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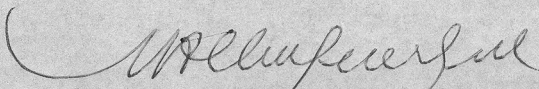
Prezados Senhores,

O Instituto Nacional de Estudos e Pesquisas Educacionais - INEP, do Ministério da Educação e Cultura, Órgão encarregado de incentivar, coordenar e difundir a pesquisa educacional no Brasil, além de operar e manter um subsistema de documentação e informação que apoie e possibilite a execução de suas atividades no campo dos estudos, pesquisa e experimentação, solicita a V.Sas. sua inclusão entre as Entidades que recebem o periódico "INNOVATION", assim como o nome de sua diretora-geral, Professora Maria Mesquita de Siqueira.

Esclarecemos que a referida publicação será de grande valia ao nosso trabalho.

Agradecendo antecipadamente a atenção, colocamo-nos ao dispor de V.Sas. para quanto possamos oferecer, apresentando,

Cordiais Saudações


Martha Albuquerque
Técnico em Assuntos Culturais
Pela UNIPER

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NEWSLETTER OF THE INTERNATIONAL EDUCATIONAL REPORTING SERVICE
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Motives to change

'Deficit motives to change', wrote Michael Huberman in Understanding change in education: an introduction¹ '... would be motivated by crisis, competition or conflict: student or teacher strikes, dissatisfaction of citizens at large or of national officials, internal conflicts between administrators and teachers, shortages of teachers or facilities, so-called "educational emergencies"...'.

Such motives may be found anywhere, and from Washington comes a report of an 18-year-old New York school leaver suing his high school because he cannot read or write and is therefore 'unable to cope with the affairs of the world'. The report adds that a recent University of Texas survey showed the young New Yorker's plight to be shared by as many as one in five American adults. United Kingdom schools' performance has come under criticism from inspectors and from industry alike. So the level of performance of an education system does not necessarily depend on its level of development, and innovation in education is as important in developed as it is in developing systems.

In the United Kingdom, a national debate on education has been tackling the problem, structuring it at the outset into eight essential questions. These are dealt with in a Department of Education and Science background paper which proposes four main areas for discussion: 'the school curriculum 5-16, the assessment of standards, the education and training of teachers, school and working life'. The questions are posed in the following pages with the conviction that *Innovation* readers will find in them as much food for thought as in the usual 'Viewpoint'. It is clearly beyond the scope of this newsletter to report on the debate, however: the educational press may be relied on to do that adequately enough. Suffice it here to indicate a direction from which interesting initiatives in the field of educational innovation may be expected in the coming months.

Enclosed with this issue is a 'mini-directory' of readers of *Innovation*, classified in alphabetical order of countries and showing addresses and fields of specialization. It is issued in response to the suggestion of an American reader, Dr. Paul Owoc, in order to facilitate communication — an important part of the task IERS has set itself — among workers in the same area of innovation. Its appearance does not mean that the list is

closed, however, and names received later will be filed for inclusion in updated lists as these become necessary.

News from the network

At the first **International workshop for Editors of Adult and Workers' Educational Journals**, held in Teheran, Iran, in March, some 25 editors, most of them from developing countries, participated in outlining a strategy whereby such journals can engage more fully in the broad purposes of education for development and of the growth and improvement of adult education. Anticipated outcomes are a state-of-the-art report, a plan for an editors' handbook, and an annotated directory of adult education and related journals and of information sources.

The study arises directly from recommendations for action agreed to by the international adult education community and by governments and contained in the Recommendation for the Development of Adult Education accepted by 141 member countries at the Unesco 1976 General Conference; and the Design for Action which resulted from the International Conference on Adult Education and Development, attended in Dar es Salaam last June by over 400 adult education and development specialists from some 80 countries.

In this issue

Motives to change

News from the network: International Workshops for Editors; New teaching methods discussed in Moscow; Convention on the recognition of studies; Rajasthan Adult Education Association; Associação Brasileira de Teleducação

Ways and means: Report from Didacta

New books: from IERS and national research bodies

Experiments and projects: Times five; the development and activities of the Atlantic Institute of Education, by J.A. Lauwerys

Innovation in Uruguay: educational research applied to the deaf and mentally retarded, by J.A. Vázquez Petrides

From the IERS index: Textbooks for Algeria; Integrated science in Botswana and Sierra Leone; Improved testing in Mauritius; Science teachers' training in Nigeria.

1. Paris, Unesco, 1973. 99 p. (Experiments and innovations in education no. 4)

New teaching methods on the agenda of the USSR Academy

The General Meeting of the Academy of Pedagogical Sciences of the USSR which took place in December 1976 in Moscow discussed one of the most important problems of the Soviet school: improvement and modernization of teaching methods. The five reports presented and the discussion that followed dealt with various aspects of the problem and made a number of concrete suggestions and recommendations based on practical experiences and research work.

It was underlined that the problem of teaching methods is not only an educational one but also a social and political problem, for on its successful solution depends the further improvement of the quality of the school's work as well as the intellectual development of the young generation.

Therefore all teaching methods — traditional, modernized or innovative — should aim at developing in schoolchildren a creative attitude to learning tasks, and developing their independent thinking and self-reliance. However, the modern content of education calls for the renovation of methods of teaching in line with this content and with scientific and technological progress.

The close link between new methods of teaching and the use of modern educational technology was also stressed. To support the efforts made by teachers, the Scientific Research Institute of Educational Technology created a series of new teaching-learning aids for teaching various school subjects. This work is based on a study of the state and trends of production and use of various types of modern teaching apparatus employed in the USSR and in other countries of the world.

The meeting adopted a number of recommendations concerning the improvement and modernization of teaching methods addressed to teachers, researchers and the members of the Academy.

Fizike v škole No. 2, 1977, p. 3-14.

Convention on the recognition of studies

Among the problems posed by the expansion of higher education systems to cater for the demands arising from the development of communities, the question of the mobility of persons who are engaged in higher studies is assuming increasingly large proportions. Its effects, like its causes, are many.

There are a number of different aspects of the mobility of individuals. Some stem from the relation of education systems to their social, economic, political or other environments, (social mobility); others from the relations between different education systems (international mobility), while others, again, are inherent in the systems (interdisciplinary mobility). These aspects cannot be dissociated from each other; because attention has been focused on one of them considered in isolation, the problem has long been dealt with in too piece-meal a fashion. Hence the need, stated by Member States of Unesco at recent sessions of the General Conference, to adapt the movement

of persons more closely to the changing conditions of societies: accordingly, the aim of the Organization's action is to establish the bases that will facilitate the improvement of exchanges.

