The articles in this collection present the views of teacher educators in Czechoslovakia, Poland, and the Soviet Union on inservice, or "lifelong" teacher education. The first section contains five essays: (1) a new teachers' training project in Czechoslovakia; (2) further education of teachers and educational personnel in the Czechoslovak system of education; (3) teachers and the new conception of basic schools; (4) ways of improving the system for teachers' further education; and (5) some problems in the initial training and further education of teachers. In the second section of the volume, reports on activities and symposia of the European Information Centre for Further Education of Teachers (EIC-FET), located in Prague, Czechoslovakia, are presented. The Centre was begun in 1973 at the Charles University (Prague, Czechoslovakia) as an information clearinghouse and analytical center. Although essentially national in scope, EIC-FET cooperates with international organizations such as the United Nations Educational, Scientific, and Cultural Organization. The articles in this section discuss: (1) EIC-FET's information subsystem "Further Education of Teachers": (2) an international symposium on preschool education (Prague, 1976); (3) an international conference of advisors on the research and information priorities for the further education of teachers (Prague, 1977); (4) an international symposium on the further education of special school teachers (Prague, 1977); (5) an international symposium on the further education of teachers in the use of educational technology (Prague, 1977); and (6) an international survey on the effective use of educational media and further education of teachers (Prague, 1977).
MODERNIZATION OF THE TEACHERS' FURTHER EDUCATION SYSTEM

(Based on the experience from Czechoslovakia, Soviet Union and Poland)

Charles University
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FOREWORD

The present collection published by the European Information Centre for the Further Education of Teachers, Charles University, Prague, opens up a new series of synthetic studies and analyses of the views, information and reports on the further education of teachers in the individual European countries. Its aim is to give a full account or a concise generalization of the best experience concerning the conception, system, content, methods and ways how to organize a life-long education of teachers and other educational workers.

The main idea of this volume - as its title and subtitle suggest - is to make available the views on a life-long education of teachers held by outstanding educationalists and experts in the field of teachers' training and interpreting the theoretical bases of the reforms in the further education of teachers which have been going on practically in all socialist countries during the past five to ten years. For the purposes of this volume three countries have been chosen, the Soviet Union, Poland and Czechoslovakia, where in our opinion a particularly marked effort has been made to modernize the system, content and methods of the teachers' further education.

Even if there are some minor differences in the respective national systems, there is one common point. They have devised a long-term scheme for the further improvement of the central control and institutionalization of teachers' further training, laying, at the same time, emphasis on the various methods and forms of teachers' self-education. In each of the three countries teachers' life-long education is conceived as a system, in which the training carried out in educational establishments and self-education alternate according to the given schedule and the output of which there is an integrated personality of a well-educated teacher bringing up a new generation.
In conclusion the volume presents the new items on topical international activities of the European Information Centre for the Further Education of Teachers which, however, not only describe the proceedings and results of the symposia referred to, but also attempt to give an account of their main ideas and contributions to knowledge in the world and international understanding.

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I. PAPERS
The rapidly developing life of a socialist society constantly places increasing demands on the ideological, political and professional qualities of people in all walks of life.

Socialist education ranks prominently in the system of "science - technology - production - management - education", as it is a sphere providing scope for innovation and, through the human factor, facilitating the implementation of recent scientific knowledge in technology, industrial production, social organization, in culture, in fact in all fields of social activity.

Under socialism the importance of education and of the school system lies in its universal mission as a tool for educating the socialist citizen as well as contributing to harmonizing the interests of society as a whole with those of the individuals and social groups. Education is a social factor affecting people in a comprehensive way, both as producers and consumers; a factor acting on their consciousness and their entire personality. It represents an essential value for every member of the socialist society by offering him a socialist lifelong aim.

Typical of socialist education is its open system embracing both content and organization. New scientific findings should continuously and systematically be included in the content and methods of work enabling man to receive a consistent education in and out of school in keeping with the changes in the social process of work and according to everybody's individual needs and interests in their all-round development.
Only a well educated man can fully meet the demands of socialist and communist production, i.e. a man well-versed in the rudiments of social, natural and technological sciences, a man well-informed about the major achievements, capable of creative thinking and working and of applying up-to-date knowledge to the social process of work.

A versatile education combined with a high standard of expert proficiency is an essential feature of socialist man as well as an objective of the socialist school system.

These new, long-term projects for the development of socialist education in Czechoslovakia were outlined in a resolution on the further development of the Czechoslovak system of education adopted by the Presidium of the Central Committee of the Czechoslovak Communist Party of June 4th 1976.

The document gives prominence to the role of general and theoretical education based on Marx-Leninist theories and methodology. The open system of the content and organization in the education system referred to in the resolution ensures harmony between immediate and subsequent gradual changes entailing profounder alterations envisaged in the future. The resolution lays down the principle of consistent dialectical unity of man's education and professional training in terms of both content and form ensuring the necessary interlinking of all sections of the school system. In concept the former rigid distinction between elementary and secondary education has been eradicated by making the latter available to all pupils, so that gradually all of them will be able to complete their compulsory school attendance with a school-leaving examination certificate. Adult education and training is now firmly integrated in the school system.

The aim of the education in Czechoslovakia is that it should yield people universally and harmoniously developed, whose aptitudes, interests and abilities are at...
educated by the most modern educational methods. This is based on the scientific assumption that man as a biosocial being represents a sum total of social relationships. In this sense the highly effective educational influence of school and of other educational factors have a decisive formative effect on the all-round development of man's personality.

The education of a versatile, harmoniously developed personality is only possible in the dialectic unity of upbringing and education put into effect in the system of life-long communist guidance. The care and attention devoted to the enlightenment of all members of the socialist society and, at the same time, the efforts of qualified staff to promote the abilities and talent of each individual to the full constitute one of the guiding principles of the Czechoslovak educational system.

Education in Czechoslovakia is a matter of general concern to society. It is ensured in close collaboration with the family, the state, especially the local government bodies i.e. the National Committees, the organizations of the National Front, economic organizations and other institutions.

Education is based on a unified system of schools and educational institutions with a marked working and polytechnical character. Their attendance is compulsory for all children and youth from the age of six to sixteen. Schools with identical standards and streams have been established throughout the Czechoslovak Socialist Republic, where tuition is based on uniform syllabuses and curricula, while the text-books take into account local national differences.

All schools and institutions included in the educational system are state run; all citizens of the Czechoslovak Socialist Republic are admitted under the same con-
ditions, regardless of their nationality, sex, wealth or social origin. Tuition at schools of all levels and streams is free of charge.

The education in the Czechoslovak Socialist Republic is founded on Marxism-Leninism and is continuously being perfected on the basis of the latest scientific and technological findings.

The structure of the unified Czechoslovak educational system is as follows:
1. Crèches and nursery schools for children up to the age of six,
2. Elementary schools,
3. Secondary schools,
4. Universities,
5. Institutions for adult training and education.

Children requiring special care are provided with an upbringing and education at pre-school, elementary and secondary school level at special schools established for this purpose.

The Czechoslovak educational system also includes People's Art Schools, People's Language Schools and Language Schools, other educational and social school amenities as well as a network of educational advisory centres.

The greatest wealth of the socialist society - the young generation - is entrusted to the teachers and instructors.

In Czechoslovakia there are the following teacher categories:

Nursery school teachers are trained at secondary pedagogical schools and at three selected pedagogical colleges, where they gain full qualifications as professionals at nursery schools.
Future elementary and secondary school teachers study at universities, where they can take courses for:

- teachers for the lower grades of the basic schools;
- teachers for subjects of general education,
- teachers of specialized subjects,
- teachers of handicrafts,
- teachers for the People's Art Schools,
- teachers for Language Schools,
- teachers for schools for children requiring special care,
- educational personnel, e.g., out-of-class supervisors.

The course for teachers and educational personnel of all categories are run according to syllabuses officially approved for the whole country, which include, in suitable proportions the ideological-political and the pedagogical-psychological components and the actual subject. Practical teaching at the schools and educational institutions available for the facilities is part of the compulsory training.

The project for the further development of the Czechoslovak educational system and the report giving the reasons for the essential qualities required of a socialist teacher characterize him as one who should meet the demands for ensuring the undividedness of his ideological and political influence, guide the young towards communist moral standards and be fully prepared for the tuition of his own subject.

The ideological and political maturity of a teacher or educationalist is subject to an acquisition of Marxism-Leninism, a full identification with this ideology and an ability to apply Marxist-Leninist methodology in creatively solving whatever situations he may come up against in teaching or outside school in public life. The teacher's ideological maturity stems from his socialist conviction and is evident in his involvement in the implementation of the Czechoslovak Communist
arty's policy. It is asserted in winning over his pupils to take an active part in social affairs conducive to the strengthening of the socialist system, to have a socialist attitude to work and to common property. It also makes itself felt in promoting the deepening of international relations among the socialist community of nations and in support of the progressive revolutionary forces' struggle against imperialism and war.

The moral qualities of a teacher or educator are a source of strength in influencing the upbringing of his charges in the spirit of communism according to his personal example. The moral qualities are intensified by the teacher's active role in the building of a socialist society and effected by further personal life experiences.

The teacher's (and educationalist's) general pedagogical qualification is reflected in his close acquaintance of the pupil as an individual and of the environment of their upbringing, as well as knowing the aims, methods, organization forms and ways and means of communist education in the broadest sense of the word. This is based on Marxist pedagogy and psychology and interrelated disciplines and on their imaginative application in the educational practice, and their rational control at various levels of the school system, among pupils of different age groups and under different tuition and training conditions. All this knowledge, skill and competence serves to accomplish the educational aims in a single continuous process, during which the teacher makes use of his subject to encourage the pupils' creativity.

Training teachers in their specialized qualification means seeing they have a command of the sciences constituting their respective subjects, the theoretical rudiments things as a subject in itself, including the theory of art. This should be up to th:
standard of the most up-to-date knowledge of science and research and the learning must be combined with the need and ability permanently to renew and supplement the knowledge acquired in keeping with the progress made in human findings and social practice. A feature a teacher, as an expert in his subject and in the theory of teaching it, should be endowed with is the ability to lay the foundations for an educated pupil as well as teaching him to generalize and classify the knowledge acquired and how to use it in a systematic and creative manner. This also assumes the ability to teach the pupil to find his bearings independently among the multiplex attained learning and to use it in practice, and thus shape in him a scientific mode of thinking corresponding to his age and mental capacity.

A socialist teacher’s work, however, is not merely confined to school or other educational institutions. A teacher is also a public worker, an active promoter of the party, a person who takes part in political work and cultural enlightenment or some other public activity. He should disseminate the latest education methods and procedures in out-of-school up-bringing, particularly in the family. He should take an active part in the educational work in children’s and youth organizations.

A socialist school teacher should also be capable of implementing the principles of socialist health care and a healthy environment and contributing to the establishment of conditions for leading a socialist way of life as a general social standpoint.

The schools responsible for training teachers are chiefly responsible for the cultivation of the above-mentioned qualities. Considerable importance, however, is attached to the early professional guidance of young people towards the teaching profession, and to a suitable
selection of candidates to take up this career. To this end a set of measures has been taken, which already in the elementary schools serve to form the pre-requisites for the the pupils' communal social activity and to promote all their hobbies, which in one way or another shape and deepen the children's positive attitude towards the teaching profession.

Not only grammar school graduates but also those from other types of secondary schools are systematically recruited for teachers' courses. Secondary school educated people from industry and other walks of life may also take up teachers' courses.

Within the framework of the unified system of teachers' training a unified system of consistent teachers' further education has been introduced. Its aim is to renew, deepen, supplement and broaden the knowledge and skills gained in the basic university training according to the needs of the developing socialist society in the conditions of the scientific-technical revolution.

The content of this education is uniform and includes the ideological-political, educational-psychological and the professional component.

This education has three stages:
- Stage I. ensures the initiation of the teacher-beginners into the teaching practice.
- Stage II. represents the teachers' post-graduate studies.
- Stage III. represents specialized studies.

The Czechoslovak system of the further education of teachers and other educational personnel is composed of:

1. The further education of teachers;

2. The further education of the leading educational officers;
3. Current further training of teachers and other educational personnel;

4. The further education of the leading educationists and psychologists in the service of the Ministry of Education;

5. Ideological-political education of teachers.

All the others employed in education undergo compulsory studies corresponding to their respective positions.

As to the forms of the implementation of this system it is carried out as full-time, part-time or correspondence studies, or special lectures, seminars, courses, fellowships etc. are organised for them. The focal point lies in independent individual studies.

Each new teacher, in the second year of his teaching practice, is enrolled in the first stage of training, which concerns the initiation of the-teacher-beginners in the teaching practice.

Following this first stage of the further education and after several years of teaching practice each teacher is enrolled in post-graduate university studies.

Its goal is further ideological-political, educational and professional development of teachers, as well as the improvement of their work and fostering their all-round educational creativity. The course of studies usually lasts two years and begins at the earliest after six years and at the latest after eight years of the teaching practice. The course of post-graduate studies ends with the submission of a written paper and with a final examination before a board of examiners appointed by the dean.

Receiving an academic degree or a higher degree in education or psychology may be recognised as a form of post-graduate studies. Part-time studies, whereby the teacher acquires higher qualifications or supplements them acc
According to the needs of the school, may also be recognized.

After having gone through the first two stages all teachers are obliged to take up specialized studies.

All teachers and other educational workers are currently being educated in other forms, which ensure the renewal of the science and methods of education and the educational activity of these workers in view of the needs of the society as well as of the talent and individual interest of each teacher.

After the successful completion of the respective stages of teachers' further education, a certificate is issued, which is a requirement for further promotion as well as a salary rise of each individual.

In raising the standard of teachers and educational personnel training the theory and practice of teaching are closely interlinked. To this end there is a network of schools attached to the faculties, where practical teaching is carried out, and of educational establishments, where the teacher-students apply their theoretical knowledge in all subjects in which they are qualified in practice.

University training of teachers is also closely linked up with the research work. Faculties of Education and University Faculties training teachers participate in scientific research, particularly in the field of educational psychological sciences.

University lecturers training teachers are obliged to acquire higher political and professional, and mainly methodological qualifications by obtaining PhD or higher degrees, and by further studies in the establishments concerned with further professional training of university teachers.
In agreement with the long-range scheme for the development of the Czechoslovak educational system, teachers and educational personnel of all categories should gradually receive a complete university education. The measures proposed, compared with the present state, represent a further step forward, namely in the following sense:

1. they unify on a national scale the categories of the fields of studies and the system of teachers' training paying consistent regard to the content and forms of the new conception of education;

2. they increase the number of teachers and educational professions with university qualifications;

3. they improve the quality in the content of teachers' education in two-subject-courses and unify the professional education of teachers of general education subjects for the second phase of Basic Schools and for Secondary Schools;

4. they unify, widen and deepen the political-educational, educational-psychological and the didactic components in teachers' studies.

The general idea underlying the new conception of teachers' education is:

1. to train the teacher in the course of his university studies to become a specialist of a wide scope, who will then be in a position to teach at several levels of the educational system, as well as at several types of the educational establishments, thus facilitating his appointment after graduation from university and his transfer during his teaching career;

2. to design the project for teachers' training as an open dynamic system, which without major difficulties and according to the increasing demands of practice, enables the teacher to improve his qualifications in the course of a life-long education, to supplement or broaden
then in keeping with the contemporary general laws and
trends of the development of all other professions under
the influence of scientific-technical progress.

To ensure the above-mentioned tasks a national com-
mission of experts has been set up to investigate the
studies of teachers of general education subjects in grades
5 - 12 of the second phase of the Basic School and of the
secondary schools.

In accordance with the long-term plan for the develop-
ment of the Czechoslovak system of education new basic fea-
tures were outlined for the graduates, study plans, sylla-
buses as well as materials have been worked out in order
to achieve national standardization for each particular
teaching subject, and to co-ordinate the content and forms
with regard to the new concept of education outlined in
the document on the further education of the Czechoslovak
educational system. Each teacher is at the same time an
educator. Attention is given to the perfection of the con-
tent of the training of teachers with two subjects, and
the training of teachers of general education subjects for
the second phase of the Basic School and for secondary
schools has been unified according to uniform curricula
throughout the CSSR. The Marxist-Leninist ideological and
political training, as well as the educational-psychologi-
cal, medical and didactic components of teachers' courses,
as well as the actual professional subject have been
broadened, unified and substantially enriched. The system
of teaching practice has been newly conceived with respect
to the content, length and structure of its organisation.
A system of schools affiliated to the faculties of educa-
tion has been established to ensure a close connection
between teachers' university training and the school and
social practice.

The new system of three stages provides the necessary
prerequisites for supplementing and improving teachers
lifelong qualifications. They are: the adaptation stage in the first years of teaching, the innovation stage (or re-qualification stage) in the system of post-graduate studies, and finally the specialisation stage for those executing specialised leading functions in the field of education. A standard has been set for the content and structure of supplementary and parallel studies of teachers of specialised subjects and of apprentices secondary school teachers.

All independent faculties of education, all university faculties training teachers enjoy an equal status and have a joint mission. The new concept of education and teachers' training is being introduced after thorough research work successively as from grade one. The first teachers trained according to the new project will graduate in the CSE in 1981-2. The new concept of the teachers' all-round training and the new system of a lifelong education of teachers and other educational personnel as described above will soon be backed by new legal measures, a new act on universities and by new legal statutes issued by the Ministry of Education of the CSE and the Ministry of Education of the SSR.

FURTHER EDUCATION OF TEACHERS AND EDUCATIONAL PERSONNEL IN THE PROJECT FOR THE FURTHER DEVELOPMENT OF THE CZECHOSLOVAK SYSTEM OF EDUCATION

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The revolutionary process of the development of science and technology in a developed socialist society revolutioni-
also the system of education. Its reorganisation is based on the resolution of the Party document on "The further development of the Czechoslovak system of education" which outlines the programme of the school education policy laid down at the XVth Congress of the Communist Party of Czechoslovakia. Its bearer in the field of education is the teacher in whose educational activity should, according to the resolution, prevail the processes of formative character instead of the hitherto practised informative processes which often led to formalism and verbalism in instruction.

Accordingly, the demands for a better training of all educational workers are naturally rising, too, for in view of the objectives of building up a communist society the teacher should be in a position to shape an integrated personality of the pupil with firm moral political attitudes and international tenets as well as with an initiative and devoted relation towards work for the benefit of a socialist society. The point is to place particular stress on a creative approach to the improvement of the education of the youth in schools and in all out-of-school educational establishments. Therefore great importance is attributed to the personality of a socialist teacher whose creative personality cannot be substituted for in the educational work in all types of schools.

The existing experience and research show that the university training and preparation of the teachers for their teaching practice in school as well as the school itself have not often established favourable conditions for the teachers to be able to cope with the exacting educational activities in a creative way, thus increasing their effectiveness. Between the teachers' preparatory training and their initial teaching practice there has been an undesirable break which should gradually be removed by a systematic organization of the further education
of teachers and other educational workers as a continuation of their basic university studies.

Great attention is therefore given in Czechoslovakia to the problems of teacher training and its further improvement. This is an entirely objective phenomenon arising also from the quickening pace of the scientific-technical revolution. These problems can be successfully and comprehensively solved in the present conditions of a socialist society in which the optimum possibilities and prerequisites for a versatile and independent development of the individual man have been established in keeping with the advancement of the society and scientific technical knowledge.

The exploitation of the advantages of the socialist community must needs lead to the cooperation with other socialist states in integrating the concept of education also in the field of selection, training and further education of teachers and educational workers, even in naturally in different forms. The findings and experience obtained from the reorganization of the content and structure of the school systems in socialist states help us in tackling similar problems in the field of school education which need to be solved in harmony with the scientific technical progress in a developed socialist society.

One of the adopted documents which was approved after the XVth Congress of the Communist Party of Czechoslovakia is the project of the advancement of Czechoslovak education system outlining a long-term programme of the education in the CSSR. The implementation of this programme would be unthinkable without taking into account the decisive role of socialist teacher's personality. And it is the teacher as well as the conception of his education that are given due attention in this document; not only from the point of view of a new conception of the content of education but
also in view of a new system of educational establishments.

