (literary movement at the beginning of the century in Croatia)
- National Liberation War (1941-1949) in the literature of Yugoslav peoples
- Research in biology
- Approach to information and the organisation of the school library resource centre
- Writer and his work (CAL in literature programme)

- Medical psychology and mental hygiene (integration of the school subjects: psychology, biology, psychiatry, mental hygiene, Croatian or Serbian language and literature; members of the team: teachers, nurses, physician, school psychologist, librarian)
- Endocrine glands, hormones and their influence on psychological life (school subjects: anatomy, physiology, psychology)
- Medical treatment of women during pregnancy and after childbirth (school subjects: obstetrics, physio-therapy, methodics of medical education; members of the team: teachers, physicians therapist, nurse, midwife, librarian).

Innovations in individual and small group work with pupils

"The aim of the school is to bring the students skill development to the level where he can solve creatively and effectively the problems he will meet throughout his life time." (8.)

The prime concern of the educational process is the individual pupil. Although the programmes are unique and uniform the educational goals are to promote individuality, creativity, personality of a pupil.

The school library resource centre is the place where pupils can really express his individual interests. Information skills, study skills, thinking skills that are indispensable for every intellectual activity can be practiced and mastered in the library. Information skills are mastered through special librarian's programme "User's education" in several ways: introductory classes specially planned, and indirectly in interdisciplinary team work, in specially guided programmes for small groups an individual pupils, through continuous individual work according to the pupils' and teachers' demands.

The librarians have designed a special guidance programme for methodology of research. The programme has two phases:

1. identifying information in various media
2. recording information according to the assignment

During introductory classes on the organisation of the school library resource centre all the pupils get the basic information about the classification scheme (UDC), various catalogues, reference literature. They are acquainted with various media kept in the library and their characteristics and use.

Since any research cannot be done void of content, the assignments for information skills are part of concrete themes with intentions to exploit all the instruments of research available.

In order to help the pupil, special working sheets are designed to guide him to use different instruments of research and various resources. In this way a pupil is supposed to create his own multi-media package (Picture 6)

After the information are located, they are selected, evaluated. The chosen material is then read, analysed and essential information is recorded (phase 2). The process "reading (or alternatively listening, watching)-understanding-extracting and recording the essential" is a very sophisticated intellectual activity. To help the pupil in the organisation of his work, special "analytical cards" are designed by the librarian. They are meant for different purposes and that is why they are not uniform. Basically they consist of bibliographic description of the resource, the given theme and the subdivision of the theme meant for pupil's notes. (Picture 7). Some cards are designed for non-print media. Again they must have basic bibliographic description and places for general and specific remarks (Picture 8). Pupils find very useful chronological cards (Picture 9).

Such auxiliary guiding tools like the mentioned working sheets and analytical cards are very helpful for pupils to acquire the methodology of information research and study skills. Very often, especially at the beginning of secondary education the pupils feel "left to themselves" and are very disorganised.

Librarians and teachers both in classrooms and in the school library resource centre should devote a lot of time and effort to teach them to learn. The instruments of individual and group work that the librarians have created have proved very useful. One of the possible drawbacks might be that pupils are too much guided and not independent enough. The practice shows, on the contrary, that they are more oriented than guided. It is very important that once they have mastered a certain skill on several models, they "transfer" the skill to other subjects and other media. Little by little they create systems of work and study of their own, that is adapted to individual possibilities and needs.

Effectiveness of the school library resource centre

This study primarily covered the most effective and developed activities in the school library resource centre, i.e. the integration of rich and mult-media information stored in the school library resource centre into the curriculum. The co-operation of teachers and librarians in preparation, realisation and evaluation of class sessions, designed and guided group and individual work with pupils have made all the library resource full available in the educational process.

The school library resource centre is not only integrated in the curriculum but also in many extracurriculum programmes. This is very important because this is the area where pupils special interests are manifested. The resources and the space of the library is very important in elective courses that the school offers and also in many extra curricula groups (young library assistants, theatre group, young journalists).

The school library resource centre is also a communication channel to the community and the core of many cultural events. In cooperation with libraries, theatres, publishing house, different professional associations and societies, educational

authorities, youth centres and community organisations, hospitals and health centres, a wide range of events like performances, lectures, talks, film sessions, exhibitions etc. are organised.

The school library resource centre has proved to be indispensable in preparing pupils to find their own methodology of information research, work and study, in creating full personalities in pupils, for in-service training of teachers and other school staff especially when introducing new educational technology and as a mediator between the school and the community.

Photographs on Picture 10 present some of the activities of the school library resource centre (exhibitions; pupil's information retrieval).