In its present programme, Unesco is striving to 'draw up standards and prepare practical arrangements with regard to the mobility of persons in higher education, in particular in connexion with the recognition of studies, diplomas and degrees and the reintegration of such persons in their countries of origin'.

International conventions have accordingly been drawn up, and two have already been signed: the Convention for the States of Latin America and the Caribbean, adopted in Mexico on 19 July 1974, and that for the Arab and European States bordering on the Mediterranean, adopted in Nice on 17 December 1976.

The Nice Convention, through the diversity of the States Parties to it, confirms the resolve of Member States of Unesco to co-operate closely with one another in extending and standardizing the international recognition of studies and diplomas, by establishing methods and procedures for international action to this end. It also indicates, more clearly than heretofore, the intention to promote the interpenetration of cultures through the movement of those engaged in higher education.

Rajasthan Proudh Shikshan Samiti or Rajasthan Adult Education Association was set up four years ago to meet the need for a state level organization which could suggest programmes of action and help in creating greater awareness of the importance of lifelong education. It aims, through some 25 district adult education associations,

- to create awareness of the importance of adult education;
- to encourage the work of existing adult education institutions and to create new ones;
- to propose adult education programmes for implementation by existing agencies;
- to provide a forum for contacts and exchanges of views between persons interested in adult education;
- to encourage research in this field;
- to take up directly programmes of adult education such as functional literacy or the use of mass media for adult education.

The theme of the Association's fourth annual conference, held in December 1976, was the linking of non-formal education programmes with development programmes. Several workshops have also been organized and the Association issues a Hindi Bulletin *Anaupcharika* ('the non-formal approach').

Contact: Ramesh Thanvi, organizing secretary RAEA, 38, Jobner Bagh, Pareek College Road, Jaipur 302006, Rajasthan, India.

Information, please

The **Associação Brasileira de Teleducação** (Brazilian Distance Education Association), brings together professionals and bodies specializing in educational research in the use of appropriate technologies, in particular distance education. Launched in 1971, it organizes seminars and study groups which constitute a significant contribution to the development of educational technology. It publishes a journal, *Tecnologia educacional*, and recently set up a Centre for Information on Educational Technology (CITE), one of whose tasks will be to publish a bulletin of abstracts, book reviews, facts and bibliographies. The CITE Co-ordinator is anxious to be informed of or to receive any relevant materials. **Contact:** Angela P. Ribeiro Mazzi, Coordenadora do CITE, Av. Erasmo Braga, 255/Grupo 401, Rio de Janeiro, Brazil.

The school curriculum 5-16

What should be the aims and content of a core curriculum?

How best can agreed core curriculum be put into effect?

The same type of information is requested by the **Arab States Educational Media Centre** in Kuwait. This pioneer project was launched last year to serve the mutual audio-visual needs of the twenty Arabic-speaking countries, extending from the Atlantic Ocean to the Arabian Gulf. **Contact: Professor Salah El-Araby, Head of International Co-ordination Division, Alecco, Arab States Educational Media Centre, P.O. Box 24017, Safat, Kuwait.**

Ways and means



(Photo: Innovation)

Didacta, as the major world event at which producers of educational materials give a tangible account of the progress of their work, is always worth watching as such, even before approaching the content.

For many years a biennial exhibition centred on the Federal Republic of Germany, it first ventured outside that country with a session in Brussels in 1974. Last year, a flurry of regional activity activated Didafrica in Dakar and Didamerica in São Paulo, as reported in *Innovation* no. 6. Now the exhibition is settling into an effective alternation of exhibitions in the Federal Republic of Germany and abroad, and this year was the occasion for a smaller-scale exhibition at Hanover in the Federal Republic of Germany. Next April it returns to Brussels.

Discussions

● the largest exhibition of its kind in the world, 'smaller scale' still means some 600 exhibitors from two dozen countries. Among the special events organized within the framework of the exhibition was the 'School-book forum 77', clearly of enormous value to teachers able to be there, but unfortunately impossible to report in sufficient detail for those who were not. The Unesco Forum on Development Education, organized by the German Commission for Unesco, comprised a panel discussion on the theme 'Do we understand the Third World? — The role of education' and a set of lectures focusing on the subject of the talk given by a Unesco specialist, 'Educational Media and Development Education'. This was certainly close to the essential interests of IERS and a full report is expected to be available shortly.

Hardware

The basis of the exhibition is, however, school equipment and educational materials. Innovations in the field were few and far between, though technological innovation is not necessarily directly related to educational innovation: either may occur without the other. An inexpensive, indestructible chair which

could be neatly stacked or easily linked into unbreakable rows was not without interest for a school budget, but beyond that would be unlikely to affect the education system.

AV

A British prototype which projects still pictures from a cartridge of 16 mm. film while accompanying them with a commentary recorded on a sound cassette is portable, autonomous and compact in comparison with a slide projector whose work it does with greater flexibility. The picture may be projected on to a small, built-in screen, shaded for use in undarkened surroundings, suitable for individual instruction or monitoring. It may also be projected with the necessary brilliance on to a 1m 20 screen at a distance or, using a wide angle lense, on to the reverse side of a large screen close at hand. The apparatus is expected to be available for various voltages, although the model shown at Hanover was under-performing because it was not adapted to the local voltage. A battery model is also foreseen, so that when the apparatus comes on to the market in June, it will make a positive contribution to bringing an audio-visual medium in a compact and flexible form within easier range of a greater number of situations where it is needed. Perhaps some further thinking may be devoted to the fact that the 120 metres of film in the cartridge give the equivalent of more carrousels of slides than some teachers may wish to bring to a single lesson, even in the name of compactness, especially if they wish to use, say, the seventh set of pictures. And while film will avoid loss or breakage of single slides, it does not facilitate the substitution of individual items.

CAI

At the more expensive end of the scale came a computerized audio-visual teaching machine, interesting despite its price because of its teaching technique and advanced technology. Verbal explanations may be heard over a loudspeaker or through earphones, while visual demonstrations are shown on a small screen. Questions to ascertain whether the student has understood a unit of instruction may be of the multiple-choice type, in which case the answer is selected by pressing the correct button, or they may require calculation of a numerical answer which is 'typed' on a keyboard linked to the computer. The latter may be programmed to allow some tolerance, but in the case of a totally wrong answer, the student may, by pressing a button, ask to have the last step repeated or, if necessary, the whole stage; or he may proceed to further questions on the same stage before going on to the next. The 150 audio channels of the tape cassette are arranged in parallel order, so that any channel can be reached within less than a second. A printer can be connected to the machine in order to provide full feed-back on a student's performance and so indicate any programme changes that might be necessary. In a similar vein but a more modest price range, a Finnish machine for scoring multiple-choice tests can process answer sheets with up to 60 responses in a second and a half. It shows a pupil's 'raw' result, expresses it as a percentage, computes the average for a group of pupils and the percentage of correct answers for each question. Full details of the equipment described here is of course obtainable from IERS.