The demands for devising a new content of initial teacher training and further education are essential. Teacher training, as any other social phenomenon, is a variable product of social historical conditions which directly or indirectly determine its quality. Teacher training in the CSSR has a long-established tradition which was, of course, considerably marked by the class distinctions of the bourgeoisie society and its school system, in which, however, progressive and revolutionary ideas concerning teacher training were formulated. With these trends then the progressive traditions of those teachers' organisations persistently fighting for a progressive conception of teacher training and its enhancement also identified themselves. The programme of the Communist Party of Czechoslovakia oriented the prewar left wing in the teachers' movement and the progressive public towards the fulfilment of the demand for a uniform socialist school and for the university education of teachers, that is to say, towards the goals which many generations of progressive teachers only dreamed of and which the progressive teachers' organisations were fighting for.

A qualitative reorganisation of teacher training began after the liberation of our republic by the Soviet army. The post-war development, in which also the topical and prospective problems of our social development were reflected, led to this reorganisation. It is the aim of the present stage of a developed society to concentrate all the progressive ideas form the past and to apply them in a creative manner above all to teachers' basic training and further education.

The quality of all educational work has been substantially changing with respect to this experience, which
of course assumes that the function of the teacher should essentially alter as well. There is an inevitable shift from imparting mere knowledge and skills towards shaping an integrated personality of the pupil with a definite aim in mind. This implies that there is also a shift from isolated educational activity towards planned integrated activities affecting the pupils as a whole and unifying the influence of teachers in class and school with that of other educational workers outside school.

The main idea underlying the changed proposed in the content of teachers' university training is, therefore, to educate teachers and other educational personnel of a broad professional scope so that they were in a position to teach at several levels of the school education system and in various types of the educational establishments. Another essential principle is to devise the teachers' training scheme as an open dynamic system enabling teachers and educational personnel to acquire higher qualifications and, if necessary, to supplement or widen them in the course of their lifelong education in keeping with the demands of socialist society and the tendencies of the up-to-date standard of scientific technical progress.

The new concept of teacher training emphasizes the fact that all the components of teacher training, i.e., ideological-political, moral, educational-psychological, as well as the knowledge of the teacher's specialist subject should be in equal proportion. At the same time, teachers' ideological-political education is conceived as a factor which pervades teachers' education as a whole. The ideological-political education cannot stand apart from the other specialized disciplines as it integrates all of them, thus helping to establish permanent bonds and logical connections within the regularities in the social and natural sciences.
The desired harmony in the training of teachers also calls for a new approach to the training of teachers and educational personnel. The point is to instill teachers with the abilities to solve educational situations with the help of their knowledge of educational and psychological disciplines, to think over the subject matter and to seek creative ways how to impart it methodically to the pupils so that it will become their permanent possession. In this process conditions are established for teacher’s creative educational work with the pupils which largely involves the processes of shaping their moral qualities. Every qualified teacher should, therefore, master not only the theory and practice of teaching but also the guidance of education apart from the school instruction.

Teaching practice is an important factor in the initial training of teachers and educational personnel. It is mainly in this way that the prospective teacher gets acquainted with the practical problems of teaching and educating. Compared with the hitherto existing conception of teaching practice the new project of the advancement of education in the CSSR moreover includes the field of social-political practice. As to the educational establishments, only the training of nursery school teachers will remain at secondary school level, i.e. at the colleges of education. Teachers and educational personnel in schools and educational establishments for the children and youth between the ages of 6 – 18 will gradually receive a uniform training at the faculties of education, arts, science, physical training and sports with regard to their respective subjects. The teachers of specialised subjects in secondary schools will be educated at universities, universities of technology, schools of economics, universities of agriculture and academies of the arts, and partially at special faculties of the respective universities with the appropriate professional orientation towards education and psychology.
It is therefore quite natural that also the further education of teachers should be conceived as a continuation of the basic university training and should be fully linked with it to comply with the exacting tasks involved in the reorganisation of the content of the socialist school system.

A well-founded and persistent promotion of the continuity of the basic university training of teachers and educational personnel with their further education directed towards raising their qualifications calls for a systematic method in determining the content of the particular types and stages of the further education of teachers and the other educational personnel. The uniform system of the further education of teachers and the other educational personnel is carried out in three basic stages: that is to say, the initiation of the teacher-beginners into teaching practice, post-graduate studies of teachers or studies after the school-leaving examination at secondary school, and the so-called interest-oriented studies.

The first stage, the initiation of teachers and out-of-class supervisors into practice, follows up immediately the respective basic studies. The teacher-beginners need mainly methodological assistance and advice in tackling difficult educational situations and it is necessary for them to get to know the life not only in the place of the school but also in the whole district or region. The work with the teacher-beginners requires a great systematic effort, particularly on the part of the headmasters and educational authorities. Yet the role of the teacher being initiated into teaching practice should above all be evident. He should have not only a natural authority among his pupils but also among the teaching staff of the school. This first stage of the further education of teacher-beginners is carried out according to the teachers' individual plans. It is compulsory and lasts a year. It ends with an over-
all evaluation of the teacher including the results of his educational activities and giving also suggestions for his further professional development.

The second stage of further education has mainly the function of innovation. All teachers and educational workers with university education go through it in the form of post-graduate studies, as well as all teachers and educational workers with secondary-school education, where it takes the form of part-time studies after the school-leaving examination. It is usually a two-year course of part-time studies after the school-leaving examination. It is usually a two-year course of part-time studies carried out approximately after 6 - 8 years of teaching practice. It is focused on guided individual studies supplemented by courses of theoretical training. The innovation function of this stage of further education lies mainly in the preparation of teachers for the application of progressive changes to the teaching practice. This orientation of the post-graduate or the other type of studies will enrich and supplement the components of teacher training. The respective universities or secondary technical schools are responsible for the content, organisation and running of these studies.

The research projects of the state and departmental plans which were mainly based on comparative studies of these problems in the socialist countries and which involved also the practical side of organizing experimental courses of teachers' post-graduate studies since the beginning of the sixties have made an important contribution to the conception of these studies. They set the themes of the basic theoretical and practical problems of teachers' post-graduate studies and arrived at important conclusions concerning the function of the content, organization and methods of post-graduate studies.

A great effort was devoted to seeking the criteria for the selection of the content of teachers' post-graduate
Essentially a compromise has successfully been struck between the two extreme views, i.e. the narrow practical view concentrating only on the content which might immediately be applicable to the teacher's educational work and a one-sided bias towards new discoveries in science and technology without paying due regard to educational aspects. In this connection a number of theoretical as well as practical problems have successfully been solved, e.g. the optimum measure of the time-load of post-graduate teachers has been experimentally verified, a limit to the number of consultation periods and individual studies has been set and some problems of the organization and methods of post-graduate studies have been solved.

This experience has also led to the view that taking an academic degree or PhD degree in education, or a specialized course of foreign language studies abroad may be recognized as a form of the second stage of teachers' further education, eventually other forms which will be specified in the respective instructions under preparation by the Ministry of Education of the CSR and SSR.

One of these forms may as well be a course of comprehensive of supplementary studies or other forms of part-time studies approved to serve this purpose.

Also the second stage of the further education of teachers and educational personnel is compulsory and it is a necessary condition for receiving a salary rise.

This form of the second stage of further training is becoming an integral part of a uniform system of a continuous lifelong education of teachers and educational personnel. Its aim is to raise the ideological-political standard of the teachers, to innovate, supplement and improve their education in the field of education theory and psychology as well as in their own subjects. The programme of post-graduate studies includes selected questions of Marxist-
Leninist philosophy, education, psychology and of the teacher's particular subject along with the theoretical problems of their instruction. As to the training in the teacher's particular subject, first grade teachers in basic schools who take up a course of postgraduate studies get acquainted with new findings from the theory of mother tongue instruction, arithmetic, nature study, civics and from an optional subject, i.e., music, art or crafts; teachers of general education subjects in the second grade of basic school and in secondary technical and grammar schools are presented with new findings in their own subjects along with the respective theoretical methodological training. The programme of postgraduate studies of teachers and assistant teachers in schools and establishments for the children requiring special care includes professional training specialized according to the type of school or establishment at which they teach.

The third stage of further education is optional and is oriented towards the teacher's own interests and specialization. Teachers can choose one of the forms of professional studies offered by the central institutes for the education of teachers and educational workers, regional institutes of education and universities, or other establishments following the approval and consent of the Ministry of Education. The content of these studies is focused on the training of educational specialists, methodologists of specialized subjects, experts in out-of-school education, heads of the subject departments and methodological commissions at schools, educational psychologists (advisers), teachers initiating newcomers etc. These studies are carried out in the form of part-time individual studies. Studying for a higher degree or a good placement in the national competition Teachers Pedagogical Readings where the best teachers read their reports on the results achieved in the theory and practice of teaching, may also be
recognized as a form of further education at this stage. This stage also includes a systematic work with outstanding and merited teachers whose experience and findings gained from the application of theory to practice and vice versa can significantly influence not only the wide pedagogical public but also the Marxist theory of education.

Headmasters and their deputies as well as school inspectors take part in professional cyclic training which is also part of the further education system, thus gradually establishing the conditions for the continuity of the respective stages and types of further education conceived as a continuous system of teachers' training.

During the intervals between the realization of the respective stages of further education teachers' training focused on the topical problems of teaching practice will be currently organized by central institutes for the education of teachers and educational personnel, district institutes of education, district centres of education, subject departments and methodological commissions at schools or by other professional and research establishments. This continuing education will enable the teachers and educational personnel to exchange their experiences gained from their educational work and thus will, in a creative way, help to raise the standard of the preparation of teachers for the new conception of the content and structure of our school education system. A systematic ideological-political education closely linked up with the particular stage of the training achieved will continue to form an integral part of the teachers' further education system.

The system of the further education of teachers and educational personnel, arranged in this way, will become a means of political control and educational guidance of the school education system, a means of the requalification of teachers and their specializations as well as a tool
for the innovation of education. The programme for teachers' further training takes into account the role of the teacher with a view to his social and professional duties as well as his personal life and fully corresponds to the basic functions of the teachers' further education system. We shall make use of the results of some researches of the state and departmental plans to achieve a more effective concentration on the content of teachers' further education. The choice of the content should follow up the results of the basic studies and should continue to pay due regard to the teacher's professional and personal development, to the achievements in the fields of science, and mainly anticipate the changes in the school education system. Last but not least, there is an important problem to be solved, how to establish the basic relations between educational establishments, social institutions, and communication media for teachers' self-education without unnecessarily overloading them.

The given basic functions of the teachers' further education system suggest that working out the conception of an integrated system of this education implies that a number of theoretical and practical problems should be solved for this system of further education to become an effective form of teachers' continuous education throughout their lives thus providing the conditions for their successful self-education.

The unusual and ever increasing advances in science, technology and culture thus call for such a system of education which would safeguard man's security in the socialist society, and ensure his powers and abilities to react actively and committedly to the continuous changes in social life. This process makes it imperative that a continuous education and self-education should become man's permanent assets under socialism and communism.
The educational system can therefore no longer be conceived and established as a completed closed system, mainly from the point of view of future prospects, which naturally applies to the system of teachers' education as well. The need becomes apparent to build up teachers' education as well. The need becomes apparent to build up teachers' education as a comprehensive open system of initial higher training and further education inclusive of post-graduate studies — and some prerequisites have already been established in the present conditions, mainly in the present forms of further education organised by the regional institutes of education, and district centres of education in co-operation with the Socialist Academy, and in the form of post-graduate studies carried out at the respective universities training teachers.

The adopted tasks assigned in the field of teachers' training by the party and government supreme bodies have significantly stimulated also theoretical educationists to deal with the theoretical problems of teachers' continuous lifelong education and thus provide well-founded bases for the solution of the conceptual problems involved in a successive re-organization of the content and structure of the whole educational system. Therefore, also the investigation of the system of teachers' education as a whole is coming to the fore, as it forms an integral part of the whole system of education in the CSSR. One main project of the department's general scheme of the researches in the field of school education is therefore entirely devoted to the problems of a continuous lifelong education of teachers and other educational workers. Essentially, the main point is to work out the theory of a lifelong education system and its advancement on which the conception of the system and its structure is based and then to determine the internal connection with the demands of a developed socialist society. In this way we would like to discover new functions of the teacher in the perspective historic situation, to show the
stimuli and conditions of his personality development as well as social demands on the teacher in confrontation with his potentialities for performing his socio-professional roles. This conception of the research work implies that a systematic use will be made of the results of the previous departmental and state research projects and of the results of the investigations carried out at the former Teacher Training College in Prague and in Bratislava as well as of the experience and co-operation with the socialist countries, namely with the USSR, GDR and PRF. The main project for our research work will also be concerned with the following problems focused on the respective stages of teachers' training: the choice of prospective teachers; a complex of problems concerning the teachers' training carried out at the faculties of education and providing the basis for further education, thus constituting a component in the lifelong education concept; post-graduate studies and specialized studies oriented towards the teacher's own interest; cyclic training of headmasters, their deputies and school inspectors.

Empirc researches will be carried out to verify the conception of the individual stages and forms of the further education of teachers and educational personnel. Specific features of educational activity and personal as well as professional situations of teachers and the other educational personnel with a different length of practice will be investigated with a view to the aspects of the content and methods applied in the individual stages and forms of their further education.

The subject of the researches will concern the following: the teacher-beginner and the adaptation phase of his further education, teachers and educational personnel with many years of practice, such as headmasters, school inspectors, or educational psychologists (advisers), initiating teachers and their role in the adaptation phase of the
teacher-engineers further education, and the specialization period in the basic training. The problems of teachers' post-graduate studies will follow up the results of previous investigations and will mainly concentrate on harmonising the new programme of these studies with the conception of the programme of teachers' lifelong education, and on the up-to-date methods. It will also be necessary to analyze and investigate the content, forms and methods of the teachers' current training provided by regional institutes of education and district centres of education in the periods between the respective stages of the further education. Personal initiative and stimuli to further education fostered by educational establishments represent a problem which pervades all the stages and forms of the further education and which, therefore, will also be subject to analytic-synthetic investigations.

The research work oriented in this way will continue to attempt to establish theoretical prerequisites for the shaping personality of teachers throughout their lives, outlining in terms of structure the goals, content and methods of education which would meet the demands of our socialist society. The objective will be to show the main stimuli to the development of teachers' personality, to suggest the strategies and tactics in implementing the teachers' lifelong education, to work out the respective projects and obtain experimental experience with the particular stages of the further education, and to submit proposals for their systematic implementation.

Success in devising the theoretical concept of teachers' lifelong education is largely dependent on a good command of the methodology of the structural systems approach in which the problem of the educational process and of interlinking the form and methods of putting it into practice will constitute the actual dialectical unity of education, theory and practice.
In the conditions of a developed socialist society the theoretical problems of teachers' education in various socialist countries are similar. It is therefore natural that there is a common effort to tackle them as efficiently as possible.

It is indisputable that the success in carrying out the principles of the adopted resolution on the further development of education in the CSSR is mainly dependent on the quality of the educational work of teachers, experts in practical teaching and educational personnel in schools and educational establishments, as well as educational authorities and government bodies. All of them may profoundly influence and improve the quality of the content and structure of the reorganization of education in the CSSR. A goal-directed uniform system of teachers' lifelong education carried out step-by-step will be an efficacious tool if it becomes common property of each of its participants helping him to acquit himself well of the ever increasing and more exacting tasks involved both in the theory and practice of teaching.

TEACHERS AND THE NEW CONCEPTION OF THE FIRST PHASE OF BASIC SCHOOLS

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As from the beginning of the school year 1976-77 the new scheme for the further development of the Czechoslovak educational system is gradually beginning to be implemented.1)
The first concrete steps are being taken to put into practice the resolutions adopted at the Czechoslovak Communist Party's XVth Congress with regard to upbringing and education, especially the task of introducing step-by-step and after due deliberation a complete secondary school education for all. The demand that this should be done step-by-step is evident in the approach to the realization of the new scheme, namely from the initial stage; the demand that this should be carried out with due deliberation lies in the fact that the project is being put into effect following thorough preparation and long-term verification.

Guaranteed that there are serious changes in the sphere of pre-school education and in the preparation of children for school, but the greatest amount of attention is being focused on the introduction of the new conception in the first phase of Basic School, which as from the school year 1971-2 is gradually being established as a four-grade one (hitherto five grades were traditional in Czechoslovakia) and where there is the most marked change in content.+)  Hitherto the first phase of Basic Schools aimed at forming habits in reading, writing, arithmetic and at imparting elementary knowledge about nature and society; now the emphasis is on the establishment of a grounding in education in general, which is then developed in the later school grades. This follows from the finding that the all-round maturing of a child is to a great extent liable to the education he receives at the very beginning of his school attendance and that the potentials for his development are far higher than was assumed.

Kořínek, M., Entwicklungsperspektiven der Unterrufe der allgemeinbildenden Schule in der CSSR. Vergleichende Pädagogik, 12, 1976, No. 4, pp. 375 - 378, 374 - 375. (The Development Prospects of the First Phase of Basic School in the Czechoslovak Socialist Republic.)
This new approach to the education at this stage of course puts far higher demands on the quality of the teacher’s work. Thus the project for the further development of the Czechoslovak educational system also envisages an advance in the preparation and further education of teachers due to realise this scheme. In this respect experience from other socialist countries, in particular the Soviet Union, is being made use of. The purpose of this paper is to show how this aim is reflected on teachers concerned with the instruction in the first phase of Basic Schools.

The teacher’s role in the education system. In many studies on education and in weighty educational-political documents’ stress is laid on the leading role of the teacher in the educational process, and, in this connection, also his task in perfecting the school didactic system. In analysing the system of education in schools, the teacher, as one of the four fundamental elements of this system, is described as the subject and simultaneously as the object of communist education. This is because the teacher, at a certain level, identifies himself with the project of upbringing and education, and in the given school and broader social conditions realizes the basic teacher-pupil relationship.

Taking into account the complexities of the educational system, radical changes in this system cannot be undertaken by merely changing the project (the system of goals, syllabuses and corresponding ways and means), but above all by

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3) e. g. Kujal, B., The Socialist School of the Future. John Amos Comenius Institute of Education, Prague, 1973
influencing the teacher's activities. We have learned from some of the past school reforms that the activity of the teacher is considerably stabilised in certain conditions and that a mere alteration in the education law, curricula and so on have no marked effect. An analysis of this phenomenon has therefore shown that those changes in the system carried out not only through the agency of decrees issued "from above", but also those carried out "from within" have the highest hope for success. In our case this means guiding the teacher to take an active share in the improvement of the educational system and leading him to the conviction that what has been done up till now was not efficacious enough.

The introduction of a university education for all teachers for the first phase of the Basic Schools in 1959 provided fertile ground for the improvement of the education at this stage. At present almost half the staff in this category have graduated from university. By degrees the number of teachers for the first phase of Basic Schools who have also taken a post-graduate course in their subject is increasing. Where the Faculties of Education have fulfilled their tasks well, it has been evident in the graduates' fresh approach to the prepared and current changes in the conception of teaching. Whereas teachers' training at Colleges and similar establishments could only lead to the immediate application of the knowledge acquired, a mechanical passing on of knowledge, the Faculties of Education now pave the way for the graduates to be creative in their work on the basis of deeper theoretical studies combined with a scientific analysis of the educational process. It may be assumed that the teachers thus prepared are more willing to accept and realize well-founded changes in the educational system.

Thanks to the improvement of the system of teachers' further education the raising of the political standards of the other teachers and their higher specialised quali-
fications are also not left to chance. Conditions are provided for these teachers to consciously broaden and improve the teaching skills they attained at various establishments.