FOOTNOTES

1. Bulovic, I. Development of education in the SFR of Yugoslavia 1981-1983. pp. 20
2. Brkic, J. Tipovi bibliotecno-informacijskih centara u SR Hrvatskoj (Categories of school library resource centres in the SR of Croatia) in: Bibliotecno-informacijski centar kao faktor unapredivanja odgojno-obrazovnog procesa u organizacijama odgoja i obrazovanja, pp. 19, translated by A. Stojevic
3. A wide-spread term in recent literature on school librarianship
4. Davies, R.A. The School library. A Force for educational excellence, pp. 245
5. The Reform has introduced a new terminology for the names of secondary schools which is rather awkward in translation. The translations of the names of the two schools do not correspond exactly to the original, but are translated to keep the clarity
6. The scheme is used according to the corresponding schemes in the book "Towards excellence. Case studies of good school libraries"

7. Lenac, Vjekoslava. Oblici timske nastave u BIC-u u funkciji struke završnog stupnja srednjeg usmjerenog obrazovanja (Types of team instruction in the vocational school subjects in the final stage of secondary vocational education) in: Bibliotecno-informacijski centar kao faktor unapređivanja odgojno-obrazovnog procesa u organizacijama odgoja i obrazovanja, pp. 106, translated by A. Stojevic
8. Davies, R.A. The School library. A Force for educational excellence, pp. 199

PICTURES

1. Scheme of the school library resource centre in the Secondary Technical School for Civil Engineering and Architecture in Osijek
2. Multi-media approach in individual and group work in the school library resource centre in the Secondary Technical School for Civil Engineering and Architecture in Osijek
3. Assistance in teaching
4. Everyday atmosphere in the school library resource centre in the Secondary Technical School for Civil Engineering and Architecture in Osijek
5. Scheme of the school library resource centre in the Centre for Secondary Education for Medical Workers in Rijeka
6. Working sheet for note-making
7. Analytical card I
8. Analytical card II
9. Analytical card III, Chronological scheme
10. Some activities in the school library resource centre in the Centre for Secondary Education for Medical Workers in Rijeka

LITERATURE

1. Davies, R.A. The School library. A Force for educational excellence, New York, London, R.R. Bowker Com, 1969
2. Towards excellence. Case studies of good school libraries, London, LA, 1985
3. Bulovic, Irena. Development of education in the SFR of Yugoslavia 1981-1983. Report prepared for the 39th session of the International Conference on Education (UNESCO, IBE), Geneva, 16-25 October 1984, Belgrade, Yugoslav Commission for UNESCO, Zagreb, Republic Institute for Education of the SR of Croatia, 1984
4. Bibliotecno-informacijski centar kao faktor unapređivanja odgojno-obrazovnog procesa u organizacijama odgoja i obrazovanja. Zbornik radova medurepublickog savjetovanja, Rijeka, 10-11. prosinca 1981. (School library resource centre as a decisive factor for improvement of education in schools. Proceedings from the Yugoslav Conference, Rijeka, 10-11th December 1981), Rijeka, Društvo bibliotekara Rijeka, 1982
5. Standardi za rad skolskih knjižnica/bibliotечно-informacijskih centara u organizacijama odgoja i usmjerenog obrazovanja. (Standards for organisation of school libraries/school library resource centres in secondary education), Zagreb, Zavod za prosvjetno-pedagogku službu SR Hrvatske, Republicki komitet za prosvjetu, kulturu, fizicku i tehnicku kulturu, Nacionalna i sveucilisna biblioteka, Knjižnice grada Zagreba, 1986
6. Documentation on the school library resource centre of the Secondary Technical School for Civil Engineering and Architecture in Osijek
7. Documentation on the school library resource centre of the Centre for Secondary Education for Medical Workers in Rijeka