Indian presence

A discreet but significant presence at Didacta was that of EDMA — the Educator-Manufacturer Association¹, of Bangalore. The association was formed in June 1975, as a result of interest sparked off by a seminar held in Calcutta in 1973 on the use of teaching materials for primary science and new mathematics. The materials used at the seminar were subsequently exhibited at other major cities and the growing wave of interest led to a second seminar, in Bombay in 1974, on the production of low-cost teaching materials.

The thinking underlying the materials now produced by the Dynam Engineering Corporation in Bangalore is akin to that of Piaget and of Montessori. The materials themselves are made by some 30 workers who periodically go out to visit the schools where they are used. Their observations then determine further developments. Apparatus at present available is directed particularly towards single-teacher and ungraded schools in rural areas — a priority area if ever there was one. There are plans, however, to produce for a wider range of ages and subjects.

1. 6, Haudin Road, Bangalore 560042, India.



(Kleine Schulbuchschule)

New books

From IERS

Latest additions to the 'Experiments and innovations in education' series are numbers 30 to 33, being published this month in their initial language editions, with other language editions in preparation. *An alternative pattern of basic education: Radio Santa Maria* (No. 30), by Robert White, is the first study in this series to emanate from the Unesco Institute for Education, Hamburg. It describes the growth, work and underlying philosophy of an educational radio station in the Dominican Republic. Radio Santa Maria, through an innovative combination of carefully timed and adapted radio programmes, printed materials and tutorial assistance, offers the rural adult population a way towards a qualification equivalent to that achieved through the formal system, with which it is in fact articulated. An interesting comparison based on cost-effectiveness is made between the two systems.

The Spanish educational reform and lifelong education, (No. 31), also the result of collaboration between the Unesco Institute for Education and IERS, is the work of Ricardo Diez Hochleitner, Joaquín Tena Artigas and Marcelino García Cuerpo. It is structured in two main sections, one on the preparation of the reform, the other describing and analysing the new education system from the perspective of lifelong education. The conclusions offer a set of 'criteria for evaluating the Spanish system in relation to lifelong education' and a contribution 'towards systematizing the process of reform'

The Caribbean Mathematics Project: training the teacher as the agent of reform (No. 32) by H. Martyn Cundy, formerly Professor of Mathematics at the University of Malawi, describes the evolution of a course adapted to the needs of children in the eight Caribbean islands. 'Adapted to the needs' means taking account of the real difficulties faced by these children, who are

not always able to understand the terms in which problems are set, nor, for that matter, always able to attend school. Robert Morris, describing the project in *Innovation* (No. 6) last year, drew attention to the unique character of the project. While it has one characteristic in common with the many other curriculum development projects which have mushroomed in the past fifteen years — it has produced teaching materials — in almost every other respect it differs from them. Firstly, it is a regional project involving eight island territories in the Windward and Leeward Islands of the West Indies. Secondly, it has been implemented as a joint operation involving a number of authorities and institutions. Thirdly, it quickly brought local serving teachers actively into the process of materials development, so exhibiting many of the features of the theoretical 'social-inter-active' model of curriculum development. And, finally, it probably broke all records in becoming operative within eight months of the submission of the report of the feasibility study which preceded it.'

Educational innovations in Switzerland: traits and trends (No. 33) is the fruit of patient, informed and often critical efforts on the part of Emile Blanc and Eugene Egger. The title is self-explanatory: this is a meticulous inventory of recent changes i.e. of the multitude of innovatory experiences in the education systems of the 25 Cantons of the Confederation. It covers 80 innovations classified by type, described and analysed. Progress necessarily slow, the authors point out, and educational innovation calls for constant adaptation — 'as in other fields, Switzerland is condemned to a policy of little steps' and 'cannot afford the luxury of innovations which fail'. They add, however, that this country is a significant example in that it has drawn on what is done elsewhere while retaining its characteristic approach where this was more in keeping with young people's interests. And although each Canton is anxious to keep its autonomy and originality, particularly with regard to education and culture, all are open to innovations from other countries or to those advocated by international organizations such as Unesco, OECD, the Council of Europe or the European Communities, whose important role in this field is highlighted by the authors.

From national research bodies

Educational research and innovations is a recent publication of the National Council of Educational Research and Training, New Delhi, India. The NCERT Department of Teaching Aids is now compiling an All India Directory of Audio-visual Equipment and Materials.

Register of educational research in the United Kingdom 1973-1976 is published by the National Foundation for Educational Research in England and Wales. Its 2,000 entries of completed and current research cover the work of some 280 universities, colleges, government departments and associations.

Set is a research information kit for teachers, published twice a year by the New Zealand Council for Educational Research (P. O. Box 3237, Wellington). It comes as a set of well illustrated fact sheets on a wide range of important current issues; in 'Set 76 number two' these range from 'research briefs' on learning a second language vocabulary or on team teaching to open plan schools and teaching about drugs. The sheets are presented in a stout cardboard folder in the manner of a menu of the early

The assessment of standards

How are individual pupils progressing in the acquisition of basic skills and more generally?

How is the school system as a whole performing?

years of this century. 'Platitudinous, full of jargon and a waste of money', said the staff of a provincial girls' secondary school. 'Perhaps the most imaginative popular presentation of research findings that I have seen', said National Foundation for Educational Research editor Gabriel Chanan.



Today's Menu

Rhyming Cutlets with Stuffed Corn
Four Other Appetizers
Streaming Soup



Dish of the Day

Side of Bullock
with
Sauce De La Mort Horse
Four Other Main Courses

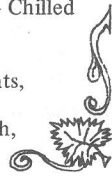
Desserts

Punishment Pie – with Lashings Open Plan Delight – Chilled

Tea, Coffee or Drug Education with Every Meal

Only the finest imported and home grown ingredients,
carefully inspected by

The New Zealand Council for Educational Research,
are used in the set kitchens



Experiments and projects

It is 30 years now since Dr. Joseph Lauwerys presented at the International Conference on Education a report on equality of access to secondary education. When he retired five years ago from his Chair at the University of London Institute of Education, Dr. H.L. Elvin, writing in the World year book of education, recalled that 'one of his first tasks when he was appointed to this post in 1947 was to recommend the annual publication of the Year book of education which had not been published during the war years'.