The teacher's role in verifying the new conception of the first phase of Basic Schools. The above-mentioned starting points led a team of researchers and the educational authorities responsible to work out, as part of the procedure for the verification of the new conception of the first phase of the Basic Schools as from the school year 1971-1972, also a programme for the preparation of the teachers for the experimental schools for the entire period of experimental verification.\(^*\) It was stipulated that the central Ministry of Education should be in charge of the preparation of 22 teachers of experimental classes in the regions (the 1st stage of verification) for the entire four years of experimental verification; and the respective Regional Institutes of Education should be responsible for the preparation of 73 teachers for the other experimental classes (the second stage of verification). A recommendation was also made to organize, as part of the Institutes' work, collective visits by experimental school teachers to schools in their region, or at least to some of them.

The improvement of the syllabuses for the new conception has also led to the extension of their further function. They have become a fundamental educational document with a conceptual guiding function. That is why teachers studied these syllabuses as part of the organized preparation, first in connection with the basic educational-political documents and then in connection with specialized and methodological literature, as well as in connection with the experimental text-books and other methodological material.

Following this groundwork, they then proceeded with their own preparation for educational work with children.

For not even in this new conception can the school syllabuses be a substitute for the teacher’s own educational programme, although they greatly facilitate its elaboration. It was the task of the teachers of experimental classes to ensure:

a) that the educational activities in the experimental classes should take place consistently according to the syllabuses and the methodological guidelines, and that the experimental text-books and other verified materials be used;

b) that all the data on the educational activities regarding the adequacy of the tasks assigned in the given time, the difficulties arising and so on, are amassed according to the instructions of the researchers, and that the records of these data are handed over to the research workers regularly;

c) that, according to a co-ordinated programme, the planned oral and written examinations are set, while strictly adhering to the principles laid down for these exams, and that the results are submitted to those responsible.

In the course of verification the principle was applied that the teachers not only test the new educational system, but that they also develop its teaching methods and enrich it with their own didactic approach. The teacher’s creativeness could naturally not be concerned with changes in the already verified conception, but was to find full scope elsewhere:

a) in searching for new possibilities for exploiting the curricula for ideological-educational ends thus to promote an integrated development of the pupils’ personality:

b) in the advancement of inter-subject relations, which have not been fully worked out in the experimental syllabuses;
c) in a more thorough methodological elaboration of teaching, in linking up better teaching with life, in the encouragement of pupils to work independently, a suitable motivation of teaching and so on;

d) in a new approach to the evaluation of the pupil and awarding marks (stressing the positive aspects in the evaluation and so on);

e) in organizing the community life in the class, in making use of the pupils' self-administration, in assisting the Pioneer Organization of the Union of Socialist Youth etc.

A no less significant task of the teachers of experimental classes was to win the understanding and support of parents and the approval of the general public for this new venture.

The teachers were continually reminded to consider the experimental syllabuses and tuition texts as materials still subject to be tested as to whether they are really profitable, even though they had been verified in preliminary partial research projects. It was stressed that only those materials helping to ensure the integrated development of essentially all the children, and not those disregarding the difficulties of a substantial section, would be considered as successfully verified ones. Hence a demand was made for objective and truthful teacher's reports of the actual situation in every case, which were to be weighed by the research workers.

The influence of the work according to the new conception on the teacher. The teachers' preparation for the experimental verification of the new conception was considered to be one of the significant prerequisites for a successful fulfilment of the new educational tasks. Moreover it was assumed, and the preliminary experience from the experimental work confirmed this, that the teachers,
especially in the course of their own teaching practice according to the experimental syllabuses, experimental text-books and other didactic materials, will gain a deeper insight into the new conception and be convinced of its advantages. It became apparent that a comparison of former results with the present achievements in the educational work were a persuasive proof for the teachers. For instance the majority of teachers eventually expressed themselves in favour of teaching mathematics on the basis of sets as having advantages also for the effective transfer of the mathematical knowledge gained to the sphere of nature study, for the development of creative, independent thinking in the child, for the improvement of conditions for the pupils' world outlook education etc.

As the teachers became more experienced, so they became more active during the seminars arranged with the research workers. This activity gradually tended towards a deeper knowledge of the new conception in their particular school subject, and also led to a continuous improvement in the new conception's content and in its procedural aspects, which was evident especially in the comments and suggestions put forward by the teachers for the perfection of the verified texts.

The teachers of experimental classes gradually changed their attitude towards the new conception. This was ascertained from the comprehensive reports on the experience of teaching in the individual grades as one of the indicators of the success of this teaching conception. For example the teachers were supposed to mention in their reports whether, if they had a choice between work according to the current usual syllabuses and work in an experimental class, they would choose the latter. It was evident from the data processed that only an unsubstantial section of teachers at experimental schools (3.3% in the 4th grade, up to 7.1% in the 3rd grade) expressed a reserved attitude
or rejected the work based on the experimental syllabuses. Some of them also gave their reasons (e.g. the new conception requires far more preparation of the teacher). As verification proceeded it was noted that from the lower to the higher grades there was a rising proportion of marked positive teacher's attitudes (in the 4th grades 76.8% and in the 3rd grades 19.9%).

The attitude of the rest of the teachers at the experimental schools, who did not actually teach in the experimental classes, was reported on by the experimental class teachers regarding the former's interest in the current experimental teaching, and their willingness to take on teaching in the new experimental classes. It was apparent from the analysis of the data obtained that a 1/4 to 1/3 of the non-participating teachers in the verification scheme held a reserved or negative view of the project. The prevailing reasons given for this attitude was apprehension of the exacting work. Here too, however, as verification proceeded there was an increase in the number of teachers who were swayed towards a positive attitude to the new conception in the education in the first phase of the Basic Schools. This was obviously the outcome of more and more information about the new conception, due to organized visits of these teachers to demonstration lessons in the experimental classes, to the publications and articles on the new conception in methodological journals and the daily press etc. A convincing proof was given at the end of the individual stages of the verification work when the vast majority of the experimental class teachers reiterated that they had no desire to return to the former teaching conception.

The main load of the educational activity in the first phase of Basic Schools lies on the form teacher, who is responsible for the instruction in all, or most, of the subjects and usually takes the same class for two years.
Considering that some of the school subjects require the teachers to have specialised abilities and skills, it was recommended that the experimental instruction be organised to make use of the teacher's specialisation, not only in some chosen subjects, but also according to grades, or in some groups within the grades. That is why during the verification data was collected about the teachers' specialisations and the teachers' procedure with a certain group of pupils. An analysis of the data shows that in the first two grades of Basic School teachers most frequently specialise in music, art or physical training and often also in crafts. In the upper grades the number of these teachers increased and in individual cases specialised instruction was extended to other school subjects.

An analysis of the data regarding the specialisation of teachers according to the grades indicated that in about a quarter of cases the presumed optimal procedure was arranged, i.e. a change of teacher after the second grade, after he had been in charge of the class for two years (in the 1st and 2nd grades or in the 3rd and 4th grades). About one third of the teachers taught their own forms from the 1st to the 4th grades. Many teachers at the experimental schools and their headmasters explained this state of affairs by pointing out the difficulty in starting work from the 1st grade according to the new conception while verification was already going on. This then seemed to be typical only of the verification stage and of the initial period of the introduction of this conception. Some special types of procedures (e.g. one teacher in the 1st and 2nd grade, always a new teacher in the following grades) occurred by chance due to teachers being posted elsewhere, or some teachers going on maternity leave etc.

The preparation of teachers as a means of implementing the new conception in general. The verification process and the results of the new conception of the first phase of the Basic Schools confirmed that the decisive factor that breathe life into the new didactic system is the teacher. The new conception is considerably exacting in its high demands, because it is not concerned merely with some aspects and details, but with the system of educational activity as a whole in the first phase of Basic Schools. The new conception’s marked focus on the children’s activation in acquiring a command of the new content requires, especially at the beginning of the year in each grade, exceptional efforts on the part of the teacher in overcoming the initial difficulties, when ingrained procedures must be abandoned and customary routines discarded. Many well-meant pedagogical and educational-political measures adopted in the past were not carried out thoroughly, just because the teachers were not duly prepared, or because their objectives were unsuitable and superficial.

From this experience conclusions were drawn concerning the assurance for the preparation of the teachers involved in the introduction of the new conception by a sufficient number of qualified lecturers, which included above all the authors of the new conception, professionals from the Regional Institutes of Education, who from the very beginning participated in the preparation and verification, the selection of teachers for experimental schools, who verified the new materials and the district methodologists, who closely followed the verification work. This preparation was assigned to the network of establishment for the further education of teachers.

The teacher’s preliminary preparation for teaching according to the syllabuses and textbooks was mapped out in two forms in the co-ordinated programme of the step-by-step introduction of the new conception:
a) as basic preparation, always in the course of the school year that preceded the introduction of the new conception in the given year;

b) as supplementary preparation during work with the new text-books and the methodological material in the given year.

The basic preparation applied the following ways and means:

Lectures (instructions) by experts from the Faculties of Education; the Research Institutes of Education and the Regional Institutes of Education concerning the content and conception of teaching in the first phase of Basic Schools as a whole and in the individual school subjects for each grade in particular;

the individual study of materials explaining the new conception (collections of lectures, papers by research workers, articles in methodological and specialized journals, radio and television broadcasts);

seminars following up the individual studies led by research workers, the methodologists of the Regional Institutes of Education, the District Centres of Education and by selected teachers from the experimental schools;

complete sets of pupils' didactic materials, inclusive of methodological material for the teachers, to enable them to gain a concrete idea of the new system, the content and the teaching conception.

For supplementary preparation the following recommendations were made:

model class demonstrations at the experimental schools in the districts for groups of visiting teachers from other Basic Schools;

mutual visits of teachers to demonstration classes from several schools with the participation of the district methodologist etc.;
guide and checked class demonstrations (headmasters, inspectors, methodologists, research assistants at Faculties of Education and the Research Institute of Education); filmstrips (slides), transparencies for back projection and other teaching aids that serve as object lessons supplementing the lectures and seminars of experts and methodologists; small exhibitions of new aids and other educational media made practical use of in the experimental schools; examples of the experimental schools' pupils' written work (exercise-books, rough exercise-books, drawings, handicraft objects etc.).

Bearing in mind that since the school year 1975-76 always in the course of one year, for a period of four years, about 20 % to 25 % of all teachers of the first phase of Basic Schools have been training in this way using the various forms of preparation, and moreover since the school year 1976-77 supplementary preparation for the introduction of the new conception has gradually been organised for another 20 % to 25 % of teachers, then it is obvious that such preparation must be thoroughly contemplated, organised and be well staffed and materially ensured. In the course of the school year 1975-76 and in the subsequent years the headmasters and their deputies at Basic Schools and all the inspectors of Basic Schools were acquainted with the essential principles of the changes to be carried out. An illustration of how this venture was guided by a plan may be seen from fig. 1 on p. 49.

Apart from the above-mentioned system of preparation, there were schemes for the further running of extensive single events, which contributed to heightening the teachers' and the general public's interest in the envisaged changes. In particular the commemorations of John Amos Comenius marked in the Uherský Brod district were explicit- ed in this respect. Also the series of radio broadcasts
The coordinated programme of the step-by-step training of teachers for work according to the new conception of the first phase of Basic schools

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*) Mach, M., Teachers training for the new conception of upbringing and education at Basic Schools. Teachers News, 1977, No. 4, p. 3.
for teachers, for instance in the school year 1976-77, featured the preparation for the introduction of the new conception in the second grades of the Basic School.

Apart from these forms of preparation, whose immediate aim was the mass introduction of the new conception of education to children in the first phase of Basic School, this conception also dealt with the preparation of teacher trainees at Faculties of Education and the post-graduate studies of teachers of the first phase of Basic Schools, also at these faculties. The essential aim was to eliminate the need to organize new training in preparation for work according to the new syllabuses, no sooner had the trainees finished their courses. That is why from the very outset of the verification of teachers' training for the first phase of Basic Schools stress was laid on these aspects of the content of all those school subjects and pedagogical disciplines that form the basis of the new conception of the first phase of the Basic Schools. In the content of the instruction of the individual methodological procedures the concrete analysis of the subject matter in question and its methodological presentation in each year was strictly applied. At least part of the teaching practice (especially the long-term practice periods) took place at the experimental schools. (Verification was also carried out at the Basic Schools affiliated to the faculties of Education. The Faculties of Education had a sufficient number of copies of the new syllabuses, textbooks and other methodological materials forming the tools for the implementation of the new conception.

As from the school year 1976-77 extensive changes are being carried out in the structure of the courses at Faculties of Education for trainees for the first phase of the Basic Schools. This is to ensure that the graduates attain qualifications to meet the demands required of them in the prospective advance of the initial stages of edu-
cation and upbringing. Considering the tendency to unify the subjects taken in common by all teacher trainees, there is on the one hand the requirement stemming from the universal features that should characterize the teacher graduate in the ideological-political and moral sphere, in the pedagogical and psychological sphere as well as in his own subject, and on the other hand there is a demand for the specific accomplishments vital to the teacher graduate due to take up his career at the first phase of Basic School. These qualities required of the graduate teacher for the first phase of Basic School are necessary, because the teacher at this stage of the school is the only teacher, the given class has, providing instruction in all subjects of the syllabus. Apart from this he can also function as a supervisor in the usual establishments for children in the early school stage. This assumes:

- that he has a high standard of general education,
- that he has a good command of the national culture, especially the progressive traditions, children's literature, the theatre, films and other media, whose contents and means of expression have an emotional effect on the young children;
- that he takes an interest in all current social affairs, in the development of science and technology and culture, that he is capable of making their significance and essence meaningful for the children in the light of a scientific world outlook;
- that he is aware that the fundamental prerequisite for success in his profession is a thorough knowledge of the pedagogical, psychological and social laws of the educational process, that he therefore continually broadens, perfects and modernizes his specialized education and improves his teaching skills bearing in mind the integrated development of the pupil's personality at the first phase of the Basic School;
that he has a command of the methodology of the subjects he is teaching, that he has an appreciation of music and singing, is versed in drawing, has neat handwriting and is skilled in handicrafts, is physically fit and agile; that his manner of speech is highly cultured, using correct standard language, perfect in form and content;

that he is familiar with the problem of defective children and on the basis of this knowledge can provide the necessary care for their successful development and help in mitigating the social consequences of their defects;

that he has a true knowledge of the contents and forms of educational work in the top department for children in nursery schools;

that he is capable of co-operating with the leaders of the Pioneer Organization of the Union of Socialist Youth and taking an initiative share in the out-of-class and out-of-school children’s guidance, that he is theoretically and practically prepared for work in village schools in classes including more grades, and is capable of organizing the pupils’ independent work in groups according to the grade’s contained in the one class.

The above-mentioned specific features that must characterize the graduate teacher for the first phase of the Basic School stem from the fact that the universal qualification of the teachers of this category are essentially unified, i. e. each of them is qualified to teach all subjects in all grades of the given school stage, and this also applies to schools with a lesser number of classes. At the same time each teacher is qualified more thoroughly in a specific sphere of upbringing and education and for public activities.

The general ideological-political and moral features of the graduate teacher are substantiated in emphasizing the problems in the country and in the agricultural dis-
tracts and in stressing the social and legal problems of the family and the care for children and youth. The key quality required of the teacher graduate for the first grade of Basic School is his pedagogical and psychological qualifications. The graduates must therefore have an adequate command of the science of education inclusive of the methodology of the subjects they take and the methodology of educational guidance, have formed habits to study independently, pedagogical literature and be well-versed in the basic organizational and communicative teacher's skills. At the same time they should have the ability to give a fully integrated image of the development of the child in the early stages of school. In fact taken as whole they should implement and prove their potentials for a creative approach in this sphere.

With regard to the school subjects the qualified teacher has a full command - determined by the current and future demands of the methodology of teaching - of the mother tongue, arithmetic and one further subject of his own choice. As far as the other subjects contained in the syllabus of the first phase of the Basic School are concerned the teachers are capable of carrying out the essential teacher's assignment and are acquainted with the methodology of these subjects. The graduates are more thoroughly prepared for handicrafts, or art, or physical training or music. In this chosen field they comply with requirements for conducting specialized teaching at the first phase of Basic Schools, for work as out-of-class supervisors and for the guidance in the development of children's, youth and adult hobby activity.

The characteristic features outlined of the teacher graduate for the first phase of Basic School are, however, typical of the beginner in the teaching profession or as a supervisor, who only after some experience and further self-education acquires the abilities to run a school, or
other educational establishment, to work in specialized classes or as a methodologist of some school subject thus influencing the work of other teachers.

Similar changes have been prepared in the post-graduate studies for teachers of the first phase of Basic Schools. Work has begun on the systematic preparation of texts to be studied for all forms of training and for the further education of teachers for the first phase of Basic Schools.

Conclusion. From the data obtained on the task of the teachers in the verification of the new conception of the first phase of Basic School it is evident that their participation in implementing the research project for one thing extended the source of information regarding the verified materials, and for another shaped more effectively the teachers' positive attitude towards the envisaged changes. The data concerning the teachers' training for the overall implementation of the new conception indicated that this training must become a vitally organic part and tool of all the planned changes in the content and methods of educational work in schools.

In solving the above-mentioned problems and in the confrontation with the experience of other socialist countries, it has come to light, however, that the approaches mentioned are dependent on the given situation with regard to qualified teachers and the given system of training teachers for the first phase of Basic Schools. From the point of view of solving similar problems with long-range prospects new issues arise. In particular it is the problem of eliminating the multi-subject training of teachers in this category, the possibility of a more marked specialisation for the individual school subjects (or group of subjects) at this school stage, the question of the relationship between the pedagogical training of nursery-school teachers and the teachers for the first phase of Basic Schools etc. These are almost all problems that should be
solved as a part of international co-operation. There can be no doubt that one of the limiting factors putting a brake on the implementation of all the goals and measures in the reform of the educational system is the question of training teachers to carry out these intentions and measures.

WAYS OF IMPROVING THE SYSTEM FOR TEACHERS' FURTHER EDUCATION

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The importance of raising the qualifications of educational workers at the present stage. It is common knowledge that the results of pupils' upbringing and education are dependent on the knowledge, professional abilities, authority and general cultural standard of the teacher. Currently the importance of the teacher's authority and professional qualities, his cultural standard of education as a success factor in education has increased still further. This may be put down to extremely varied reasons. The most significant one is the shift in the position of the school and the teacher in society, and their role in providing general knowledge to the population. About ten to fifteen years ago the great majority of the inhabitants of the CSSR had a rather low standard of education and the teacher had a considerably superior erudition to that of the vast majority of the pupils' parents. Now the standard of the inhabitants' education has sharply risen and continues to do so. The pupils' parents' age usually ranges between 25 - 40. The level of education of this age group, however, is particularly high. The teacher is no longer so clearly superior to the others, and in future this difference will be even less.
In the past the school used to be the main, and in many cases the only, source of general information. Now there are incomparably more such sources. A considerable section of the parents borrow books from the libraries. Nearly all the families have some of their own books at home, even if not many; they subscribe to newspapers and many also popular-scientific, socially-scientific and literary journals. Most families have television and radio sets. The press, films, radio and television have spread and provided overall information for adults and children. The position of the school and the teacher in our society, which has changed in connection with the objective conditions of social advance, the continuously mightier flow of out-of-school enlightenment, have all gone to making the function of the teacher more arduous and his work more exacting.

The teacher in a communist society must be an expert in a certain field and at the same time he must be a universally developed man with a Marxist-Leninist world outlook, a broad general education encompassing a wide range of knowledge, with diverse interests and high moral values. The task of the schools providing a general education is to form an integrated man. The young school graduate must be prepared for his own life-long education, he must be in a position, as was pointed out in the address to the XXVth Congress of the Communist Party of the Soviet Union by L. I. Brezhnev, "to independently supplement his knowledge and find his bearings in the fast tempo of new scientific and political information." The teacher must prepare his pupils for a permanent education not only by equipping them with vital knowledge and skills, but he must also cultivate positive attitudes to life, cultural needs, interests leading to new knowledge and a strong motivation to continuously raise the standard of education and the ideological-political level. The tasks the Soviet school is about to solve at present, and the new conditions under which this work is taking
place, sete the educational function of the teacher in the foreground. The teacher, whose assignment is to mould an integrated personality capable of further self-education after completing school attendance, must not only be good at his profession with educational abilities, but must have a wide general education, perfectly prepared for the job of bringing up the future generation, be well-informed and be highly cultured.