MULTI-MEDIA CENTRE - GŠC OSIJEK DEMONSTRATION OF WORK

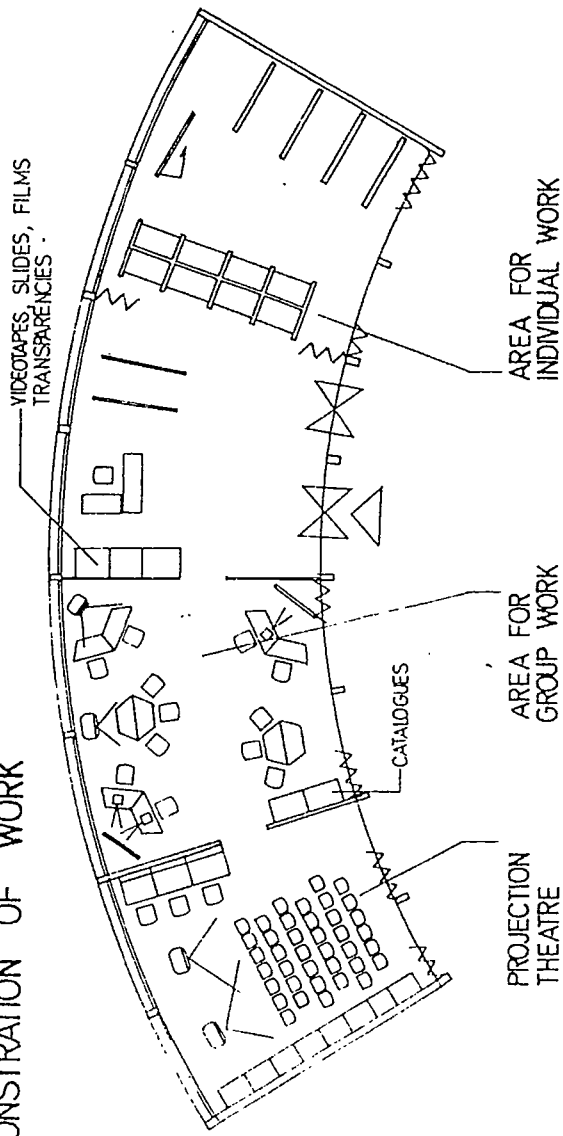


Figure 1

MULTI - MEDIA CENTRE - GŠC OSIJEK

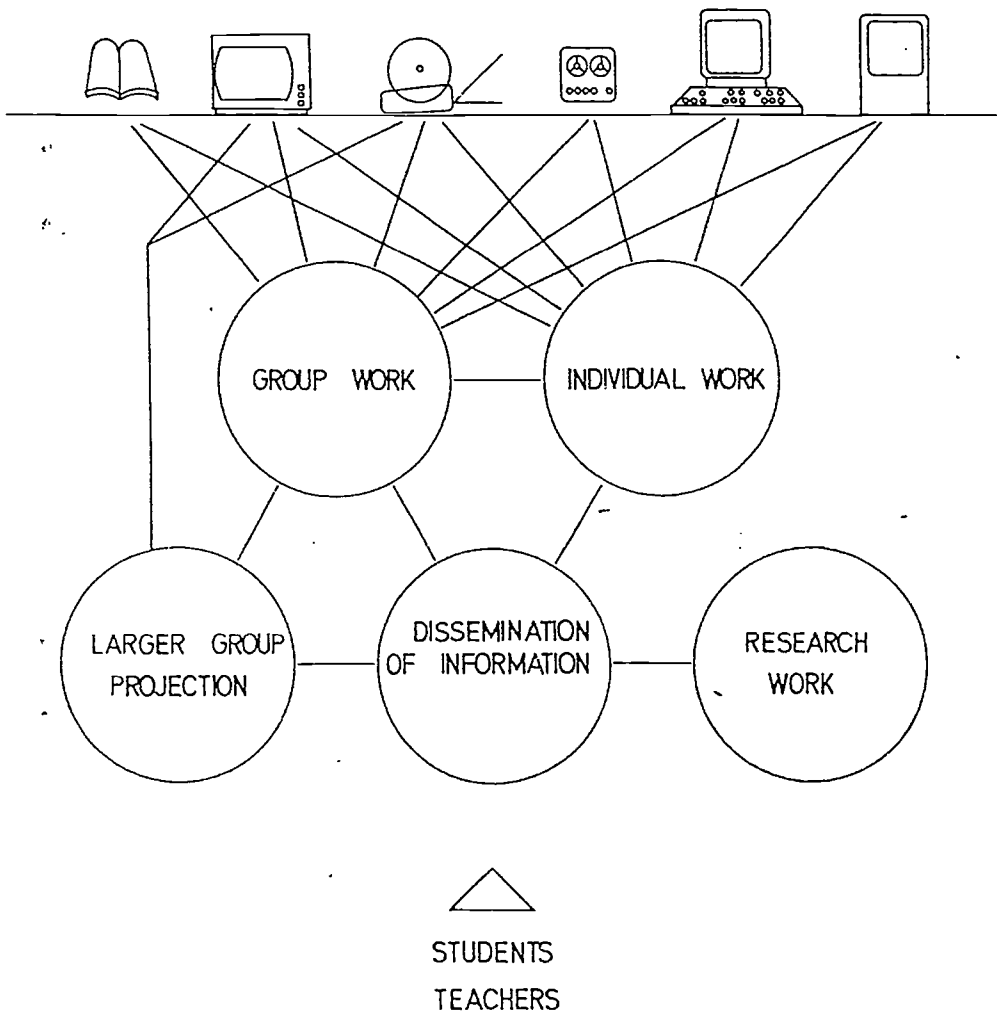


Figure 2

MMC - ASSISTANCE IN TEACHING

Figure 3