'He brought to the immensely important task of strengthening a transatlantic bridge through a joint publication', continued Dr. Elvin, 'a wealth of experience and scholarship in Comparative Education'. Now Dr. Lauwerys brings his experience to the IERS bridge-building effort with an account of the work of the Atlantic Institute of Education which he directed until recently. A more extensive case study is in preparation for the 'Experiments and innovations in education' series.

TIMES FIVE. THE DEVELOPMENT AND ACTIVITIES OF THE ATLANTIC INSTITUTE OF EDUCATION.

The four provinces of Canada which border the Atlantic have an area nearly equal to that of France and a population of about 2 millions. There is one conurbation — Halifax — with about 200,000 inhabitants and a number of small, lively towns. The rest of the people live in little villages and scattered farms or cottages surrounded by forests and lakes. Together with parts of Quebec, this was the part of Canada that was settled earliest and by 1850 there were already four university colleges in Nova Scotia alone.

For geographical, political and religious reasons the number of institutions at the third level of education is astonishingly large. There are certainly far more of them than can be justified on grounds of economy and efficiency. In Nova Scotia, for example, nine independent colleges and university departments are concerned with teacher education — to serve the needs of fewer than 800,000 people. As a result, most are small and lack the resources needed to support high level research or specialized teaching.

Faced by this situation, educators met frequently in the 1950s and 1960s to discuss ways of overcoming fragmentation and of developing post-graduate programmes. It was commonly as-

sumed that full co-operation would be needed among all universities and colleges as well between the four provinces. After full consultation and taking account of several detailed reports, the Government of Nova Scotia decided to go ahead on its own in the confident expectation that the three other provinces would join later. An Act of the Legislature was passed unanimously in 1969 making available the necessary funds. Professor J.A. Lauwerys was appointed Director and Dr. G. Anderson, Associate Director of the Atlantic Institute of Education. Work started in August 1970.

General principles

The general principles of operation adopted were, of course, based on the 1969 Act. They can be summarized as follows.

- (a) The Institute should attempt, in every way possible, to promote co-operation among all those concerned with teacher education. It should support other institutions but never compete with them, acting on its own only in areas not of concern to them. It should also endeavour always to act in association with all four provinces.
- (b) The governing bodies of the Institute — that is its Board of Governors and Academic Council — must include representatives of all groups concerned with schools and teaching; for example: the Teachers' Union; the local school boards; the universities.
- (c) Long-term theoretical research will not normally be undertaken: it is with the *application* of such research that the Institute is concerned.
- (d) The Institute will use the right, granted to it by the Act, to award degrees and diplomas. Usually this will be done to reward significant but exploratory work not easily fitted within ordinary university structures.
- (e) The Institute should look upon itself as a research and development unit, at the disposal of the Ministries of Education in the four provinces.
- (f) The Institute will not normally give material or financial support to projects which do not represent or include original and innovative ideas and practices.

Report

The report entitled *Times five*¹ recently issued by the Institute describes briefly what was achieved during the first five years of its existence. The amount and diversity of the work done is impressive. It serves to explain why this new institution gained national prestige and recognition in so short a time. It seems also to have been an economical undertaking. The annual budget increased from about \$ 180,000 to about \$ 500,000; while the professional staff grew to just over 20, six of whom worked outside headquarters, in the field, in schools.

Projects completed

These fall into four main groups.

First, the development of graduate programmes including an experimental B.Ed. and experimental M.Ed in special education. These were provided for about three years, and between 25 and 30 students were trained. When the programmes had proved a marked success, they were handed over to a univer-

1. Atlantic Institute of Education, South Street, Halifax, Nova Scotia, Canada. *Times five*. 43 p.

sity. There was also an M.Ed programme in counselling and guidance. The most interesting and impressive success, however, was the establishment of an 'Open Acces Study Plan' — a Canadian version of an 'Open University'. This plan provides a structure which enables teachers anywhere to pursue programmes of study, part-time or full-time, with the supervision and assistance of the Institute and of administrators and university professors. Full-time attendance at a campus is not essential: students can plan their timetables as they wish and they can continue their ordinary work. The programmes, tailored to their own needs and interests, lead to an M.Ed or to a Ph.D.

The second field of concern has been 'Continuing Teacher Education'. There have been experimental workshops and courses; the promotion of an Outdoor Education Centre; the training of teachers in the field of behaviour analysis and precision teaching. In Prince Edward Island an abandoned 'Little Red School House' was transformed and is being used by local teachers as a centre under their own control.

The third area of activity is 'Curriculum Development' and includes the technology of education. It includes, too, the 'Lighthouse Learning Program' which endeavours to promote excellence in education by finding ways of developing human and material resources which exist in the schools and communities of the four Atlantic provinces. The approach was that of identifying and reporting what has been learned about educational innovation and change in the whole region.

The fourth area, that of 'Planning and Research', has involved the preparation of a number of important studies and reports for the public authorities. Much attention has been given to the forecasting of the demand for teachers within various parts of the school curriculum.

Success and application

The noteworthy success of the Atlantic Institute of Education, an institution of a new kind, is no doubt due in large part to the fact that it is well adapted to Canadian traditions and to the social environment within which it operates. But there are also factors of a general or universal kind. For example: final authority in academic and professional matters should be in the hands of teachers and educators; the members of staff of an institution concerned with teacher education must be in contact with schools and all of them experienced teachers — some of them practising teachers on secondment; attention must be concentrated on problems of obvious importance to administrators and teachers.

Finally, it has to be recognized that everywhere formal education is becoming increasingly bureaucratized and professionalized. The danger of this trend is that it favours the growth of very conservative attitudes and practices — it may well lead to static ossification. In the major industries such trends are usually opposed and neutralized by the establishment of Research and Development units, themselves organic parts of the whole enterprise. In all probability, every national system of education would benefit from the work of a National Institute of Education.

Nor need such an Institute be costly. It could be started in a most modest way. An old house or a school building no longer required would provide adequate premises. The staff need not be numerous: quality is here more important than numbers.

Growth and development would follow when, and only when, it became evident that a genuine contribution to the improvement of education was being made.