These requirements of the teacher are of prime importance for the system of their further education. Firstly, under such circumstances a narrowly professional approach, which may still often be observed in practice, is impossible. Because the raising of the teachers' qualifications must ensure their all-round training for their vocation, it is not enough for it to include the modernization and bringing up-to-date of their professional scientific and pedagogical knowledge and their perfection in the field of sciences of education. It must also cater for the raising of the ideological-political standard of the teachers and the enhancement of their general knowledge and cultural level. All these facets of the teachers' training have a professional significance and are important factors in their qualifications. Secondly, in the conditions of the fast advancing scientific-technological and social progress, the teachers must raise their qualifications during the entire period of their teaching career. In such a case we may consider the versatile and continuous raising of the qualifications of educational workers as a lifelong education. Only a lifelong education can ensure the kind of standard vitally required of a fully-prepared teacher to carry out the assignments of today's education in the present conditions.

The main conditions for the effective raising of educational workers' qualifications. In the USSR there is the necessary legal and organisational basis for the lifelong education of teachers. The further education of all edu-
cational workers is compulsory as was stipulated by the Fundamentals of the Education Law of the USSR and the Union Republics (article 52) and by the Decree concerning secondary schools. Just as other professionals of the national economy in the USSR, so also educational workers must undertake on an average once in five years periodic courses for further education in establishments for the further education of teachers, or at faculties for the further education of headmasters at pedagogical institutes or universities. In the period between the compulsory courses for teachers' further education all those involved in the education system must apply themselves to raising their qualifications. They are given assistance in this by the headmasters, the methodological commissions, the district and municipal methodological departments, as well as by the very wide-spread people's universities run on a voluntary basis. The principals of the schools and the inspectors check on the quality of the school work and thus also check on the teachers' erudition. A systematic re-examination of teachers also aims at improving their teaching abilities.

Institutes for the further education of teachers hold a key position in the network of establishments for the teachers' further education. They are chiefly concerned with running and conducting courses for teachers' further education. These courses are considered to be a basic link in the system of teachers' further education. Attempts have also been made to create a bridge between the further education courses and the teachers' work in the period between the courses. From this point of view, for example, the content of so-called pre-course and post-course assignments for the teacher are determined. In spite of the due importance of these further education course, which have a unified content, forms and methods of work for all those who attend them, they cannot be the main link in the chain of teachers' further education. The final aim of teachers' further edu-
cution is to advance the efficiency of educational work. 
This efficiency is achieved by improving the pedagogical abilities, developing the intellect, education and culture of the teacher and by introducing the advances made in science and in progressive methods to their work, as well as by adapting to new conditions in time. All these qualities and hence also the possibilities and standard of the abilities of each and everyone is purely individual and singular. That is why the raising of educational workers' qualifications is only efficient provided that it is done not only in the courses, but also individually, purposefully and systematically, i.e. by self-education.

The teacher must determine for himself the target and content of his self-education and choose what he will undertake and how broadly he will embrace the subject taking into account the sources he intends to study. In this he is motivated by his own needs. The fundamental motivation for self-education is the same among all educational workers - an endeavour to improve professionally. The need for self-education, however, can be various among different teachers. Here are evident:

1. the personality peculiarities of each teacher, his interests, scientific and pedagogical training, his ideological-political and cultural standard and the level of his general education,

2. the influence of his own practical work, its results and the evaluation of his work by his colleagues, school principals, inspectors, methodologists, by the pupils and their parents and finally

3. the general aims and tasks of the education system in the USSR at the present stage and the problems now being solved by the school staff, districts, towns, regions and republics. Teachers' education can only be continuous if it is carried out during the entire instruction activity, as pertains to the work of a teacher.
The planning and organisation of self-education. In practice the Soviet teachers prepare their individual plans for the forthcoming school year. Taking into account that the raising of the teacher's professional qualifications is understood as a life-long education, the planning of this self-education must include four main components:

1. The raising of the ideological-political standard.
2. The raising of the scientific-theoretical standard of his own subject.
3. The raising of the professional standard in the sphere of education, psychology and methodology.
4. The raising of the general cultural standard and the standard of education.

In the individual plans of self-education these four main components can take on various forms in the teaching activity, for instance: teaching in courses arranged by the institutes for the further education of teachers, individual independent work in preparation for some activity in, or out of, school, visits to the lessons by the headmasters of schools, inspectors, methodologists and teachers, participation in collective methodological work carried out in school or in collaboration with other schools, in the district methodological commissions and people's universities; participation at conferences, seminars, staff lectures, political education and in school outings. The plan of self-education may also include a series of films, visits to the theatre, regularly following radio and television programmes and concerts, provided that it is all part and parcel of the purposeful and systematic work and will serve to raise the ideological-political and scientific-pedagogical standard, to foster the general cultural level and to broaden the teachers' overall general knowledge.

In compiling the individual plans of self-education specific problems in the regions, towns, districts and the
respective schools must also be taken into consideration. In the interest of his community each teacher must deal with a question of the general collective theme. Its importance within the framework of this theme is the greater the more it corresponds to the abilities, ideological-political, theoretical, pedagogical and general cultural scope of the teacher and his need for self-education. In determining the theme of the collective methodological work it is, however, necessary, in our opinion, to take into account the special requirements of the teachers ascertained from an analysis of their individual plans for self-education. This helps to improve the results of the collective methodological projects and encourages the active participation of the heads of the schools and teachers in this work.

The teachers' lifelong education is an important factor in improving the quality of educational work, and that is why it requires help, guidance and control. First of all it is necessary to assist the teachers in compiling the individual plans for self-education. This is the purpose of the "Programmes of Self-Education" issued by the ministries of education of the union republics for teachers of all subjects. They contain lists of the possible themes and lectures for independent work and refer to literature on these topics. The content of the self-education project and the approach of each person is quite individual. There are no generally valid plans for self-education. These "programmes" are essentially only guidelines for the teachers in selecting the themes for independent work and study. They consist in methodological and informative materials that can help the teacher in working out his independent plan for a given period. They also contain recommendations for compiling the individual plans for self-education and for determining what to concentrate on, as well as outlines of examples and questions from each section.
The requirements for the methodological recommendations for planning self-education among teachers was couched in the following terms by N. K. Krupska: "Self-education will only have the desired effect if we know what to read, how to read and how best to organise our studies" (N. K. Krupska, Pedagogical Papers, vol. 9, p. 59). Guidelines providing information for self-education are of particular importance in the field of pedagogics, psychology and the methodology of all school subjects. They should not, however, take the form of lists of books, but characterise the sources and give annotated bibliographical data corresponding to the standard of the teacher's training. So far such informative and methodological materials are lacking in our country, though now it is the task of scientists to prepare them for the teachers.

The organisation of self-education and its control is one of the basic tasks in the methodological work of heads of schools, the respective subject departments at schools, the district (municipal) methodological departments, and of the methodological commissions. These establishments serve as advisory centres for teachers compiling their individual self-education plans, check on how they are carried out, arrange lectures and seminars, practical demonstrations, excursions, conferences and other events to promote self-education. The ministries of education of the union and autonomous republics, the regional (municipal) departments of education in conjunction with the teachers' works social clubs, faculties of education and universities run people's universities on pedagogics and culture for teachers. However, this kind of work can only achieve the desired results if it is carried out co-ordinately with regard to the individual self-education plans and the collective work plans at schools, in the districts or towns.

The role of the courses for further education in the system of raising teachers' qualifications. An important
component of the system for raising teachers' qualifications are courses of further education run at institutes for teachers' further education. These courses have existed in the USSR for a long time and are very widespread. Nevertheless, there is still not complete agreement on the tasks of these courses and their place in the system of teachers' further education. There can be no doubt about the fact that instruction in these courses must be closely linked with the system of life-long self-education of teachers. Although the opinions with respect to the importance and character of this mutual link widely differ in the various republics or even in the various districts. This is naturally reflected in the syllabuses and in the content of the instruction in these courses in the various districts.

The determination of the position and tasks of the further education courses in the system for raising teachers' qualifications above all assumes the determination of their specific functions that cannot be substituted for anything else in the process of life-long education. In the current circumstances of speedy scientific-technological and social progress the teacher cannot possibly encompass and deal with the rich and varied flow of fresh information. It is therefore necessary for teachers to attend courses on the most significant new scientific discoveries, on educational views and the latest practical findings. This function of modernizing knowledge and maintaining its topicality can only be fulfilled by courses run on a large scale in big cultural and industrial centres, where experts in various branches of the national economy, scientists and creative workers are available as well as the vital financial means. Only the institutes for teachers' further education in the regions and republics have such means at their disposal.

The prime task of the further education courses is systematic innovation, broadening the teachers' knowledge and bringing it up-to-date in the sphere of Marxism-Leninism.
their own subjects, pedagogics, methodology, psychology and a widening of general cultural horizons. All teachers regardless of their individual bents and personal interests must have a command of this knowledge. Secondly, in our opinion, these courses should serve as a guide for the lifelong individual self-education of teachers. All teachers work according to an individual plan for five years and many are successful in their profession. The teachers continuously exchange experience, of course within the limits of their school, town or district. In the further education courses every teacher has the opportunity of exchanging experience with his colleagues on a wider scale, draw conclusions from long years of experience, gain instructions and advice for further independent work. It follows from this that the second task for the further education courses is to assist teachers both in their self-education and in the exchange of experience. As opposed to the first function of the courses determined for all teachers; the second function is aimed at self-education of each individual with respect to personal singular traits.

The function and tasks of the further education courses also determine the direction to be taken in their perfection. There can be no doubt about the professional principle at present applied in the practical work of the institutes for teachers' further education, namely that the courses should provide the kind of information professionally necessary for a particular group. Each of the following groups require special information: headmasters of schools, their deputies concerned with educational and guidance work, the organizers of out-of-class and out-of-school activities, the older leaders of Pioneer Organizations, the teachers of Basic Schools and the teachers of individual subjects, supervisors in boarding schools and special schools, the heads and methodologists of district (municipal) methodological departments. They must therefore be grouped into special streams. The establishment
of narrowly specialised groups has proved to be fully ef-
icient e. g. groups of headmasters and the headmaster de-
puties of various types of schools (secondary, Eight-Year-
Basic Schools, evening and boarding schools, day schools
with free-times supervision etc.), groups of teachers accord-
ing to their subjects, groups of teachers employed in day
or evening schools or in schools for youth requiring special
care etc.

Some issues that should lead to the perfection of the
courses still remain unsolved. Above all, there is the question
of courses for teachers teaching more than one subject. Some-
times these teachers are sent to attend courses concerned
with their main subject. It is taken for granted that the
raising of qualifications in the second (the more so in the
third) subject must be undertaken by the district (municipal)
methodological departments as part of the system of self-
education. In some of the republics and regions the insti-
tutes for teachers' further education arrange for the teach-
ers with two subjects courses for their second subject
(usually short-term ones). In our view such courses are vital.
The teachers with qualifications for two subjects are usually
country teachers from Eight-Year-Schools with a small number
of parallel classes. The conditions of their work differ
from those of the teachers giving instruction in only one
subject in a larger school. Hence their further education
requires special syllabuses taking into account these speci-
fic features.

The second unsolved problem are courses for teachers,
who simultaneously function as form teachers or supervisors
in the school clubs etc. In a number of republics and regions
further education institutes run such courses, of course on
a smaller scale (ten to fifteen days) than those for teachers
with one subject qualifications. In some regions the running
of courses for form teachers has been entrusted to the dis-
trict (municipal) methodological departments. But we can
hardly expect teachers to take two courses within five years: one concerned with his subject and the other with guidance work. New information and an exchange of experience in guidance work and the work of the form teacher are just as important as the specialization in the subject the teacher is qualified in. That is why guidance work and form teachers' work should be included to a proportionate extent in the syllabuses for further education of all teachers without exception.

Undergraduates at the faculties of education are not given training to take on functions in the school bodies or to carry out leading functions in the schools. This too has bearings on the specific demands for improving the further education courses for the given category of professionals. A person can be a good teacher but if he has not learned to do guidance work, in many cases his lack of qualifications is apparent. In a number of republics, e. g. in the Ukraine, a system has been evolved whereby teachers undergo courses with a view to their becoming prospective cadres for educational guidance work.

Currently the institutes for teachers' further education are running summer monthly courses of further education without the teachers having to interrupt their work at schools; or yearly courses are held, usually mixed, day and correspondence courses combined with two or three in-service training periods in that year (during the holidays). Some further education institutes arrange shorter courses - fortnightly or even ten-day ones - in the summer. In many cases these courses concentrate on one particular theme or problem, they deal with key, complicated or topical questions. Such courses are run with a view to a special purpose, they are determined for teachers working in a certain field (e. g. for supervisors in school clubs, or for instructing in the use of technical teaching aids).
In this connection an investigation should be made into
the most efficacious duration of further education courses
for the various vocational groups of teachers, and into the
time-table. It has been proved by experience that in a num-
ber of categories a monthly course (with a daily time-table
of six lessons i. e. 156 hours) is insufficient. The duration
of further education courses for the headmasters of secondary
schools has already been prolonged. It is to be assumed that
an extension will also be necessary for some other categories
in the profession, e. g. for teachers with qualifications in
more than one subject. It is clear that the courses for
prospective cadres for leading functions will also have to
be longer. The further education courses constitute an in-
tegral part of teachers' lifelong education. The syllabuses
must therefore include: Marxism-Leninism, the theory and metho-
dology of a communist education, didactics, school management,
psychology and physiology of children and adolescents, methodo-
dology, law, questions concerning culture in general, ethics
and aesthetics. An analysis of the syllabuses indicates that
there are considerable differences in the various republics
regarding the mutual relation between the above-mentioned
subjects included in the content of studies in the further
education courses. To establish optimum relations will neces-
sitate a thorough study of experience and some of it will have
to be experimentally verified. The Research Institute for
Adult Education in the USSR has therefore devised drafts of
types of syllabuses for one-month teachers' further education
courses mapped out for 156 hours of teaching time. The ratio
of the individual subjects to be studied was specified as
follows: Marxism-Leninism - 20 hrs. (13 %); the theory and
methodology of a communist education - 20 hrs. (13 %); di-
dactic questions, school management, psychology and physiolo-
gy 16 hrs. (10 %); the theory and methodology of the subject
the teacher is qualified in - 90 hrs. (57 %). Experimental
verification will ascertain to what extent this ratio is com-
patible with the optimum.
The syllabuses and curricula of the further education courses, which reflect the content and form of tuition, must correspond to the goals of these courses. In all fields of educational work one must bear in mind both lectures (and other forms of instruction), vital for all the students, and also the lectures for a certain professional group dealing with specific questions. At the same time it is necessary to organize practical demonstrations in schools. Advisory centres to assist in teachers' self-education have proved worthwhile. During the courses considerable attention should be devoted to an exchange of experience in the form of conferences, seminars and discussions. That is why the optimum ratio should be fixed between lessons that have varying assignments. For instance there are lessons focused on modernizing and bringing up-to-date students' knowledge, lessons focused on every single person's individual self-education, lessons devoted to an exchange of experience.

It is also necessary to draw up new syllabuses specifying the teaching content in all subjects. Above all these syllabuses must be scientifically based on the qualification features of the individual educational professions, that is to say the function of the teachers is determined on the one hand, and on the other the essence of every type of pedagogical activity. This enables the identification of the knowledge and skills necessary for each teacher for the given vocational specialization. In defining the content of the instruction in the further education courses, apart from the qualification characteristics of the teaching profession already mentioned, the inclusion of new questions from various disciplines the teacher has to master to acquit himself well of his tasks, must also be taken into account. While the weak aspects of the teachers' work, their typical difficulties and mistakes, also have to be borne in mind. These considerations will lead to the best possible adaptation of the instruction content in the further education courses to the teachers' actual needs.
Teachers of differing levels of training, i.e. those that have already participated in the courses several times before, and those attending for the first time, study according to the same syllabuses in the further education courses. The teachers' continuous education also assumes that their professional qualifications and teaching accomplishments will constantly improve. Every subsequent stage of the teachers' further education must follow up previous ones and continue to develop it. In the context of the further education courses this means that the content and forms of work with more experienced and more qualified teachers must needs differ from the work with those less qualified or less experienced. This seemingly absolutely clear principle, however, is put into practice only with great difficulties. For the standard of the qualifications is not directly dependent on the number of times a particular teacher has attended courses, nor on how long he has been teaching. Often less experienced teachers with shorter practice prove to have great educational abilities and are more efficient than their colleagues with longer standing in the profession. Hence it is not expedient to deduce directly from the length of service the content and forms of work to be applied in the further education courses. The only exception to this are young teachers taking the course for the first time. For them, special syllabuses are needed, which in content and forms take heed of the small pedagogic experience of the beginner-teachers and the obstacles they inevitably encounter when they start teaching.

The lifelong teachers' education assumes the mutual integration of the content and organization forms of work in the further education courses with the content of self-education during the five-year-period between the courses. One way of promoting this integration that has become more widespread of late is represented by so-called pre-course and post-course assignments (work), which the teachers carry out before going to the course, or after they have taken it.
Almost every teacher has a certain amount of good experience reflected in his successes in his educational work. A description and analysis of such experience may be the subject of his pre-course work. The teacher then comes to the course with this work and imparts his results to the others. The discussion of experience in the courses and the acquiring of new knowledge then enables the teachers to elaborate on this theme at a higher level and then make it the subject of his post-course work.

The teacher chooses the subject of his pre-course task on his own. He submits it for approval to the district (municipal) methodological department and to the school management. The subject of the post-course work is selected by the teachers during the course and they submit it for approval to the respective department of the institute for teachers' further education. After the course is over they let the district (municipal) methodological department and the school management know about the chosen theme. The pre-course and post-course assignments are included in the individual plans of self-education and may also become a part of the collective work carried out at school or in the district (town). The organization of the integration of further education courses and various forms of teachers' individual self-education is ensured through the co-ordinating work of the institutes for teachers' further education, the district (municipal) methodological departments, the district (municipal) inter-school and school methodological departments and commissions. With regard to content this integration is evident in the interlinked sequence of events arranged to help in the individual self-education, and in the centrally run further education courses.

Stimuli for teachers' further education. The lifelong teachers' education not only requires good guidance, but also the appropriate motivation. That is why it is of vital importance to duly evaluate each teacher's achieved qualifi-
cations. This is also the point of the re-examination of teachers. At present the system of teachers' further education is only partially connected with re-examination procedure. One of the reasons for this is that so far no objective criteria have been devised for re-examination and thus no objective classification of teachers into appropriate categories according to their work of performance. An important task for the science of education is research into the methods for evaluating objectively teachers' qualifications and the possible ways of motivating teachers' further education.

SOME PROBLEMS OF THE INITIAL TRAINING AND FURTHER EDUCATION OF TEACHERS

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It is the aim of the present paper to show and expound the following four basic points:

The main idea of the training and further education of teachers is to devise a new model of the teacher-pupil relationship which would correspond to the future school;

The training and further education of teachers must take into account the fact that the process of bringing the school work up-to-date is a continuous one. This modernization is the outcome of the changes which are going on in science and social distribution of work and it is a condition of a progressive development of the school education system;

A close connection between teacher's theoretical training and his teaching practice should be established as a necessary prerequisite for the progress in the field of teachers' training and further education;
The progress in the field of teachers' training and further education calls for a rational institutionalisation of a continuous lifelong education which will promote the teacher's individual creative work and self-education.

I.

If, at a general level, we are to answer the question about the main aim of teachers' training and further education, we may say that it is to eradicate the traditional teacher-pupil relationship and devise a new model of these relations. The reason is that the system of the teacher-pupil mutual relationships is the focal point of education throughout the changes in the educational system. Hence also one of the main factors affecting the educational system, and the basic prerequisite for its innovation, is to educate teachers so that a new type of the teacher-pupil mutual relationships may be established, both in the sphere of cognition and social moral behaviour.