J.A. Lauwerys

INNOVATION IN URUGUAY: EDUCATIONAL RESEARCH APPLIED TO THE DEAF AND MENTALLY RETARDED

The Instituto Magisterial Superior (Higher Institute of Education), an affiliated body of the Consejo Nacional de Educación uruguayo (Uruguayan National Council of Education), has provided training and specialist courses for primary level teachers since the early sixties. These courses have traditionally covered two distinct areas:

- (a) *specialist courses, where the emphasis is on students with psychic development problems (mentally retarded), deaf and pre-school children and students with speech defects; specialist courses are also planned for students with abnormal behaviour patterns and for blind students;*
- (b) *training courses at three different levels: first stage (refresher courses), second stage (management courses) and third stage (courses for school inspectors).*

The high level achieved in the specialist courses for mentally retarded and deaf students attracted the interest of the Organization of American States (OAS) which, through its regional programme of educational development, encouraged the creation of multinational specialist courses in the two areas mentioned. The latter, operating by means of a system of Latin American scholarships, have been running for eight years.

Beginning of the innovation

From 1975 onwards a new dimension was added to the planning of the multinational courses. This innovation, which affects the entire study programme, including case studies, seminars, round tables, technical panels, educational audio-visual sessions, etc., also involves the inclusion of an educational research programme which is experimenting with a particular method: work in this sector entails not only theoretical knowledge related to research as an academic subject but also the entire implementation of standard research on a subject relevant to the sector and using the 'in-service training' technique.

This is the first time that this type of methodology has been applied in the national education system, with the support of a multinational body such as the OAS. Furthermore, this support involves an obligation to conclude the course with a publication covering the whole study to date, one of the specific headings of the project being 'publications'.

The first response to this ever-present challenge consists in the setting up of a Department of Educational Research to be responsible among other things for the specific task of planning, carrying out, evaluating and preparing for publication the annual research work of the course; the same tasks would be required for the management course (entirely made up of national teachers) in whose curriculum educational research forms an integral part.

The education and training of teachers

What steps can be taken to ensure that all teachers receive the in-service training and education they need at the various stages of their careers?

What are the academic and professional requirements of teachers which need to be provided for in their initial training and, in particular, what are the implications these have for entrance requirements?

Methodology

Planned in this way, the task thus involves three basic stages.

The first stage provides the teachers of the courses with sufficient theoretical bases in educational research. This can be done, for example, by having access to specialized bibliography or to the opinions of a pluridisciplinary group, by organizing frequent group activities, by the selection, compagination and printing of material which is either unpublished or else not easily accessible, by means of 'research simulation models', or by showing films and audio-visual presentations. It should be borne in mind here that these teachers, as can be seen from the study which was previously carried out by means of individual records, do not have any technical training in research methods. This stage, however, attempts not only to impart general knowledge but also to promote and stimulate educational research.

The second stage, along with the last third of the first stage, includes the choice of the research problem with the aid of the pluridisciplinary team as a consultative body, its feasibility study and the drawing up of the research programme. The definition of the subject finally overlaps into the third stage, during which the research will develop according to a basic plan in four progressive steps:

Outline of the problem, including the introduction, definition and the objectives and goals;

statement of position, which includes the theoretical framework and the working hypotheses;

operational phase, which includes the proposed methodology and the development of tools; and

conclusions and recommendations.

The three stages considered normally end with the task of finally writing up the completed study which, once it has been approved by the technical organs in the system, is submitted for publication.

To date the Educational Research Department (DINED, Departamento de Investigaciones Educativas), has headed two educational research projects in the framework of the multinational courses and two others in the framework of the management courses. As this report is being written, the DINED is drawing the work programme for the present academic year, pending the arrival of national teachers in March for the management course and of foreign teachers in April for the multinational course.

Conclusions and prospects

The application of a scientific research method to the area of special students (mentally retarded and deaf) is opening up interesting prospects in the educational affairs of the sector, particularly on a Latin American level, where this approach is new in the field. By way of example, mention could be made of the outcome of the 1975 research findings which dealt mainly with the effects of television on this type of student. In fact, contrary to expectation, a high percentage of the representative sample of deaf students studied proved to be watching commercial television and to be perfectly able to interpret the system of signs, symbols and codes of the audio-visual television language, obviously modifying their behaviour accordingly (jobs, theatre, games, general sociability). These modifications ranged from mere interest in the daily watching of television (on average two

to three hours a day) to manifestations of violence and aggressivity clearly identifiable with archetypes taken from the 'blood and thunder' serials.

Much more important, however, than the scientific observation of this fact (which often does not arouse sufficient curiosity on the part of specialized teachers) is that it is diametrically opposed to modern theories concerning the mechanisms by which individuals perceive, assimilate and react to stimuli from mass media (particular case of television). Obviously these theories, particularly in the cases of Olson, Bruner, and Salomon, refer only to normal individuals whereas the above-mentioned research applied to the mentally handicapped. At first glance this argument also seems contradictory since, if it were proved in other circumstances which make it possible to expand on it and draw conclusions, it could have a 'boomerang' effect in demanding the reassessment of current ideas concerning normal students.

The scope of this subject extends well beyond the objectives of the initial research to the point where it merits further research, recently drawn up by the DINED management, which will be presented as an original contribution to the *Revista de Tecnología Educativa* published by the OAS.

Despite the natural limits of this research project, it seems that the problem as presented is sufficiently indicative of future trends. It also fits in very well with the motto which we have adopted: 'To strive, to seek, not to find, and not to yield'.

Juan Antonio Vázquez Petrides
Head of Department, Instituto Magisterial Superior

From the IERS index

Country: Afghanistan
Title: Training in the inspection of Primary Schools
Institution responsible: Ministry of Education

Description:

Provision of instruction in the techniques of inspection covering the administration and methodology of primary schools. Participants are drawn from the central and provincial inspectorates. This is probably the most formative and important field for qualitative improvement in primary education, which is undergoing a large-scale reorganisation with a building programme and the upgrading of small rural schools. For promising students on the courses short attachments to members of Her Majesty's Inspectorate and the inspectorates of local education authorities in the United Kingdom are proposed.

School and working life

How best can children be educated towards an awareness and understanding of our technological and industrial society and of their own role within it?

How can employers make the best use of school leavers and what contribution can industry make to education?

Country: Algeria
Title: Preparation of a series of English language textbooks, with supporting materials, to meet the needs of the secondary schools
Institution responsible: Ministry of Primary & Secondary Education, Institut Pédagogique National, Château Royal, Ben Aknoun, Algiers

Description:

The object is to produce five course books (one for each of secondary education) and two teachers' books (one for each secondary level) which will reflect Algerian priorities. A programme of training for teachers who will use the new teaching material is incorporated in the exercise. Manchester University Department of Education has acted as adviser to the project and as a result a teacher training programme for Algerians at Manchester is being discussed.