The teacher as organizer of the process of cognition should give up the notion that man might be endowed with sufficient knowledge and skills as to last him throughout his professional activity. The advancement in modern science and technology makes the traditional model questionable for, although taking into account the continual growth of knowledge, it assumes the fund of knowledge acquired to be stable. This type of education lies in accumulating knowledge in the human mind. The store of the information gained is considered to be a once for all closed system in which nothing needs to be changed or substituted for. It is sufficient to add new facts and data verified through experience and of a definitive character. Recently, however, there have been so rapid changes in science that not a single statement may be expected to be of final validity. In contemporary science there is no room for final truths, nor for unalterable propositions. Even those scientific truths which are at present...
considered to be fool-proof and about which there is no doubt may well be thrown doubt upon in the next stage of scientific development.

In these conditions the conception of education is naturally changing as well. Education is not limited solely to the process of endowing the human mind with encyclopedic knowledge, nor to developing the ability to store a once for all closed system of knowledge in memory. It is far more relevant to foster the interests in cognition, individual thinking and creativity, which are the forms of providing education motivated not by exterior commands but by the subject's own needs. In this connection the question arises how to effectuate this demand, how to introduce it into the syllabuses and text-books, into teaching methods and forms of organizing educational activity. How to constitute this demand as a component of teacher's qualifications? How to conceive teachers' education to make it effective and to bring about a decisive change in the teacher's hitherto traditional role of a "guide" through the realm of information and values?

Another factor modifying the organization of school instruction is the growth of scientific information sources and values outside school. All this constitutes an entirely new situation which is due to the fact that the young are ever more increasingly acquiring knowledge outside school. In these conditions the teacher cannot stand apart from the life which is going on beyond the school bounds. On the contrary, he must be integrated in this life and be well-informed about what his pupils are acquiring from other sources outside school. He must make use of this out-of-school information in his teaching practice, minimizing thus the risk of widening the discrepancies between the rich realm of information and values and the content of the school instruction.

The school and teachers who used to look upon the traditional function of school and teacher as upon the only sources of cognition will naturally discard this attitude only with difficulties.

Another factor which modifies the form of the teacher-pupil relationship is the modernization of school education. The process of education is increasingly being based on modern educational media optimizing the work of teachers and school and enabling the differentiation of the process of education on a larger scale than ever before. The use of modern educational media in schools enables not only to improve the basic education of each individual. Young people also get acquainted with the possibilities and means of the further education which they will need later on in life as well as in performing their professional duties. Modernizing the educational process by introducing modern educational media also widens teacher's possibilities of organizing the process of education, saves his strength and energy and prolongs the time which the teacher can devote to the actual work with individual pupils. All this naturally increases the over-all effectiveness of the educational process, and will in the long run also strengthen the prestige of the teaching profession in society.

When speaking about the training and further education of teachers we must bear in mind that it implies their preparation for a continual modernization of school's educational activity. It is, of course, a problem how to achieve it. How to train the teacher to be able not only to adapt himself readily to the changes which are going on in the field of education but also to become their instigator, a pioneer of modernization and innovation. The present system of teachers' training and their further education cannot comply with this demand. Modernizing the educational process, looking upon school as one of the sources of information, making utmost use of modern educational media, all this constitutes the
factors whose influence on the effectiveness of the educational process is largely dependent on the extent of modern scientific findings the teachers have acquired, on the possibilities of persistently innovating them and on the access teachers have to various information sources in the course of their lifelong education.

The conception of a new model of the teacher-pupil relationship calls for a substantial change also in the social and moral sphere. The present scheme of these relations based on the hierarchy of power has a negative influence on pupils. It suppresses their individuality, the feeling of their own dignity and encroaches upon their reactions. All this is naturally reflected in their development.

How to train the teacher to master the art of enlivening the process of school instruction and education by conducting a continual dialogue between himself and his pupils? How to teach him to shape his pupils' development, to prepare pupils for self-education and self-instruction? How to pass on to the teacher contemporary scientific findings on the complexity of human mind and its expressions? How to overcome teacher's indifference toward the varieties of children's characters and temperament, aspirations and expectations? How to put an end to the general practice of everybody being interested not in how far the learner has gone on his way to education but what knowledge and skills he has acquired, often regardless of their mutual relationship.

The new model of the teacher-pupil relationship assumes a mutual co-operation of the teacher with his pupils, the awareness of one's own responsibility for accomplishing the given tasks, superior organization of work and a high discipline.†

The production of a new model of the teacher-pupil relationship and the fundamental change in the view of the teacher's role call for a new quality in teacher's training and further education. Both types of education must be organized and conceived so that the teacher may receive not only a certain degree of education, certain theoretical knowledge and skills, but that he may have a possibility to become acquainted with the practical models of new behaviour and new human relations in class.

In designing a new type of the teacher-pupil relationship it is of great importance to establish also a new type of the relations between the teacher training establishments and the educational system, between the educational research workers of these establishments and the prospective teachers or teachers undergoing further education, between teacher-training establishments and places of educational research work.

II.

In the Times Supplement of 10th 8, 1970 an advertisement appeared whose free version will now in part be quoted: Applications are invited from graduates from the College of Education with honour degrees, rich teaching experience in the field of initial teaching, special educational treatment, education of mentally retarded and immigrant children and with practice in group teaching in comprehensive school. They are supposed to be in a position to teach in classes with outstanding as well as backward students, with the students coming from industry who have not completed their university studies and with adults who have interrupted their studies for a period up to twenty years. They are also expected to have some practice in educational advisory services. They will work in provincial schools... This advertisement sounding almost like a joke shows the difference between what the
teacher is expected to do in practice and how far it is possible to comply with these demands at all.

As yet prospective teachers' training has been oriented towards receiving teaching qualifications "as such". The graduates are awarded the title of qualified teacher. They may become members of the educational personnel (e.g. out-of-class supervisors of children and youth), teachers in the respective grades of the educational system, even regardless of their own subjects, they can teach in general education or technical schools as well as in various types of adult education. They may become educational officers.

The development of educational systems is, however, aiming at specialisation and professional differentiation of the teaching profession, which consequently leads to a modification of the hitherto existing teaching professions. This process of differentiation and specialisation is based on the increasing social distribution of work and specialisation of science and on the penetration of technology into instruction, which results in a change in the organisation of school activity.

To meet, at a general level, the new needs stemming from the specialisation and differentiation of school work the practising teacher or graduate in the teaching of a particular subject is trying to gain new findings and skills in some way which would, more or less, enable him to accomplish new tasks. Owing to a strong impact of the new social needs and the necessity to formulate the corresponding new tasks the school system is faced with the imperative problem how to prepare new specialists.

Teacher's acquisition of the essential knowledge and skills following the aim to fulfil new tasks involved in the educational system is not sufficient to comply with the demands placed on the contemporary, and future school, in particular. Future school will need and ever increasing number of highly qualified teachers.
The new school model requires well-educated teachers, of the usual specializations. At the same time, however, it is necessary to reckon with a certain modification of these specializations and mainly with the introduction of entirely new specializations. This is, however, already suggested in the present conception of the ten-year school. It will, of course, not be possible to determine these new teaching specializations more specifically and characterize the alterations in the existing specializations and finally to specify the resulting demands for the conception and implementation of teachers' training scheme until the new content, methods and organization of the educational process in the new ten-year school have been specified in more detail. In the meantime it may be generally assumed that future school will require the following three groups of qualifications:

a) The basic group includes specialized teachers and educational personnel concerned with teaching, education and children's care in general. The notion of specialized teacher is not limited solely to the teacher specialized in a particular subject. It includes also the elementary school teacher, educational adviser, educational personnel in children's homes, nursery school teacher and other teaching qualifications.

b) The second group includes the qualifications concerned with the school administration and guidance, inclusive of experts dealing with the projects for the school education systems and networks and for other educational establishments, namely on a nation-wide or regional scale. The administrators of the education system in charge of its proper operation also belong to this group; they are e.g. officials concerned with the investment and financial planning, or producers of methodological materials and teaching aids, as well as those in charge of various school services (medical care, educational psychological guidance). And finally there are also the specialists in the field of school inspection and supervision, that is to say, those who look after the
smooth running of the education system as a whole as well as its particular sections, and who take care of its modernisation, etc.

c) The third group includes auxiliary services. Generally speaking they are those responsible for delivering the material for the teaching aids, for the operation and maintenance of educational technology etc. Clerical staff as well as economic-technical and library personnel are also included.

Specialisation of this kind will evidently bring about some negative phenomena as well. This problem has been very thoroughly studied in the latest research work done by Jan Czespeński. In his view, it is apparent that specialisation will unfavourably affect the educational process by breaking it down into too many small parts, which will lead to a certain dissociation of the findings imparted. There will be difficulties concerning the co-operation among teachers with different qualifications and their collaboration in solving various educational problems and inter-subject relations. The teacher-pupil relationship will also be affected. It will become more impersonal and personal interests will not be fully reflected in it.

These are the reasons why in investigating how the educational system operates so much stress is laid on the necessity to prevent undesirable specialisation in the teaching qualifications, or at least to limit it and attempt to find ways and means how to lessen its negative impact. This effort is reflected for example in the experimental introduction of the subjects with an integrating function. It must be particularly emphasised that instruction in these new subjects will of course require of the teacher to become a specialist of a new type.

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It should be stressed again that the point is not to slow down the process of specialization in the teaching professions but only to discover the ways which would help to overcome or at least to lessen the indubitable negative consequences of this specialization. Hence also the effort to design teachers’ training and further education in such a way as to educate teachers highly specialized in their own subjects but who, at the same time, are also in a position to participate in the implementation of the school educational objectives and tasks at the most general level. The multiplex character and complexity of the educational process require namely both a high specialization and a deep mutual understanding and collaboration among the specialists.

In this connection the problem of inter-subject relations and its solution in teachers’ training are coming to the fore. It is necessary to note that unfortunately there are no scientifically substantiated systems and sub-systems of the fields which in the training of teachers in a particular qualification appear as boundary disciplines. The reason is that these particular disciplines do not possess enough dynamism to extricate themselves from the stabilized structures of their findings and constitute new ones which would better correspond to the demands for acquiring the respective teaching qualifications. It seems that the main method for tackling this problem in teachers’ training is to carry out syntheses with a view to integrating the store of findings from various branches of science in the teacher’s qualifications with respect to the specific position which this branch of science occupies in the process of education.

The second sphere in which it may be possible to overcome the negative consequences of the narrow professional specialization of teachers and educational personnel is the conception of school in terms of content and organization. Even a teacher with a wide intellectual scope who is aware of the position of his own subject in the system of education
and pays due regard to the inter-subject relations, who links up the theory with practice and has a good command of the knowledge of the methods of scientific research work may, in his relation to the existing conception of the content, methods and forms of education, be trapped within the narrow limits of his professional bias. That is why the teacher's role in the process of education in the new school must be conceived from the very outset so that the teacher, in performing his professional duties, is continually obliged to exceed the limits of his own narrow specialization and regularly enter into co-operation with his colleagues - specialists in other teaching qualifications. Thus his professional development is tending towards versatility encompassing all the various aspects of his knowledge, skills and personal qualities.

III.

In one of the numbers of "Głos nauczycielski" W. Okoń formulated a proposition which is of particularly great importance for teachers' training. The author's main idea lies in the statement that prospective teachers' training should not be governed by a system of grades and credits testifying to the theoretical rudiments achieved but rather by a system of assignments and tasks which the teacher-trainees should be supposed to learn now to solve.

From the above statement several conclusions may be drawn concerning the teachers' training and further education.

The first conclusion lies in the fact that the theoretical knowledge which the prospective or practising teacher undergoing further education is supposed to acquire must be judged in view of the particular tasks he will have to solve later on in his teaching practice.
Typical of teachers' training is the wide range of study fields. It includes basic as well as boundary subjects, educational and socio-political sciences. In some types of teachers' preparatory courses prospective teachers are trained without any direct connection with the tasks involved in their future teaching practice. This mainly theoretical training is, among other things, widely different (if we do not want to say that it is remote) from the teacher's practical tasks. For the teacher receives his qualification not only thanks to theoretical training but also, in equal proportion, thanks to practical training. "In these circumstances - particularly when taking into account the demands placed on teachers by the school reform", Okon points out, "a quite substantial reform in the methods and forms of teachers' training and their further education should take place. This reform - generally speaking - should consist in considerably extending the training of prospective teachers in the science of education and interlinking the theory with teaching practice. To this end it would be naturally necessary to eradicate some speculative elements from the theory of education (and from some of the psychological and sociological theories as well) and to develop rather those of its areas in which the regularities of the processes of acquiring knowledge and teaching skills, shaping attitudes and personal qualities are reflected.")

There has been a widespread opinion recently, maintaining that the acquisition of a set of professional knowledge of up-to-date standard is to be the main objective of teachers' training and further education. This is to guarantee that the teacher will be in a position not only to carry out his educational tasks and play his professional part in the educational process but also to solve independently the problems of the subject matter, teaching methods and the like.

arising from the continual progress in scientific knowledge. This view is an extreme reaction to the one-sided utilitarianism which has been governing our educational system for many years. It does not take into account the practical side of teachers' training and further education that is to say, the application of theoretical knowledge to teaching practice. It is necessary to reject it and apply the principle stating that all the fields of study constituting the content of teacher training and further education must needs be viewed from the standpoint of the tasks which the teacher is obliged to carry out in practice.

The educational approach to teachers' studies in their specialist subjects is given by the fact that these subjects form part of the school instruction. Their basic concepts, ideas and findings must therefore be illustrated by practical examples and linked up with the teacher's part in instruction. It is, however, not simple to find a solution to the problem of dealing with the subject studied in terms of the structure of its scientific concepts and simultaneously with respect to its position in the syllabuses.

Teachers' training cannot be confined to a mere acquisition of the particular teaching skills. On the other hand, studies in the theory removed from practical training are also insufficient, incomplete and otiose. The best possible system of teachers' training could, therefore, link up professional theoretical knowledge with practical teaching skills in the best possible way and ensure the necessary balance between them.

In the course of the training pursuing both cognitive and practical objectives certain difficulties and misunderstandings of course occur, for example in searching for the optimal proportion of the prospective teachers' theoretical training to the various kinds of its practical application. This gave rise to a dialogue which is going on
between the supporters of theoretical training in the teacher's specialist subject and those promoting the application of this theoretical knowledge to the teaching practice or those laying stress on the theory of education in the conception of teachers' training. It is necessary to continue with this dialogue and attempt to overcome the differences in the opinions by determining the relation between the theoretical studies, the methodological training in the teacher's own subject and the teaching practice.

In an integrated conception of teachers' training the study of teacher's specialist subject occupies the main position. The particular subject, however, must needs be acquired with respect to the teacher's future profession and must be linked up with the school practice. For this reason beside the studies in the basic rudiments and methodology of this subject as a field of science, attention needs be paid also to the position which the particular field of science as a school subject occupies in the system of school instruction as well as to its educational influence and the psychological bases and teaching methods of its instruction.

Another fact which is beginning to play and ever more important role in teachers' training and further education is the stability and proportion of the theoretical training to the teaching practice. In the course of the prospective teachers' training and during their teaching practice, teacher's knowledge of his own subject and his teaching skills are continually being developed and gradually transformed into various professional characteristics of the teacher's personality. The hitherto practice (e.g. in studying teaching for secondary technical schools) of providing courses in education for the teachers to supplement their qualifications after having completed their studies in specialist subjects is, no doubt, often objectively inevitable, yet it cannot be satisfactory. We often lose sight of the fact that nowadays the teacher's role has considerably changed.
He is teaching less in the sense of imparting particular knowledge and is becoming rather a helper assisting the pupils in acquiring knowledge and skills and in organizing their learning activities.

In this connection it is necessary to note that also the role of social political sciences is coming to the fore in teachers' training. These social political sciences (philosophy, political economy, sociology, anthropology etc.) are a matter of interest to education, school and teachers. These sciences have increasingly been applied in leading people's collectives, in establishing inter-human relations between superiors and inferiors, in character building, in analyzing diverse social processes in various branches of national economy and in cultural enlightenment. Educational practice attires great practical value to these sciences.

Social political subjects have been part of teachers' training for a long time. As yet, however, they have been taught along with the specialist and educational subjects. Their prominent position in teachers' training has been recognized. Their share, however, could be much larger if we managed to define their roles in teachers' professional training and to make them a vital and natural component of teacher's professional activity.

IV.

The main idea of the forth part of our deliberation may be formulated as a conviction that there is a relationship between the establishment of teachers' lifelong education and the development of their self-education.

The view maintaining that the institutionalization of a lifelong education acts as a brake upon self-education is not fully justified. The UNESCO documents have recently provided enough evidence in support to the fact that in spite of all the statements about the significance of education
also for those performing their professions, there are not actually many countries whose system of further education is so well established as to fully satisfy all the professional needs of teachers. The same applies to us, too. Also in our educational system it is necessary to establish far more favourable conditions for the development of teachers' life-long education to be effective.

The present system of teachers' training and further education is marked with rather imperfect and not too comprehensive solutions. Its characteristic feature is the unusual variety of forms and educational establishments. On the one hand, this diversity has the advantage that it opens up many various possibilities in devising teachers' lifelong education. On the other hand, however, it impairs a rational unification of the various establishments and organization forms, which brings about chaos and makes it impossible to determine the content, forms, methods and organization measures for the purposes of a permanent education. In designing an integrated and operational system of lifelong education establishments under these circumstances, a number of considerable difficulties occur. In this connection, it is necessary to mention at least two of them:

The first difficulty lies in the fact that the problems of teachers' lifelong education have not yet been subject to an over-all analysis. Some attempts at a comprehensive conception of teachers' education that have been made so far were practically limited to teachers' basic training. The establishments providing teachers' basic training have been stabilised. They above all set the standard in teachers' training and are mainly concerned with the question of the quality of the educational personnel.

Nothing like that, however, applies to the establishments offering further education to teachers. These establishments often change, undergo reforms and reorganizations
or are abolished. This naturally gives rise to doubts about the usefulness of seeking new solutions and the purpose of the existing ones, which again results in the fact that scientifically founded argumentation and data on the actual effectiveness of the various types and forms of teachers' training establishments are lacking.

The second difficulty is due to the fact that the teaching professions are considerably differentiated, and so are teachers' educational needs. If a system of permanent education were to be drawn up it would have to be based on a certain standard rather than on a complete set of these educational needs.

All the hitherto existing conceptions and models of teachers' further education assume, in contradiction with this, a more-or-less unified system of teachers educational needs. It is admitted that these needs slightly differ with respect to particular teaching qualifications but these differences do not seem to be decisive. In classifying the teachers' needs priority is given to those which in view of the teacher's professional performance are the basic ones. Teachers' specialist subjects and the specializations of the school administration and supervision personnel are also taken into consideration. It is necessary, too, to adapt the educational programmes to the various stages of the teacher's professional development (for example to the initial teaching period, to the period of professional maturity and the like). Taking into account the wide range of teachers' needs, interests and capabilities does not yet mean that we have arrived at a constructive solution of the problem of implementing a lifelong education scheme.

In a number of studies (for instance in the report by the UNESCO commission of experts) attempts have been made to classify the teachers' lifelong education establishments:

The establishments concerned with the training and further education of teachers are referred to as the basic institutions. The establishments which may play an important part in the process of perfecting teachers' qualifications, even if their main mission lies elsewhere, occupy the second place.

If we adopt this classification principle then the first category includes those teachers' lifelong education establishments offering training and further education only to teachers. These establishments also perform the function of coordinating all the other components of the lifelong education system. They represent a factor which determines permanent education and renders it dynamic. Unfortunately, these institutions are usually rather passive and only unwillingly take on nontraditional tasks. Thus it may sometimes happen that their conservatism acts rather as a brake upon the process of innovating teachers' training and further education than as a stimulus to innovation.

The second group includes the establishments in whose programmes, among other things, teachers' training and further education are also included. This task, as regards their primary objectives, is of secondary importance to them. They are such institutions as trade union organizations and technical facilities or works schools arranging in-service training also for teachers. Television, for example, also belongs here.

In this connection a third type of the teachers' lifelong education establishments may be given. They are those establishments providing the conditions for a continuous education. They do not immediately participate in the process of education but carry out other tasks connected with the establishing of the conditions for the attainment of the above men-

The activity of NURT may serve as an example. (NURT = The National Broadcasting and Television University for Teachers in Poland - ed. note).
tioned objective. They are, for example, publishing houses, libraries, reading-rooms and the like.

It is evident that the system of teachers' lifelong education includes establishments and other educational facilities of most varied types. The character and extent of their participation in the process of teachers' lifelong education is dependent on the kind of the educational needs they are in a position to satisfy.

The role of school will even in the future be of greatest importance to prospective teachers undergoing basic training. The establishments and facilities for further education play a prominent part in the education of serving teachers, in the professional maturing of young teachers and in the process of innovation, bringing up-to-date knowledge and teaching skills. The Council for Education fulfills its task in the system of a lifelong education by providing information on the basic problems of teachers' educational work in school. Trade Union bodies provide favourable conditions for the teachers' participation in various forms of cultural events. Numerous other facilities - for instance radio, television, publishing houses, cultural centres etc. - carry out those tasks in the system of lifelong education in whose execution they have advantages over any other establishments.

If we say that the teacher's professional maturing in the course of his teaching practice places increasing demands on a favourable institutional endowment we must not forget that all these establishments will perform their educational function only as long as the teacher is willing to be educated and is in a position to guide his professional development and improvement himself. This applies the more, the stronger the tendency to interlinking the various forms of gaining knowledge through establishments with self-education. The forms of raising qualifications of the serving teachers which combine training courses with individual studies have recently become very wide-spread. So for example
During the summer courses and consultations for teachers, the lecturers give not only specialized lectures but also encourage their students to pursue individual studies. Similarly, post-graduate studies at the Institute for Teachers' Education consist of three fortnightly courses arranged in the course of the school-year and of individual studies.

The teacher is practically daily faced with the necessity to educate himself as he continually needs to acquire new findings to be able to solve his educational problems. That is why the question of teacher's intellectual activity, his capability to react to the progress in science, social life and culture, is of greatest importance. The emotional aspect is naturally important as well - the intensity of interior preoccupation, the level of aspiration, the power of stimulation etc.

In the further education of teachers it is often necessary to remove a certain barrier first behind which the teacher's actual cognitive needs are somehow hidden and only then he may take a genuine and lively interest in his further professional development. The vital question therefore is how to train the teacher to be in a position to enrich his knowledge continually and by all possible ways and means, and how to build his personality. This is the only way how to conceive the problems of a lifelong education of the teacher as a person capable of educating and perfecting himself (in the field of knowledge, teaching skills, motives, attitudes etc.). In the conditions of the rapidly changing life the teacher should not only be possessed of knowledge but also increase his effort to learn by himself and to understand the reality, being aware of a merely relative stability and duration of the knowledge gained.

Teachers' lifelong education will in practice be apparently much more varied than we can now imagine, that is from the point of view of its syllabuses, content and methods as well as with regard to its institutional endowment.
main trend will evidently be tending towards self-education. That is the reason why the activity of the establishments and facilities for a lifelong education must neede primarily concentrate on the development of the methods of self-education and on the creation of educational programmes which would best meet the demands for the teachers' differentiated cognitive needs.

Teachers' lifelong education does not lie in a mere acquisition of a certain educational content given from the outside. It must needs be conceived as a process of the professional maturing and shaping of the teacher so as to be in a position to acquit himself well of his educational tasks. Thus the teacher who is permanently trained gains the necessary knowledge and experience practically at every step in his professional activity not only through the respective educational establishments but also directly in solving his diverse social and educational tasks and thanks to the various situations in his personal life.
II. REPORTS, REVIEWS, INFORMATION
Basic Motions. A prerequisite for conducting an educational system on scientific lines, ensuring efficient educational research and high quality teaching is the rationalization of the information system. That is why the information policy of advanced states includes such programmes and these are also the subject of international co-operation. The system of education information comprises the exchange of experience gained in the reshaping of the education system and knowledge about their conception in accordance with the needs of the development of society and the results of scientific and technical progress. A pressing issue in this sphere is that of the teachers' innovated qualification requirements. The information service regarding the training and especially the further education of teachers (PET) in the context of a lifelong education has until recently proceeded spontaneously and uncontrolled in direct contact with specialists and in bilateral co-operation between the respective institutions. The results of scientific research and the implementation of knowledge are presented at meetings of experts and are published in professional journals. The PET subject matter, however, is widely scattered in the information sources. Central bodies concerned with educational information and documentation have under their control the bibliography of this topic on a national scale, but on a rather general descriptive level, not sufficiently to the point. Research, educational and methodological establishments in each country are specializing mostly in providing information on current tasks, in the main from home sources.
The importance of ideological concepts, political goals, scientific organization and methodology of the PET together with the vital need to exchange knowledge on an international level, as well as co-ordinating information processes has necessitated the comprehensive collection of information and documents, their direct dissemination to the respective users, a critical analysis of the information content, and by comparative and case studies making a contribution to raising the level of all forms and methods of the further education of teachers in all participating countries. The European Information Centre for the Further Education of Teachers (EIC-FET) was set up in Prague in 1973 for this purpose, following discussions held between experts from the socialist countries and the respective UNESCO bodies. The Centre is affiliated to Charles University and operates as a national scientific and information institution, which may extend its operations within the European region subject to social needs, the interest of co-operating organizations and its own capacity. Since 1976 special attention has been devoted to the Centre in view of its being one of the realizers of the international exchange of information initiated by the Helsinki Conference and accepted both by UNESCO and especially by the partners who are member states of the Council of Mutual Economic Assistance.

Thus the mission of the Centre is to build up the respective PET information sub-systems of European provenance in a way to ensure that its basic information function as both a clearinghouse and an analytical centre be developed by 1980. Certain information priorities have been determined to attain this goal:

1. Orientation to information requirements with a view to the intended functions of the sub-system and with regard to the socially important categories of PET information users.
2. The setting up of a FET information network within the organizational structure of the educational system and the functional operation of systems of educational information.

3. The building-up of a common system of ordering information by defining the limits of the FET subject scope.

4. The characterization of the information file corresponding to the structure of the main sources of FET information in Europe.

5. The determination of the depth and forms of the information processing of relevant documents.

6. The introduction of information services with the required standard of promptness, selective dissemination and analytical towards suitable information media made accessible in a convenient way.

Information requirements in the field of the Further Education of Teachers. The specific character of educational information, similar to that of other social science information (as opposed to scientific and technical information) lies in the content of the mediated communication. This communication reflects the different, and in some cases class contradictory, character of the process of cognition and control of social phenomena, with regard to the historically conditioned national specific features of the educational systems. In building the respective information system we must hence be guided by the principle that such information that does not objectively serve the deepening of progressive knowledge and cultural development in society is considered as undesirable and is therefore not included in the information process. In the information system for the FET the requirement of providing full information is thus substituted for the demand of high efficiency of the information services.
We therefore do not conceive the comprehensive information need on the part of the user as a rigid set of components, but as a dialectical process of the development of partial, short-term and local information requirements of the individual spheres of interest of the FET vis-à-vis the overall long-term need of society in the field of education, which the information system must not only reflect but also predict.

Meeting the needs of different categories of users of the educational information system calls for differentiation in information input (the acquisition policy of the system) and for the accessibility of information output (the distribution policy of the system). The social significance of subjectively motivated institutional intentions, professional traditions and individual information habits need not be in harmony with the objectively determined information requirement of the education system and of the educational sciences. In the interest of this requirement we define and classify the target functions of the information sub-system of the FET as follows:

a) gnoseological, i. e. the formation of that part of the knowledge fount of educational sciences that is needed for solving the concept of the FET,

b) decision making, i. e. securing information inputs for the system, managing and regulating the system territorial, branch or institutional levels,

c) implementation, i. e. introducing the results of educational research and development, and the control of the educational process as far as the content, methods and forms of FET are concerned,

d) innovation, i. e. the exchange, evaluation and generalization of practical experience and the employment of progressive knowledge in the given field of the FET,
e) integration, i. e. the interlinking of the communication lies of the FET information sub-system to the system of educational information on an international scale.

This general model of the structure of the use and purposeful transfer of information will be more precisely specified using the methods of informatic sociology, namely standard procedures for surveying the needs of the respective user population. Proceeding from experience gained hitherto, the Centre envisages the establishment of information services. This will be done gradually, in accordance with social urgency, for the following user categories:

I. the creative basis for FET at universities, research institutes and other organizations interested,

II. authorities concerned with the running and methodological work for FET in school and out-of-school institutions,

III. leading educational institutions and other FET spheres, mainly on an international level,

IV. educational information and documentation institutions insofar as they deal with the problems of FET.

In ascertaining the actual characteristics of users we observe not only those aspects which are related to their requirements of the services provided by the Centre for FET, but also their own specialized activities, possibly the information activity of the respective user institutions and groups. The sphere of information users cannot be separated from the sphere of information processing and dissemination. It is hence serviceable to conduct the survey by actively involving the users in the information network emitting a mutually advantageous information flow on FET, which the Centre provides on a regional scale.

FET Information Network in Europe. In building up the information sub-system the Centre concentrates on institutions
involved in specific FET activities and on those specializing in educational information, documentation and librarianship. Co-operation with the latter set of establishments above all offers an opportunity for the exchange of secondary information, i.e. data on the occurrence, or maybe the orientation of primary sources, establishments or events related to FET, or the provision of a lending service, duplicates, translations or condensed information and the results of searches into original documents. Co-operation with the former set of institutes, i.e. scientific, research, educational, methodological and co-ordinating establishments of FET, enables the exchange of original information sources, in particular less accessible ones, for instance official documents, publications with restricted circulation, curricula and educational media, theses and research work results, reports on courses and so on. At this level it is also easier to promote rapport with experts through mutual participation at conferences, offering fellowships, publicising expertise and reviews, the results of creative work for a wider circle of readers etc.

The structure of such an information sub-system is built within the legislative, organizational and programme framework of the educational systems of the interested countries. The inter-relations between the individual links or the sub-system may assume the character of subordination, co-ordination or co-operation. In this respect the Centre represents the basic unit of the information sub-system in the field of FET, as has already been stated. It operates according to the plans of Charles University and the Ministry of Education of the Czech Socialist Republic in keeping with the goals of the educational policy of the Czechoslovak Socialist Republic and of the other countries of the socialist community; in some fields of activity also in co-ordination with the UNESCO programme.
Co-operation relations are gradually being established by the Centre within the Czechoslovak Socialist Republic with the respective faculties and institutes of Charles University in Prague and other Czechoslovak universities, other establishments of higher education dealing with PET research or implementation at departmental level (Central Institutes for the training of educational personnel) and at territorial level (Regional Educational Institutes). The Centre also co-operates with educational research institutes both within the educational system and with the Academy of Sciences, with institutes studying related problems (higher education theory, adult education, the communist education of the working people, etc.) or with institutes having some connection with education (labour and social welfare, science and technology, etc.) and last but not least with social organisations, such as the trade union of educational workers etc. The objective of these co-operation ties is to provide information required for PET research, teaching and the running of the education system in the Czechoslovak Socialist Republic.

An important task is the formal constitution of collaboration with analogous institutes in other countries. The Centre is by degrees concluding agreements with such institutes in the socialist countries, in particular with institutes for the further education of teachers, in a position to act as co-ordinators for PET information collection and as mediators of the dissemination of information on PET specialized literature in their respective countries. Information co-operation with other selected PET institutions in Europe (and in the USA and Canada) is promoted through the Ministries of Education in the respective countries, the National Commissions of UNESCO in the respective region and the UNESCO Secretariat in Paris, namely through its Division of Higher Education and Training of Educational Personnel as well as through its Division of Structures, Contents, Methods and Techniques of Education. Information
on models and experience in the FET in other countries, possibly at an international level is also acquired through various information services, i.e. within the functional incorporation of the Centre in the system of educational information of which the communication field of the FET is a sub-system.

Functional links within the system of educational information at national level stem from the relation between the Centre and the establishments of the information system set up as part of the Programme of State Information Policy for Scientific and Technical Progress of the Czecho-Boslov Socialist Republic. In matters having broader than mere local aspects the Centre respects the valid standards, regulations and instructions that apply to professional information activity either on a nation-wide scale or in the department of education. The Centre co-ordinates its work with the scheme designed to set up a nation-wide information system branching out in all directions and dealing with education in the school system carried out according to state stipulations, especially with regard to the relation to the Institutes of Educational Information in Prague and Bratislava and other components of the system. The Centre also maintains contacts with educational information bodies and libraries on the basis of contracts on co-operation that have been concluded.

Within the socialist community the Centre co-operates with educational information and documentation services and is thus integrated in the system of educational information of the socialist countries, while respecting the development of the information micro-systems of these countries, primarily the International System of Scientific and Technical Information (MSNT), controlled by the International Centre for Scientific and Technical Information in Moscow, and the International Information System for Social Sciences (MISON), co-ordinated by the Information Institute for Social Sciences of the Academy of Sciences of the USSR. A significant regional
The Centre also deals with those tasks that follow from the General Information Programme adopted by the 19th UNESCO General Conference in Nairobi in 1976. It mainly respects the integration trends of the UNISIST and the building up of national information systems as part of the MATHIS project, which is being implemented with the significant participation of non-governmental organizations, such as the International Federation for Documentation (FID) and the International Federation of Librarian Associations (IFLA). In this context the Centre for teachers' further education respects the co-ordinating role of the Centre for Scientific, Technical and Economic Information in Prague as the representative of Czechoslovakia in governmental and in non-governmental international information organisations and systems. At an international level the Centre avails itself of the possibilities of acquiring information and material through UNESCO and its specialised institutions, namely through the International Bureau of Education (IBE) in Geneva, the UNESCO Institute for Education (UIE) in Hamburg and the European Centre for Higher Education (CEPES) in Bucharest.

Bearing in mind the interests of the co-operating institutions the Centre collects information on the FET mainly in European countries, provides abstracting and indexing services that are then made available for dissemination through the said existing international relations. It has thus gradually developed the regular exchange of information within the system for FET development in Europe. The main precondition for co-operation in this information network is the standardisation of information processing, especially the introduction of a unified system of information classification with a view to automation in storage and retrieval.
3. Classification System in the FET Information Network.

The effect of the subject matter of the FET information subsystem depends on the one hand on the prescribing of the extreme limits of the problems to enable a division of labour within the information network both within the system of scientific-educational information and in relation to other systems, and on the other hand on the prescribing of the inner structure of the theme as a whole to enable the ordering of the search files. Here two aspects are taken into account - the semantic and the pragmatic. The semantic aspect observes the inner substance of the phenomena and processes in the given field, their objective laws, the historical and logical structure that as a rule corresponds to the scientific and bibliographical classification of the disciplines involved. The pragmatic aspect bears in mind the efficient arrangement of the system to suit the users’ needs arising from the tasks being solved, the plans of the respective institutes’ activities and the long-term goals for the society’s development. It moreover takes into consideration the functional division of labour within the information network and the possibilities of using computer technology for information processing with regard both to soft and hardware.

The Centre therefore bases its work on the existing classification and indexing systems in education. A uniform terminology does not exist in the standard language - especially not in the social sciences - suitable for use in the classification system, because of the difficulties arising from ambiguity, inconsistency, overlapping and interchangeability of concepts. Hence the problems of FET in the information process should be expressed by using the symbols of existing systems of educational information. The retrieval efficiency and the compatibility with other systems depends on the right selection of these symbols. The FET information sub-system should be capable of encoding inter-disciplinary
problems and the output should be capable of answering multiaspect queries. Considering the existing international
this ties it must also take into consideration the classification
system used in the European region.

The Universal Decimal Classification (UDC), as a hierar-
chic classification system used in a number of educational,
libraries, has an unsuitable, historically conditioned basic
structure, which moreover has not been worked out uniformly
down to the necessary details. In addition it is tied down
by the principle of precoordination, it is incapable of dis-
cerning all the horizontal relations. Its in the main nume-
rical notation is not suitable for machine processing. For
example, the classification code corresponding to PET (471.14)
is subdivided only according to educational forms, while the
other PET aspects have to be expressed by related combinations
and auxiliary symbol.

In the Czechoslovak educational information system the
UDC system is currently being used as the provisional common
information language, whose headwords, supplemented as the
occasion arises, constitutes a transition to a thesaurus of
descriptors. Descriptor ordering system permits the combina-
tion of the category approach with the subject principle more
suitable for expressing cross-section problems. They permit
the addition of headwords in the natural but controlled lan-
guage within a relatively free logical structure. A thesaurus
of key words is thus compiled, which in its verbal, alphan-
etical form is applicable for the machine processing of in-
dexes. Conversion symbol codes are used for the storage of
multi-aspect search files in the computer memory, which does
not hinder the dialogue between the user and the output equip-
ment (on-line).

The European Information Centre for PET participates in
the compilation of the respective part of the Czech version
of the education thesaurus. As part of the international
systems it is also interested in co-operating on the evolving
of the Russian version thesaurus, usable for collaboration
among the socialist countries, which is being compiled at
the Centre of Education Information of the Research Insti-
tute of General Pedagogy of the Academy of Pedagogical Sci-
cences (NIIOP APN) of the USSR in Moscow. The Centre also takes
into account the development of the English version of the
thesaurus which is used within UNESCO and is co-ordinated by
the International Bureau of Education in Geneva (UNESCO – IBE
Educational Thesaurus).

The effectiveness of the FET information sub-system output depends on the principles of information input. Apart from a uniform system of ordering information with regard to its content, the bibliographical and location identification of the information sources is also important. These information media enable the transfer of information both in time (storage) and in space (distribution). Organised acquisition is thus the key to content analysis and information utilization. The acquisition policy of the system must therefore discern the structure of the relevant information sources, as well as sources of their collection.

4.

The Characteristic Features of the FET Information File. The knowledge of the areas of scientific information origin and hence also the knowledge of their use and transformation, of the areas of its formalization and distribution by the respective communication channels underlies the ascertaining of FET information sources. The procedure commences with a simplified flowchart of the origin of the educational information in the following spheres: Creative (educational science and research), decision-making (organization and control of educational systems), implementation (teaching and methodological, empirical etc., communicative aims). The formalization of the information transfer media on the FET is mostly graphic,
There is, however, also an apparent tendency to exploit non-traditional information media (audio-visual) to miniaturise them (microfiches) and to teleprint the data.

The distribution of information sources mostly depends on the extent to which they have been published. The acquisition of sources for FET data in Europe is therefore not only on the book market (following publishing houses’ bibliographies, especially educational series) but also diverse forms used to make information sources accessible, i.e. public libraries, in particularly state educational libraries (through their advertising service of new book lists and catalogues, or by international exchange of publications). The Centre also profits from the cooperation relations established within the currently built information network for acquiring special types of sources not available on the book market, and for exchanging publications not meant for public circulation directly with the institutions that produce them.

The criteria for the selection of sources about the FET collected with regard to their required complexity and structure as a grounding for shaping the information file on the sub-system are defined as follows:

a) According to subject matter - on the basis of defining the content scope of the system, i.e. the limits and structure of the information sub-system within the system of educational information, mostly through the ordering system;

b) According to provenance - in our case the European region, with a possible extension for methodological or comparative purposes to other regions, preferably to the socialist countries and to international organizations (relatively complete); from other European countries (selectively);

c) According to language - in all languages corresponding to be), with preference, however, to world languages used by UNESCO - especially Russian and English; moreover Czech.
and Slovak for direct use for the national information services;

d) according to the date - retrospectively ad of 1970, in exceptional cases further back (standard materials, monographs of basic importance, encyclopaedias or historical works), otherwise continuously and with the utmost promptness;

e) according to types of sources - official documents and bulletins, standards and statutes, plans of activities and editions, syllabuses and curricula, text-books, teaching aids, pedagogical "readings", proceedings and programmes of educational events, conference protocols and contributions, travel reports, research reports, theses, monographs, collections of studies, articles published in scientific periodicals and newspapers, restricted circulation bulletins, publications issued by international organisations and scientific associations, reference handbooks, dictionaries and glossaries, encyclopaedias, statistical yearbooks, directories, bibliographies and abstract journals).