Country: Botswana
Title: Introduction of integrated science at junior secondary level
Started: 1973
Institution responsible: Ministry of Education

Description:

In collaboration with Lesotho and Swaziland, Botswana is introducing an integrated science course for the first three years of the secondary stage. The materials are based on the West Indian revision of the Scottish Integrated Science course, but in Botswana there has been a tendency to revert to the style of the Scottish original, while ensuring that the subject matter treated is relevant to Botswana. Materials for the first two years are now in use in all schools in Botswana and third year materials are being introduced at present. Emphasis is placed on the experimental/discovery method and worksheets are in use in all the schools. In-service work with the teachers has included three seminars with lecturers from the United Kingdom. A regional textbook in support of the course is planned.

Country: Mauritius
Title: Improvement of testing at upper primary level
Institution responsible: Ministry of Education and Cultural Affairs, Edith Cavell Street, Port Louis
Contact person: Dr. Davis, Institute of Education, Hayat Building, Rose Hill

Description:

This project, aimed at improving the validity and reliability of the Standard V and VI examinations, involved (a) holding seminars on testing for inspectors, teacher training college and Ministry staff, (b) setting up 'ad hoc' subject panels for English, French, geography and mathematics, (c) preparing examination specification grids, (d) writing and pre-testing questions for item banks, (e) administering a trial 'new' examination to all Standard V pupils in November 1972, and (f) computer analysis of the results. The next steps in the examination reform programme are at present being considered.

Country: Nigeria
Title: Production of materials for the training of science teachers
Started: 1976
Institution responsible: Science Teachers Association of Nigeria, Science Teachers Education Section
Contact person: M. R. Alabi, Secretary, Science Teachers Association of Nigeria, c/o Kwara State College of Technology, Ilorin, Kwara State

Description:

Series of workshops of which the first was held in January 1976 with the participation of a United Kingdom specialist and with a grant from Unesco. Materials have been produced on (a) evaluation of teaching practice, (b) the use of printed matter in science teaching, (c) equipment and facilities for science teachers, (d) evaluation in science, (e) development of scientific concepts and skills; and (f) in-service organization.

Country: Sierra Leone
Title: Integrated science teaching in early years of secondary school

Started: 1971
Institution responsible: Institute of Education, University of Sierra Leone

Contact: Curriculum Revision Unit (Science), Institute of Education, Freetown

Description:

The programme consists of about 15 units each based upon a topic approach. The first five units constitute year one of the course, published in August/September 1976. The second and third year materials will be available in 1977 and 1978. The published material will include a teachers' guide and a pupils' workbook. The whole programme has been designed to satisfy certain stated educational aims which are in three broad areas: knowledge, attitudes and skills. Unit goals are given for each unit and specific teaching objectives for each topic. Detailed teaching strategies are given for each topic together with teacher background enrichment material for each unit. The workbook provides full details of suggested experimental work with follow-up pupil exercises and activities. This low-cost programme stresses the use of locally available materials, and involves local teachers in writing, editing, trial teaching, re-editing on the basis of trials teachers' feedback, and final publication.

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similar nome/s e endereços pa' que o Brasil figure!

ALGERIA/ALGERIE/ARGELIA

BENSALAH, Kacem. Conseiller en planification de l'éducation. Direction générale des études et programmes, Ministère de l'éducation, El-Mouradia, Alger.

Etudes de carte scolaire (Projet-pilote) pour la réforme de l'enseignement.

ARGENTINA/ARGENTINE

ROSSI ETCHELOUZ, Nelly Yvis. Prof. en ciencias de la educación. Ofic.: San Martín 1153 -2o P. Santa Fe. Priv.: 1e de Mayo No 3348 -Santa Fe.

Sistema Provincial de Información Educativa

Centro Provincial de Documentación e Información. Doc. e Inf. Buenos Aires 489/497 Viedma, Río Negro.

Referencias Bibliograficas.

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MCMEEKIN, R.W., Senior Planning Officer, Min. of Ed. Educational Planning, c/o Ministry of Education, Private bag 005, Gaborone. Botswana National Commission on Education.

BULGARIA/BULGARIE

TODOR, Avramor, Développement de l'enseignement et planification. 38, rue Partchevetche, Sofia. Conseiller.

CANADA

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CHILE/CHILI

ITURRA, Hernán Recart. Planificación y educación de adultos. Los Carrera 951 Osorno - Fundación Radio Escuela para el Desarrollo Rural (FREDER).

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Universidad Nacional de Colombia. Sede-Manizales. Apartado Aéreo No. 127.

JARAMILLO ARBELAEZ, Delio. Professor de la materia en Universidades de Santo Tomás y El Rosario, Bogotá. Derecho Humanitario. Carrera 26, 47-25, Bogotá.

Derecho internacional humanitario.

ECUADOR/EQUATEUR

HERNANDEZ C., Jaime A. Jefe del Centro de Documentación e Información Ed. Edificio Inca, 10 de Agosto 666, 7o Piso. Ministerio de Educación Pública y Deportes. Quito.

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DEHEYN, Jean Jacques. Expert de formation en technologie agricole. 50, rue des Carrières, 92150 Suresnes.

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PIDOUX, Charles L. Social psychological research in developing countries. 96, rue Pierre Demours, 75017 Paris.

International Council on SPR in Developing Countries. BP 492 Niamey, Niger.

GABON

EYAGA NTERE, François. Secrétaire de Direction. Institut Pédagogique National. B.P. 813 Libreville.

GERMAN DEMOCRATIC REPUBLIC/REPUBLIQUE DEMOCRATIQUE ALLEMANDE/ REPUBLICA DEMOCRATICA ALEMANA

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INDIA/INDE

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INDONESIA/INDONESIE

LUMBANTORUAN, Magdalena. Management education and development. Institute for Management Educ., and Dev. Jalan Menteng Raya 9, Jakarta Pusat.

Management training.

IRAN

Asian Cultural Documentation Center for Unesco, Tehran. 1/34 Soraya Street, P.O. Box 41/2786. Tehran.

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AYMAN, Iraj. Psychology and management, National Institute of Psychology. P.O. Box 741, Tehran.

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IRAK/IRAQ

MANSOOR, Muneer. Jun. lecturer, English lit. & drama. English Dept., College of Arts, Almustansiviya University, Baghdad.