The PET information file is arranged according to the firm rules librarians and bibliographers abide by. The Centre supports the unification endeavours within the Czechoslovak system of scientific and technical information and strives for compatibility on an international scale aiming at the broad and effective social use of primary information sources. The term "primary" in this case refers to the form of information sources and not to their content with regard to the originality of the information concerned. We thus collect the full texts of the respective documents in their original forms or their duplicates, including microforms, possibly translations.

The Centre ensures the continuous coverage of the PET problems from primary sources over an optimal range either by acquiring the respective documents for its own library or by monographs on the PET, the related unique sources,
collections of publications with restricted circulation, reprints, duplicates and translations, documents published by international organisations, etc.) or by collecting the secondary sources, i.e. information regarding their whereabouts in co-operating institutions of the network, or of their records in central registers.

The preliminarily defined acquisition plan of the FET sub-system will be specified by the Centre and supplemented using bibliometric methods for checking the proportions of the information file. An analysis of the quotation relations can moreover retrospectively discern the factual connections and can thus contribute as a corrective factor of the classification system and of the content analysis of the documents during processing.

5.

Information Processing of FET Documents. The Centre's task is to process documents on the FET in Europe ranging from simple bibliographic to analytical studies and to co-ordinate this work. In stage one it will establish a secondary information file by taking over records from world abstract journals and bibliographic indexes on education and by ordering retrieval lists on FET from central information institutions. These sources will then be supplemented by the processing of the Centre's own collections of less accessible or special sources. It is envisaged that on the basis of contractual cooperation within the network authorized annotated bibliographies from national sources will be provided by the co-ordinating institutions in the respective countries. The Centre will concentrate in particular on the relatively complete processing of information on the FET in the socialist countries from which it will acquire basic data and to whom it will reciprocally provide the whole production. This regional specialisation does not exclude the incorporation of other European countries into the network or the bi-laterally
advantageous exchange of information with specialised centres of international organisations, in particular of UNESCO.

The co-ordinated processing of information within the network requires some vital measures, such as a survey of the processing qualities of the individual units in the system, the conclusion of binding agreements on the content and form of the processed information and the methodological control with respect to the bibliographical unification. The standardisation of the records, however, is hampered by the lack of uniformity of the rules for description in the individual countries. In the establishment of international cooperation it will be necessary to introduce a conversion system or, in the event of the introduction of computer processing in the future, a unified form of description will have to be the subject of agreements on cooperation.

The automation of information processing in the field of educational information suffers from a lack of co-ordination both in software and in hardware. For instance the equipment which is being introduced in the system of scientific and technical information in the Czechoslovak Socialist Republic bindingly (as part of the joint programme of the Council of Mutual Economic Assistance) is not compatible with the equipment of the educational department of the Czechoslovak Socialist Republic; likewise the computer technology used in some other socialist countries for processing educational information is not compatible with the computer system of the United Nations to which the IBE information system in Geneva is connected. Although the Centre does have the possibility of introducing within a short period any of the medium-capacity machine processing systems for FET abstracting (e.g. the ASTI system), the efficacy of introducing an independent system would be problematic in view of the relatively small annual increment of relevant documents concerned with a cross-section of FET problems. It therefore appears expedient to connect the FET sub-system to some macro-system
of educational information on an international scale, preferably to one among the socialist countries, and at the same time to co-operate with the system co-ordinated by UNESCO-IBE.

The extent of information processing (making the content of the information source accessible) depends on the types of information services and user categories. The Centre is introducing the following standard information products:

- bibliographical records (observing the Czechoslovak State Standard No. 010195),
- annotations (indicative or informative) having 200-600 signs on the average,
- abstracts (preferably the authors') (having 800-900 signs on the average,
- other results of scientific information activity, especially reviews, critical or prognostic, which are a part of the creative work should they contain qualitatively new information based on a critical evaluation and on a scientific synthesis (e.g. the well-known series "Itogi nauki..." or "Advances in ..." etc.).

The Centre makes all this kind of information output available through adequate information services.

6.

FIT Information Services. In accordance with its mission the Centre provides the following information services: documentographic, factographic, analytical, research and conference services.

The material output is made available to the users on the lines of the distribution policy of the information sub-system. There is the primary output (the mediation of the full text of documents in the original, duplicated or in translation), on the secondary output (the provision of signal
information on the occurrence of these sources); active output (the publication of the results of information activity and the publicity given to it), or passive output (on request); continuous (periodically published or regularly dispatched) or an occasional output (retrieval) related to a given problem) reviews (covering the whole FET sphere over a certain period from a particular field or a specially defined communication area) or subject-oriented (determined for someone on specific demand or - prospectively - according to the respective characteristics of the user). The Centre envisages the provision of a personal selective dissemination service when a sufficiently large information file has been built up, i.e. by about 1980.

A regular active information service is provided by the Centre in its series of publications that have been issued according to an approved plan since 1977. The series include:

a) Proceedings of international conferences, symposia, consultations and seminars which the Centre holds, or in which it participates,

b) Collections of studies, papers and documents on "FET", published once a year,

c) Annotated bibliographies (published or currently in print) on the following topics: chemistry teaching methods, biology teaching methods and mathematics teaching methods, vocational guidance. As from 1978 the selective bibliography "FET" will appear bi-annually (vol. 1 will be retrospective for the years 1970 - 1976),

d) The periodical "Newsletter" is published twice a year reporting on the work of the Centre and on international activity in the field of the FET in Europe. It contains a supplement of abstracts as an additional service of the information system.

Most of the above-mentioned publications are issued in Russian and English.
Information services provided by the Centre on the basis of co-operation within the information network are oriented to users who organise and co-ordinate FET, those who lecture, prepare teaching aids and media and provide methodological FET services, who by research and information investigations ensure the development of FET. We do not exclude mediated dissemination to the broader public, i.e., specialists (on education and related fields), decision-makers (school and other official authorities), possibly parents and people in general interested.

Implementation. The introduction of information services for the FET in Europe within the system of educational information is safeguarded by the organisational structure of the Centre, its function, staff and material equipment, in its plans of activity approved by higher authorities and discussed with the bodies concerned on the national and international scale. Its information mission is defined by its constitutional and statutory documents as the all-round enhancement of the development of information and scientific work in the field of educational systems of the socialist countries and of the other European countries with the aim to raise the level of all forms and methods of the FET.

As a type of institution the Centre, compared with other centres of education information, is more narrowly specialised FET and at the same time operates on a regional scale. The Centre differs from central institutes of teachers' further education in its method of critical analysis of information and in its scientific information mission.

In the organisational structure of the Centre this specific character of the institution is reflected in the division of labour in the two fields of activity: content (from the point of view of the science of education), which is the work of specialist departments headed by the Centre's Secretary; and methodological (from the point of view of information problems), which is the work of the department for the
organisation of information headed by an information specialist. The collaboration of the two departments enables the implementation of relations reflecting on the one hand the creative sphere of FIT; its communication process and its research, publication and conference activity, and on the other hand the information field ensuring the rational acquisition, processing and dissemination of the respective educational information bearing in mind the concept and operation of information files and services.

This division of labour is applied in the participation of educator specialists and the departments of the Centre in the acquisition policy of the sub-system, in the compiling of the ordering system, in the selection and evaluation of information and in the implementation of all higher level information processing. Information specialists, on the other hand, participate in the organization of scientific meetings, the publication of specialized literature, contractual co-operation with other institutions interested, and in making accessible the results of research and other creative work.

The fundamental character of the Centre, as a national scientific information institution, authorizes it to provide information services to faculties and institutes of the Charles University, which established the Centre, to other institutions of higher education in the Czechoslovak Socialist republic as well as specialized institutions, especially those connected with the department of education, especially those connected with the department of education, which also includes the Centre in its budget (with its headquarters at the Faculty of Education of the Prague Charles University). Apart from this the Centre co-operates with the chief bases for the further education of teachers, i.e. the central institutes for the further education of teachers, with university and college libraries (mainly with the Central Library of the Faculty of Education, which includes
the Centre's basic files), with the State educational libraries and also with the Czechoslovak system of scientific and technical information, namely with the institutes of educational information and their branch information network.

The Centre's general programme of activity is co-ordinated in the plan of political and organizational measures to carry out its basic role. Taking into account the above-mentioned priorities it is envisaged that the following measures will be implemented by 1982: a survey of the users' characteristics will be undertaken to ascertain the information needs in the FET sphere and at the same time also a survey of the processing capacity available in the information network from the point of view of co-ordinated acquisition and bibliographical checking. As a by-product of this survey, a directory will be published of the institutions in Europe that take a marked share in the creative, organisational, educational or information activity of FET.

On the basis of the results of the survey and depending on the interest shown by national institutions and international organisations contractual co-operation will be introduced in the collection of documents, the processing of data and the dissemination of selected information. To comply with the needs of unified processing a common selection language (thesaurus) in Czech, Russian and English will gradually be created and a standard bibliographic description with a view to the computer processing of information will be introduced.

The Centre is establishing, in collaboration with cooperating institutions, a library of traditional as well as special primary sources of information on FET with the aim of ensuring their accessibility in the network by reprographical or micrographical techniques. Further the Centre co-ordinates the compilation of notes (selection, annotation and abstracts) with the aim of covering the problems of FET
from sources of respective provenance in their type complexity and to their optimum thematic extent and depth. The Centre in the outset takes over the national production from the authorized partners in the individual countries and in the various international institutions and then supplements them with material from its own specific sources. It aims and a relatively complete file on the socialist countries and a selective one on the other European states.

THE INTERNATIONAL SYMPOSIUM ON PRE-SCHOOL EDUCATION
(Prague, November 1976)
Eva Opravilová
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The International Symposium on Pre-School Education with the emphasis on the initial training and further education of the personnel for pre-school educational establishments held in Prague in November 1976 was one of the first events arranged by the European Information Centre for the Further Education of Teachers affiliated to the Charles University in Prague.

Czechoslovakia took the initiative in organizing this international meeting of experts from the European countries for the purposes of exchanging experience and information as the interest in the questions of pre-school education and the demands placed on the high quality of the training offered to pre-school educational personnel go back to the 17th century when John Amos Comenius included pre-school education in the system of education and learning.

The present standard of the care given by our socialist state to the development of the pre-school education system and its integration into the Czechoslovak education system may serve as a model of a well-founded concept of contem-
porary education. Confronting this model with the ways of dealing with these problems in various countries and examining the advantages and drawbacks of the various alternative models may help in revealing the best possible ones and in discovering the tendencies and regularities of the further development in this respect. The long tradition of our public pre-school education lasting for over one and a half centuries (the first nursery schools in our country were established in the thirties of the last century) and the over three hundred years long tradition of Comenius' ideas on the objectives and the function of children's education in the early childhood have repeatedly directed our attention to the problems of the training and education provided for those in charge of the education of the youngest.

The nursery school in present-day Czechoslovakia is conceived as part of the school education system. The inclusion of the nursery school in the school system may, however, be viewed from two different aspects. Whereas the first aspect implies a mere formal organizational affiliation of this establishment to the school education system, the second aspect assumes a logical integrity of the educational process from early childhood to adulthood. The effort to relate pre-school education to the general objectives pursued in education and to unite social and educational activity is typical of the contemporary concept of the pre-school education system in our country.

For this reason it is natural that also the initial training and further education of nursery-school teachers must correspond to these objectives. A systematic building of the child's personality and laying down the foundations on which the development of each individual will be based are becoming a starting-point for the teacher training concept and determine the main trends in the education provided for the nursery-school teachers. The problem of their initial training and further education has, in this respect,
reached parity with the problems concerning initial training and further education of teachers at higher levels of the school system. Hence also a shift in the age limit at which children start being educated under the generally acknowledged professional guidance down to the period which for centuries was the exclusive domain of spontaneous up-bringing within the family and thus not included in the theory and practice of teaching.

The researches carried out during the past decades which lay stress upon the significance of the pre-school period for man and consider it to be the most important period for the shaping of his personality have helped a great deal in substantiating the professional character of the education provided for those working with the children of pre-school age. By providing a persistent and thorough professional training for the nursery-school teachers, a systematic education of children will be ensured in keeping with the demands placed on man by the contemporary development of society and thus also a basis will be established for a successful operation of the educational system as a whole.

In preparing the programme for the symposium, the organizers were well aware of the significance of these problems. The symposium should above all constitute the conditions for the first scientific meeting of this kind and provide, at the same time, the basis for a professional forum for the discussion on these questions within the framework of European countries, thus establishing a tradition in periodic meetings of specialists and research workers in the given field. The goals which the organizers set themselves were accomplished thanks to the participation of foreign experts representing the foremost specialists and scholars in this field.

The symposium dealt with several themes whose focal points were the main papers given by Professor M. Kofinek of Czechoslovakia and Professor G. Miarelet of France.
The paper by Professor Kohlmüller dealt with the present state and problems of the initial training and further education of the personnel for the pre-school educational establishments. By way of introduction he stated that a comprehensive view of the problems concerning initial training and further education could hardly be given at present as the complete and up-to-date information about the training and further education of pre-school educational personnel was lacking. He pointed out that the possibility of confronting the basic data at the present meeting was of great importance to this end.

He gave the conceptual characteristics of pre-school education as seen in the individual countries, which served him as a starting-point for comparing the respective types of the training provided for the nursery-school teachers, i.e. the educational personnel in pre-school establishments for the children between the ages of three and six. Some of the concepts recently applied lay stress on the influence of early learning, and guided activities in particular, on the development of children's abilities and assume greater success with the children stimulated at an early age. Other wide-spread concepts, however, assume that children's development can best be fostered by giving them the maximum freedom to experiment on their own and to draw conclusions by themselves. These concepts, in most cases, consider any planned instruction with definite educational objectives to be possible only after the compulsory school attendance has begun, and emphasize stimulation merely in the area of children's games and manipulation. The implications of the two concepts are reflected in the training and further education of nursery-school teachers to the effect that they acquire professional qualifications which would enable them to carry out their educational tasks both in working with the children and in advisory educational guidance services provided for children's parents.
If pre-school education is included in the system of education there is a possibility of a broader teaching profession covering the whole period of the child's development from birth to school entrance, or a narrower one for teaching the children between the ages of three and six, that is to say, before they start elementary school. The latter is closely related to the qualifications required of the teachers in the initial grades of elementary school.

It can be generally stated that a considerable growth of pre-school facilities in a number of countries has led to an immediate shortage of skilled educational personnel, which in turn has had bearing upon the fulfilment of the demands placed on the content and extent of their training and further education.

The teaching programmes for pre-school educational personnel generally include studies in education and psychology and professional training, and in the socialist countries also moral-political training focused not only on the future educational work with the children but also on the teacher's involvement in public, social and cultural activities. The teaching practice of various kinds carried out in the respective institutions forms a compulsory component of teacher training.

Surveys of the training provided for the educational personnel in various countries indicate that there was a marked tendency over the past years to educate teachers in higher education institutions, which of course assumes the completion of secondary school education.

In spite of this, however, the training provided in many countries including Czechoslovakia, is at secondary school level and the respective institutions have to offer general education along with the professional training. The more pressing need for nursery school teachers and the increasing demands placed on the standard of general education provided
for the nursery school teachers have led in Czechoslovakia to the introduction of diploma courses for the secondary school graduates. They are carried out in the form of extended courses with a professional bias and are completed by the school-leaving examination in specialist subjects. Apart from this type of secondary school courses there are university courses for nursery-school teachers which have been established at the selected faculties of education in Prague and Olomouc since 1970. Teachers may specialize in some field of nursery school education following their own interests (physical training, art, music).

The system of part-time university studies designed to help the nursery school teachers with a certain teaching practice lays the main stress on the possibility of gaining a better knowledge of the theory assuming that the teachers' more thorough theoretical training and its practical application in analysing their own educational activities is the new element to be introduced into teacher training at university level. Specialization following the students' interests and the emphasis on the theoretical problems of preschool education will also provide the basis for the training of educational research workers in the field of preschool education theory.

To meet the rising demands placed on the qualified personnel in preschool establishments for the children requiring special care it was necessary in Czechoslovakia to introduce courses of supplementary studies in special educational treatment at the faculties of education where special school teachers are being trained.

A gradual transfer of the training provided for the nursery school teachers to universities which in future will be going on in various countries is likely to produce preschool educational personnel of two categories. Besides university educated teachers who will be concerned with the exacting...
educational tasks there will be educational personnel carrying out simpler yet expert educational tasks arising from the daily rhythm of children's lives and from the fact that they are relatively lacking in independence. The training required of the latter will probably be carried out at secondary schools with special emphasis on the theory of education and its practical applications.

A suitable selection of the candidates for the courses of teacher training as well as a timely vocational orientation of the young towards the teaching profession also belong among the more general problems of teacher training. There has been very little experience in this area and it should, therefore, be given attention at one of the next meetings.

In many countries teacher training in the field of pre-school education is tending to educate teachers with broader qualification which will enable them to take on teaching in various types of the educational system. Consequently, a nursery school teacher is also in a position to work as a qualified member of the day nursery staff or as an elementary teacher because the training of nursery school teachers is closely linked up with the education provided for the teachers in the initial grades of Basic School. This trend towards a wider professional scope need not be opposed to the specialization in some of the fields requiring specific skills (music, art, physical training). In Czechoslovakia due regard is paid to this specialization during the university training provided for the teachers in the first grade of Basic School.

The further education of pre-school educational personnel is organized in all European countries. It may take up various forms ranging from a mere interchange of teaching experiences to specialized study courses and professional training of a very high standard provided for the leading.
workers in this field. So far there have been only occasional attempts to establish a system of further education within the framework of a lifelong education scheme.

In conclusion, with reference to the new project for the further development of the Czechoslovak educational system, Professor Kadleček pointed out that there is an important tendency in the development of teacher training. The teacher training system is changing into an open dynamic system which will enable the teacher, in the course of lifelong education, to raise the qualifications or widen the scope of professional training according to a particular interest or educational need.

There has been a rapid progress in the individual countries in the area of initial training and further education provided for the educational personnel in pre-school establishments. It is therefore difficult to follow the new developments closely and to obtain comparable data. For this reason it is also necessary to convene regular meetings of experts at which topical information might be systematically supplied and evaluated.

In his paper entitled The Contemporary Problems of the Training Provided for Pre-School Educational Personnel Professor Kadleček focused his attention on the recent pre-school education objectives which provide the basis for determining the role of a nursery school-teacher. He pointed out that in setting the objectives of pre-school education more regard must be paid to certain general principles and an optimum ratio between the three basic factors must be sought. The factors are the following: social demands and the existing situation, philosophical-educational systems of values and the children themselves. He demonstrated the share of these factors in the general objectives of pre-school education by appropriate examples taken from the recent researches and theoretical studies and from them he derived the corresponding social, psychological and educational tasks for the nur-
school-teachers. He stressed the point that the demands made on the training of nursery school-teachers should be formulated on the basis of these tasks.

He stated in the first place that for performing any educational function it is of primary importance to possess general knowledge of a wide scope and for this reason the nursery school-teacher must also receive a good general education. He considers certain personal qualities such as a versatile mind, concern for other people, patience and amiability to be of particular significance to teacher's work. Although in the training provided for nursery school-teachers less attention is paid to specialized knowledge in comparison with the training provided for the teachers of specialist subjects, the training of nursery school-teachers is equally demanding and cannot be conceived as a mere practical training of a simpler character than the education offered to the other teachers. The training of nursery school-teachers should include both theory and practice and a close link must be established between theory and practice as well as between educational research and practice.

In the subsequent part of his paper Professor Miarelet made an analysis of the content of the training in particular subjects. The training in psychology should develop not only theoretical knowledge of the various fields of psychology but also a sophisticated feeling for humanity enabling the teacher to comprehend the reasons and motives of children's behaviour. The training in psychology should foster the teacher's effort to develop or promote his own attitudes towards education and teach him how to take full advantage of his knowledge in carrying out his practical psycho-therapeutical tasks.