IRELAND/IRLANDE/IRLANDA

CAREY, Liam. Adult and community Educ. St. Patrick's College, Maynooth, Co. Kildare. Training of Adult and Community Educ.

ITALY/ITALIE/ITALIA

BRONDI, Paolo. Prof. de lycée. Via G. Giusti 20, 54030 Cinquale (MS). Histoire, philosophie.

CALONGHI, Luigi. Salesian University, Dep. for Educ. Research and Assess. Piazza Ateneo Salesiano, 1. I-00139 Rome.

DAMIANO, Elio. Docente di Pedagogia. Via Cavone. 25049 Iseo, (BS),

Pedagogia della scuola in quanto organizzazione; Innovazione nella scuola dell'obbligo; Educ. ricorrente, alfabetizz.

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OMAR BIN MOHD, Hashim. Measurement and testing Exam. Syndicate, Ministry of Educ., Jalan Duta, Kuala Lumpur.

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VARELA, Miguel MA. President, Catholic Educ. Ass. of the Phil. Pope Pius XII Catholic Center, 1175 United Nations Ave, Paco. Manila, P.O. Box 1214.

Educ. planning office.

POLAND/POLOGNE/POLONIA

African Institute, University of Warsaw. Exchange Division. Zwirki i Wigury 93, 02-089 Warszawa.

RWANDA

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Alphabétisation fonctionnelle.

SIERRA LEONE

EDUALINO, Emilio. Teacher educ.: Bunumbu Teachers College). Private mail bag, Kenema.

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SWITZERLAND/SUISSE/SUIZA

Office of Education. Christian, general & theological educ. World Council of Churches, 150 rte de Ferney, 1211 Geneva 20.

SYRIA/SYRIE

JANO, Issam. Prof. of chemistry & head of the Dept. of studies and research in educ. Tishreen University, Lattakia.

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THAILAND/THAÏLANDE/TAÏLANDIA

BOON-ITT, Kultida. Social sciences. Thailand Inf. Center, Ratasart Bldg. 3. Chulalongkorn University, Bangkok 5.

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TURKEY/TURQUIE/TURQUIA

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UNION OF SOVIET SOCIALIST REPUBLICS/UNION DES REPUBLIQUES SOCIALISTES SOVIETIQUES/UNION DE REPUBLICAS SOCIALISTAS SOVIETICAS

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SDI, prep. of bibl. abstracts, translations.

UNITED KINGDOM/ROYAUME-UNI/REINO UNIDO

CULSHAW, Murray. Educ. & vocational training. Stone House; 44 West St.; Storrington RH20 4EE, Sussex.

Advisory service to a few dev. agencies in Europe.

EGGIMANN, Diane. Teacher educ., Community educ., educ. studies; 15 Norham Gardens, Oxford OX 2 6 PY.

Cur. alternatives for Southeast Asian Dev.

HOGAN, Desmond F. Management of innovation. Educ. Dev., University of Sussex. Brighton BN1 9RG.

Design & dev. of a masters degree in educ. dev.

NOLAN, John C. Educ. management. 201 Cavehill Road. Belfast BT15 5BP.

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PERROTT, Elizabeth. Self-inst. microteaching 'packages'. Dir., Microteaching Res. Unit, Fylde College, Uni. of Lancaster, Bailrigg, Lancaster, LA1 4YF.

Processes essential to the intl. transfer, implementation and diss. of self-instr learning systems.

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Reform of primary educ., language section.

UNITED STATES OF AMERICA/ETATS UNIS D'AMERIQUE/ESTADOS UNIDOS DE AMERICA

ANANTHAN, T.K. Adult educ. World Educ. 1414 Sixth Av., N.Y. 10019.

BOHLIN, Jill K. Non-traditional world educ. Northeastern Illinois Uni. 5500 N. St. Louis Av., Chicago, Illinois.

Exp. in post-secondary educ.

KINCAID, Harry. Instr. technology. Stanford Research Inst., Menlo Park, California 94025.

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OWOC, Paul. Educ. psychology. Cemrel, Inc. National Educ. Lab.; 3120 59th Street; Louis, Missouri 63139.

SCHROEDER, Paul E. Voc. educ.-evaluation. 1960 Kenny Rd. Center for Voc. Educ., Columbus, Ohio 43210.

URUGUAY

VASQUEZ PETRIDES, Juan Antonio. Tecnología educativa. Leandro Gómez 2704 - Montevideo.

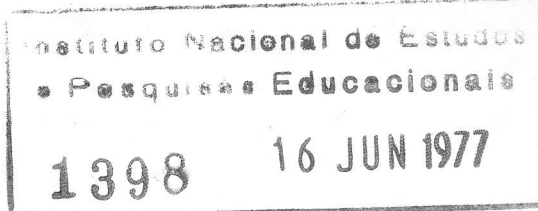
Formación de docentes-investigadores en el nivel primario.

YUGOSLAVIA/YOUGOSLAVIE

PEJOVA, Zdravka. Educ. & training of users of scientific & Technical inf. Zaednica na Naucni Dejnosti. 91000 Skopje, Prolet br. 1.

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University of Belgrade
Faculty of Defectology
11 000 Beograd, Visokog Stevana 2
Post Box 360, Tel. 628-955, 620-787



15th March, 1977.

Dear Sir,

I have the honour to inform you that the Faculty of Defectology at the University of Beograd will be holding a Seminar in November 1977 for experts from the developing countries entitled "THE CAUSES, METHODS OF DIAGNOSIS, CURE AND REHABILITATION OF HANDICAPPED PERSONS".

Special attention will be paid at the Seminar to the causes, methods of diagnosis, cure and rehabilitation of handicapped persons.

This will be a teaching and scientific type of Seminar and the latest discoveries and experiences of defectological science and practice will be considered.

We are enclosing with this letter several copies of the Seminar's working programme and would ask you to inform through the necessary channels all interested expert in your country about this Seminar and to pass on to them an invitation and working programme.

In the hope that experts from your country will take part in this Seminar and hence contribute greatly to the exchange of scientific and expert experience and the acquaintance and contact between scientific and expert workers, we ask you to accept, dear Sir, my sincere regards,

The Dean,
Profesor Danilo Ž. Marković, D.Sc.

[Signature]
CODIE/UNIPER

16.06.77

[Signature]

Arquise-de
Leu 19/6/77
Maria de Aquino

Universite de Belgrade
FACULTE POUR LES EDUCATEURS DES
INADAPTES

SÉMINAIRE

CAUSES, METHODES DE DIAGNOSTIC,
TRAITEMENT ET REHABILITATION DES
HANDICAPES

(14–25) novembre 1977
Belgrade

Séminaire pour les experts des pays en voie
de développement

Les intéressés désirant participer au séminaire sont priés de s'adresser à la Faculté jusqu'au 1^{er} mai 1977 au plus tard sur la fiche ci-jointe.

Le programme détaillé sera remis aux participants inscrits.

Les participants seront logés dans les hôtels de Belgrade selon leur choix.

COMMUNICATION PRELIMINAIRE

Dans le but du développement de la collaboration avec les pays en voie de développement dans le domaine de la réhabilitation des handicapés, la Faculté pour les éducateurs des inadaptés de l'Université de Belgrade organise un séminaire de quinze jours pour les experts en cette matière.

La participation au séminaire est gratuite. Les frais du séjour à Belgrade couvrent les participants eux-mêmes, ou leurs institutions, ou bien le gouvernement de leurs pays.

PROGRAMME DU SEMINAIRE

- I THEME:** Attitude de la société en Yougoslavi envers les handicapés
- II THEME:** Base génétique des troubles mentaux et somatiques
- III THEME:** Causes, diagnostic, traitement et réhabilitation des personnes mentalement retardées
- IV THEME:** Causes, diagnostic, traitement et réhabilitation des troubles de l'ouïe
- V THEME:** Causes des troubles de la voix et du langage, diagnostic et méthodes de la réhabilitation
- VI THEME:** Causes, diagnostic, traitement et réhabilitation des troubles visuels
- VII THEME:** Causes des troubles physiques, diagnostic, traitement et réhabilitation

Conférences et discussions.

Visite des établissements s'occupant des handicapés.

Programme culturel. Programme pour les dames.

Conférences et discussions sont traduites simultanément en anglais et en français.

Un certificat de fréquentation sera remis aux participants.

Pour les renseignements supplémentaires prière de s'adresser à

DEFEKTOLOŠKI FAKULTET UNIVERZITETA U
BEOGRADU,
11000 BEOGRAD, STEVANA VISOKOG 2, YUGO-
SLAVIA

INTERNATIONAL SEMINAR ON „CAUSES, METHODS OF DIAGNOSTICS, TREATMENT AND REHABILITATION OF HANDICAPPED PERSONS“

Organized by:
THE FACULTY OF DEFECTOLOGY,
UNIVERSITY OF BELGRADE,
YUGOSLAVIA
Belgrade, November 14–25, 1977

REGISTRATION FORM (to be typed)

Surname

Name

City

Country

Accompanied by

„Jugoslavija“ Hotel Rates

suite	US \$ 55.00
	– 95.00
double room with bath	US \$ 37.70
single room with bath	US \$ 18.85
local tax included	

Date:

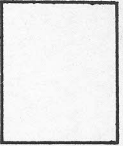
Signature:

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PLEASE SEND THIS FORM TO:

THE FACULTY OF DEFECTOLOGY, UNIVERSITY
OF BELGRADE
11000 BEOGRAD, STEVANA VISOKOG 2,
P.O. BOX 360, YUGOSLAVIA



**THE FACULTY OF DEFECTOLOGY
11000 BEOGRAD
Stevana Visokog 2, P.O. Box 360
YUGOSLAVIA**

**(FOR INTERNATIONAL SEMINAR ON „CAUSES, METHODS OF DIAGNOSTICS, TREATMENTS
AND REHABILITATION OF HANDICAPPED PERSONS“ Belgrade, November, 14–25, 1977)**

University of Belgrade
THE FACULTY OF DEFECTOLOGY

INTERNATIONAL SEMINAR
on
**CAUSES, METHODS OF DIAGNOSTICS,
TREATMENT AND REHABILITATION OF
HANDICAPPED PERSONS**

November 14–25, 1977
Belgrade

**Seminar for the Specialists from
Developing Countries**

VII THEME: Causes of Physically Handicapped Persons,
Diagnosis, Treatment and Rehabilitation

All those interested in participating at the Seminar are kindly requested to fill in Application Form (enclosed), and send it to the Faculty of Defectology, University of Belgrade.

Registered participants will be provided with a detailed Program of the Seminar and full information on hotel accommodation.

PRELIMINARY COMMUNICATION

With the intention of promoting collaboration with Developing Countries in the field of rehabilitation of handicapped persons, the Faculty of Defectology will organize for the specialists from Developing Countries a two-week Seminar dealing with these problems. Registration fee for attending the Seminar is not required.

Expenses for the stay in Belgrade are to be covered by the participants, institutions, or governments of their countries.

GENERAL PROGRAM

- lectures and discussions
- visits to institutions for the rehabilitation of handicapped persons
- social program, program for ladies
- the lectures and discussions will be simultaneously translated into English and French
- participants of the Seminar will be given certificates

PROGRAM OF THE SEMINAR

- I THEME:** The Attitude of the Society towards Handicapped Persons in Yugoslavia
- II THEME:** Genetic Basis of Mental and Somatic Damage
- III THEME:** Causes, Diagnosis, Treatment and Rehabilitation of Mentally Retarded Persons
- IV THEME:** Causes, Diagnosis, Treatment and Rehabilitation of Hearing Disorders
- V THEME:** Causes of Voice and Speech Disturbances, Diagnosis, and Methods of Rehabilitation
- VI THEME:** Causes, Diagnosis, Treatment and Rehabilitation of the Visually Handicapped Persons

For further information please apply to the following address:

**THE FACULTY OF DEFECTOLOGY,
UNIVERSITY OF BELGRADE, 11000 BEOGRAD,
STEVANA VISOKOG 2, P.O. BOX 360,
YUGOSLAVIA**

**INTERNATIONAL SEMINAR ON „CAUSES, METHODS
OF DIAGNOSTICS, TREATMENT AND REHABILITA-
TION OF HANDICAPPED PERSONS“**

Organized by:
THE FACULTY OF DEFECTOLOGY,
UNIVERSITY OF BELGRADE,
YUGOSLAVIA
Belgrade, November 14–25, 1977

REGISTRATION FORM (to be typed)

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„Jugoslavija“ Hotel Rates

suite	US \$ 55.00
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single room with bath	US \$ 18.85
local tax included	

Date:

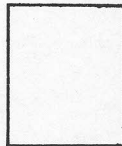
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11000 BEOGRAD
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YUGOSLAVIA**

**(FOR INTERNATIONAL SEMINAR ON „CAUSES, METHODS OF DIAGNOSTICS, TREATMENTS
AND REHABILITATION OF HANDICAPPED PERSONS“ Belgrade, November, 14–25, 1977)**