The preparation of teachers for performing their social tasks should equally combine the knowledge gained at lectures on sociology, micro-sociology and the impact of social environment on man's development, with its practical appli-
cation, which should be reflected in the teacher's ability to participate in a wide range of social educational activity related to children as well as adults.

The content of the training in the theory and practice of education is focused on the main topical problems of education and the basic educational methods with the emphasis on the methods of pre-school education, the knowledge of the procedures and methods of remedial education as well as on the specialized knowledge of the methods, concerning the practical use of the means of expression – dancing, rhythmic gymnastics, drawing, modelling, music and speech.

It is a well-known fact that rather than the knowledge gained in a pre-school institution it is the set of social habits and attitudes that plays the decisive role in the child's success in school, enabling him to integrate into the new way of life. That is why the teacher should above all attempt to develop in a child all the channels through which he may communicate with the material world and the people.

These communication and expression channels are a means of creative work, behaviour shaping and adaptation to the world. At present we are no longer in a position to provide the child with a ready-made set of solutions to the problems he is faced with, for our world is rapidly changing and all the situations a child may come against cannot be estimated or determined beforehand. The child therefore must learn by himself to cope with the problems he encounters with the help of those psychological resources generally or individually available. For this reason pre-school education should develop children's initiative, imagination, inventive powers and creative abilities as well as the habit of seeking solutions to small practical problems of everyday life.

In conclusion, prof. Miarelet pointed out that while formerly the standard of education provided for the educational personnel corresponded to the age of the child and
there was a generally acknowledged principle stating that the lower standard of education the recent concept indicates that this view must needs be radically changed. The training of nursery school-teachers brings about more problems than was generally expected.

In the opinion of prof. Miarelet neither the goals of pre-school education nor the corresponding tasks assigned to teachers with respect to their education have been sufficiently analyzed. It is therefore very useful that attempts are being made at the present meeting to clarify some of the problems and to suggest certain long-term solutions.

The discussion on the theme "Specific problems of the initial training provided for the nursery school teachers in the individual countries" was a follow-up of these two main papers. 19 discussants took part in the discussion. They were from the Soviet Union, German Democratic Republic, People's Republic of Poland, People's Republic of Hungary, Socialist Republic of Rumania, Sweden, Danmark, Belgium and Czechoslovakia. They informed their colleagues about the situation concerning the training provided for nursery school-teachers in their own countries as well as of some specific problems of pre-school education. Detailed information about the present state of these problems in Czechoslovakia was given in the reports on the initial training provided at secondary school level for the nursery school-teachers and on the system of their further education as well as on the development and present state of higher training provided for nursery school-teachers.

The data given were mainly obtained from the questionnaire which all the participants had been sent beforehand. Some of the topical data on the present state of the training provided for nursery school-teachers in the individual countries were then included in the symposium materials and distributed to the participants.
The last day of the symposium was devoted to the papers by Czechoslovak participants bringing information about the state of pre-school education in Czechoslovakia. To obtain a better picture of the situation in Czechoslovakia in this respect foreign visitors had the possibility of visiting a nursery school and other pre-school facilities.

The foreign participants were also acquainted with the share taken by the Czechoslovak socialist culture in teachers' preparation for the work with the youngest. To this end, a panel discussion on the books for the children of pre-school age and a visit to the House of Children's Books attached to the Albatros Publishing House were arranged for them. The guests also watched the performance of a puppet show given by the winners of the National Festival of Professional Theatrical Companies. The puppet show represents an area of long standing in the cultural educational work with the youngest.

The toy belongs among the conspicuous elements of a child's interaction and communication with the surrounding world. For this reason also the exhibition of Czechoslovak toys and aids for nursery schools arranged by the Komensky National Establishment became part of the symposium. It represented a selection of the toys and aids used in nursery schools and day nurseries as well as some of the forthcoming aids which will assist the teacher in carrying out the tasks set by the syllabuses to be newly introduced into the nursery school. The visitors appreciated mainly the high aesthetic standard: exacting workmanship, ingenuity and functional character of the toys. It was generally agreed that this shows an exceptional care and generosity on the part of socialist state in providing the optimum conditions for the education of children in the public pre-school institutions.

This component of the symposium substantiated the fact that the system of initial and further teacher training must
needs include a thorough knowledge of the theory as well as of the practical application of all the means of art to develop a child's all-round personality.

The symposium participants, of whom 30 took part in the discussion, were the representatives of the professional institutions concerned with the questions of teacher training. As this was the first meeting of its kind it was largely conducted in the form of information interchange, terminology confrontation and inventory making of the relevant problems. In this lies the main purpose of the activity at the present stage. Given if all the problems could not be given the same attention owing to their extensive scope and lack of time it was unanimously agreed that the training of educational personnel belongs among the key problems of the further development of preschool establishments and their educational system. The important findings and information obtained at the symposium will be published in the forthcoming proceedings and thus made available to those working on the theory and practice of education.

Maintaining different opinions on the solutions to some problems was not considered to be an obstacle to a further fruitful information exchange. The recommendation for the development of contacts and further cooperation as well as the recommendation for the UNESCO programme were formulated to this effect.

The final resolution acknowledged the usefulness of this first meeting and brought several impulses relevant to further developments in this respect. First of all it is a suggestion to arrange a follow-up to this international symposium focused on some of the narrower aspects of the training provided for the teachers in preschool facilities (e.g. the relation between secondary school and higher studies or the problems of establishing a close link between initial training and the system of the further education of nursery school-teachers).
The recommendation submitted to the UNESCO secretariat, which is of equal importance, puts forward a proposition to give an efficient support to similar events organised in the field of the further education provided for teachers in pre-school establishments and to promote the respective research including mutual international participation in devising specific research projects.

In spite of the fact that as yet there has not been much experience with international co-operation in the field of educational research we may assume that pre-school education provides better conditions for this collaboration than the other levels of the school system, as it is not confined to particular educational objectives to such an extent as the Basic School. It is mainly the teacher’s experience with the educational activity concerning the developing of abilities and skills (motor, creative, musical abilities) that can be mutually confronted and made full advantage of.

If we are to evaluate the significance of the symposium in general we may conclude that it made a definite contribution in many respects. First of all a comprehensive view of the situation in the training provided for the educational personnel in various European countries was obtained and at the same time the contacts with the educators of the individual countries have been established. A fruitful confrontation of the viewpoints, information interchange, the establishment of the working contacts, a friendly atmosphere and good organization ensured that the symposium was a great success and represent a promise as well as a pledge for the forthcoming events.
The European Information Centre for the Further Education of Teachers, Charles University, Prague

The European Information Centre for the Further Education of Teachers was established at the Charles University in Prague as a national information and research institution concerned with the field of the lifelong education of the educational personnel. Its mission is to promote the dissemination of information and exchange of research findings on the European scale with the emphasis on a widespread application of the progressive principles and methods of the sciences of education and on the promotion of the innovation trends in the educational systems.

To be in a position to carry out its tasks with efficiency and to their due extent and depth and taking into account an optimum structure of their organization and methods, it was necessary to outline a long-term programme of its activities paying due regard to the conclusions and recommendations put forward at the recent international meetings and by international agreement such as e.g., the agreement upon an extensive European cooperation in the field of education (Helsinki 1975), negotiations concerning the changes and reinstatement of the teaching qualifications at the 35th Conference on Education (Geneva 1975), The Universal Information UNESCO Programme adopted at the General UNESCO Conference (Nairobi 1976), the conclusions of the 36th International Conference on Education (Geneva 1977) etc.

These events provided the scope for the programme of the activities organized by the European Information Centre
for the Further Education of Teachers. This programme is compiled by the international advisory body established in the form of a conference of advisers on the research and information priorities. At the suggestion of the UNESCO secretariat, resident in Paris, and on the recommendation of the national UNESCO commissions set up in the respective European countries, ten experts in the field of the further education of teachers were selected and convened for their first meeting in Prague in September 1979. The conference was arranged by the European Information Centre for the Further Education of Teachers, whose director conducted the conference proceedings. The advisers were submitted the basic materials and asked to give their opinion on the type of the priority concerning the content and working methods of the activities to be carried out at the European Centre for the Further Education of Teachers during the years 1979 - 1982.

The discussion was focused on the assessment of the specific position of the European Information Centre for the Further Education of Teachers and on the UNESCO possibilities of promoting international co-operation in the given field as well as on the formulation of the concept and problems of the further education of teachers and on the levels of its systems, on the delimitation of the operation area of the information system under preparation within the framework of European countries and finally, on the viewpoints on the research work in the field of the further education of teachers.

The conference participants recommended the investigation of the problems concerning the content, principles and efficiency of the further education of teachers in the individual countries carried out in the form of case studies or thematic studies in co-operation with other countries, which should be given preference over the large-scale research projects which are expensive and yield a relatively
low result, owing to the different national, cultural-historic and political-economic character of the educational systems.

It was further stipulated that the documentation and information supply should precede the research and conference activities so that the content and results of this activity might effectually raise the standard of teachers' lifelong education.

As to the priority measures in the sphere of information the advisers agreed to give the following recommendations:

- to identify the institutions with the relevant information fund providing information services,
- to coordinate these services within the framework of the national, regional and international institutions interested in this activity,
- to raise the effectiveness of providing the information on the further education of teachers by making the sources accessible to all, by data processing and by publishing the bibliography and surveys,
- to make an analysis and evaluation of the tendencies in the development of the systems of the further education of teachers in the individual European countries.

The advisers reached the conclusion that the European Information Centre for the Further Education of Teachers had entered upon the right and useful way in this topical field. The centre was recommended to arrange the next conference of the selected European experts after 1980 to deal with the priorities for the following period. The UNESCO secretariat was recommended to take into account the results of the conference in compiling its own programmes, to take full advantage of the selected activities of the European Information Centre for the Further Education of
Teachers and to support them, and to make use of the conclusions of the present conference in widening the scope of UNESCO activities in the field of the further education of teachers.

The documents and materials from the conference of the selected advisers from European countries dealing with the research and information priorities in the field of the further education of teachers thus stipulate the recommendation of international co-operation in this field both on the part of the UNESCO, the European Information Centre for the Further Education of Teachers and on the part of the other institutions which are interested in this collaboration and received the conference report. They have also made a contribution to the promotion of the information system of the further education of teachers by laying stress on the intensification of the information services with respect to the theme, provenance, source, data processing as well as the user's needs. The documents will also help in unifying and developing the viewpoints and measures taken in the field of teachers' lifelong education in the individual European countries, as well as at the international level.

THE INTERNATIONAL SYMPOSIUM ON THE FURTHER EDUCATION OF SPECIAL SCHOOL TEACHERS (Prague, October 1977)

František Kabela
European Information Centre for the Further Education of teachers, Charles University, Prague

A symposium, with international participation, on the further education of special school teachers was held in

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Prague from 25th to 28th October 1977. It was organized by the European Information Centre for the Further Education of Teachers in collaboration with the Department for the Education of Special School Teachers of the Faculty of Education of Charles University, Prague, and with the participation of the UNESCO secretariat in Paris and the Czechoslovak Commission for Co-operation with UNESCO in Prague. The symposium was attended by a representative of WHO (the World Health Organisation) N. Wagner, and the secretary of EASE (the European Association for Special Education) W. Lund.

The session was opened by the chairman of the preparatory committee of the symposium doc. dr. Svatopluk Petráček, CSc., director of the European Information Centre for the Further Education of Teachers and vice-dean of the Faculty of Education of Charles University, Prague.

The significance of the symposium was stressed by Nils Ivar Sundberg conveying and introductory greeting on behalf of the UNESCO secretariat in Paris. He said that the symposium enabled an exchange of views, knowledge and experience, which may benefit handicapped children and youth throughout Europe. He went on to mention that the topics selected for the symposium were in full accord with the current UNESCO programmes in the field of special education, where great attention is being paid in particular to teachers for handicapped youth. He welcomed this opportunity for his personal participation at the symposium as an occasion for more detailed discussion on this theme.

This symposium was of particular importance to Czechoslovak personnel in the field of special education and in the field of the further education of teachers, particularly special school teachers, since it was being convened at a time when the project for the further development of the Czechoslovak educational system was gradually being implemented.
The co-authors František Kábele and Ludvík Edelesberger took this fact into account as a starting point for the main paper addressed to the symposium. They pointed to the rapid growth of scientific information at the present stage of scientific-technical development, the on-going process of differentiation in scientific fields, and yet their simultaneous integration, as well as more grave factors calling for an urgent need to solve the lifelong education of experts in all areas of scientific work and in social life, in the given case in the field of special educational treatment and the care of handicapped children. In the view of the Soviet Academician Nemyyanov, it is in the integrated scientific disciplines, in the so-called hybrid sciences, that a fruitful development of scientific knowledge takes place at the point of contact of the individual scientific branches.

The project for the further development of the Czechoslovak educational system contains an enumeration of the basic tasks for the further education of educational personnel, which is being carried out in three stages - the adaptation phase, the innovation phase and the specialization phase. The main paper referred to the specific character of the further education of special school teachers. A graduate of basic higher education, embarking on work in a special school for youth with some physical handicap, a sensory defect, mentally retarded or with some behaviour deviation, needs to gain also in this adaptation phase, apart from an initial orientation into the educational work, a narrower specialization in the educational methods peculiar to re-education, compensation and remedial treatment aimed at removing or at least mitigating the consequences of some handicap. Whereas in the basic-higher education for special school teachers specialization is offered only in five basic subjects (ethopedie, psychopedie, logopedie, typhilopedie, comapotopedia), in practice the school system for children requiring special care includes more than twenty types of special...
schools, differentiated according to the types and degree of the handicap and according to the age of the pupils. Taking into account how exacting this adaptation phase is at schools for youth requiring special care it is worth considering whether this phase should not be extended to two years as opposed to schools for normally healthy children, where it is estimated to take one year.

Considering the concept and the mission of the lifelong education of experts of all categories it follows that both components - the under-graduates and post-graduates - must be regarded in close mutual relationship in conceiving the content of their studies.

Further papers followed up this conception, especially the second chief paper presented by W. Lund (Sweden) and another twenty-two contributions. In all a total of twenty-four papers were read at the symposium and six participants entered into the discussion.

W. Lund, the secretary of EASE (the European Association for Special Education) discussed in his paper entitled "The Training of Special School Teachers in West European Countries Now and in the Future" the fundamental problems and postulates for the education of handicapped persons in the Scandinavian and west European countries, and the consequences that emerge for the training of expert personnel. We are above all concerned with the demand for the development of the whole personality of the child suffering from some handicap and enabling all members of the society to enjoy a cultured life, and that applies to less fortunate individuals as well. In the Scandinavian laws this principle is laid down in the demand that education should be organised with a view to the needs, integrity and ability of the individual pupil. Thus the individualization in teaching was confirmed as one of the educational maxims. This principle, however, runs counter to the social demand to train individuals capable of taking their place in advanced specialized
production. This is a conflict between theory and reality, between the wishes of the individual and the requirements of society.

In his lecture, W. Lund went on to deal with the upbringing and education of handicapped persons bearing in mind the following requirements:

- as many handicapped children as possible should be placed in normal schools and classes;
- a handicapped child should receive priority in an integrated reformed school (for healthy and handicapped children) and he should receive sufficient private attention;
- in time special classes and special schools should be abolished, while seriously handicapped children should be given the opportunity of joining special groups conducted by special school teachers;
- instead of classes so-called working units for 50 to 120 pupils should be constituted as a basic organizational form;
- these working units should be led by a team of educators (teachers, psychologists, social workers, supervisors and special school teachers);
- the handicapped children who are members of such a working unit should be organized in small groups and taught by special school teachers;
- at present particular stress is laid in Scandinavian educational theory on the relation between the individual and group (environment).

If all this is to become a reality and not to remain mere theory, then the basic school must be in a position to integrate the majority of handicapped children. Apart from this, though, children suffering from serious handicaps will be educated in special schools, where they will have the possibility of an appropriate training for life in a normal social environment.
The role of the teacher must correspond to these demands. The traditional and essential role of the special school teacher is to provide the handicapped child with qualified aid and train him in a manner enabling him to play his role as a valid member of society. This task was no doubt simpler in the past when it was possible to stipulate in far more unequivocal terms as to what is normal. In today's society, however, the borderline between the handicapped and non-handicapped are rather blurred. We may observe this situation at any school in Europe, especially in industrialized areas, where there are such serious cases of handicapped children in normal schools that the syllabuses cannot be managed without special care.

W. Lund concluded his paper with a report on the resolution adopted at the general assembly of EASE on August 3rd, 1976. This resolution was acclaimed by the personnel responsible for education and by institutions in the whole of Europe, and is couched in the following terms:

Every child is entitled to an education.

The education should provide the individual with the possibility of exercising his abilities and contributing to the society in which he lives.

Continual attention should be devoted to pupils difficulties in learning and behaviour at all schools. It is important to be vigilant all the time for children with various handicaps requiring special care and education.

However handicapped and whatever the special needs such children have a right to the broadest educational facilities.

Wherever children with any kind of handicap or special needs are being brought up a teacher with special school qualifications should be ensured.

Special education is specified according to the different types of handicaps:
a) for children with physical or sensory handicaps,
b) for children with intellectual handicaps and learning difficulties,
c) for neurotic children with behaviour and inter-personal relationship disturbances.

All teachers should be trained to have a certain amount of knowledge about children with special needs, and to have an understanding for their problems.

All teachers of children with any kind of handicap and special needs should undertake post-graduate courses in special educational treatment.

Both main lectures, whose chief points were distributed to the participants before the opening of the symposium, stimulated further papers and aroused discussion among participants from the Czechoslovak Socialist Republic and from foreign countries, e.g. J. Briška on the theoretical-organisational problems of the post-graduate course for special school teachers at the Faculty of Education of the Comenius University in Bratislava, V. Predmersky on the designing of post-graduate courses with a view to the characteristic features of special school teachers, M. Gali on the parallel development of special schools and the further education of special school teachers.

Of the foreign lectures the one that was of particular importance and informative was that given by N. I. Sundberg, representing the UNESCO secretariat in Paris, entitled "UNESCO and the training of teachers for handicapped children". He presented some basic information about the purpose and organization of UNESCO and about the programme for special school education this institution is designing. He reported on achievements, especially on seminars for experts held in various countries. In conclusion he told the symposium participants about the extensive UNESCO publishing programme.
on special school teaching and the education of handicapped children. The symposium participants applauded his address and also the possibility of gaining the above-mentioned information directly from a UNESCO secretariat expert.

The other lectures given by foreign participants were on the whole very instructive and reported on the present state and future tendencies in the further education of special school teachers in the various countries, often in conjunction with the basic studies. Two further characteristic features were apparent in most of these papers; above all in speaking of the demands on the content of special school teachers' training they bore in mind the requirements regarding the qualities of the graduate-teacher responsible for the up-bringing of children suffering from a physical handicap, a handicap of the senses, mentally retarded or maladjusted; secondly, they openly touched upon the problems arising in designing and realizing basic and post-graduate courses for special school teachers. A contribution to the solution of these problems was, for instance, the paper presented by T. Bednářová on the structure and forms of raising the qualifications of special school teachers in the Soviet Union, J. B. Vandoveldt's report on the training of teachers for handicapped children in Belgium, S. Liarecký's on the system of training special school teachers in Poland, W. Baudisch on the current developments in the basic and further education of special school teachers in the GDR, J. Draperson the higher and further special education of teacher in Holland, V. Göllesz on the training of defectologists at the University College of Defectology in Budapest (the oldest European institution of its kind founded in 1900), A. Čurdič on the training of special school teachers at the youngest faculty of its kind of the Belgrade University established only two years ago and following by-and-large the Czecho- Slovak conceptions in this field of special educational treatment. Other lectures and discussion contributions were made
on this theme by Z. Dobrevá speaking on the differentiated
training of special school teachers at the Sophia University,
and in two papers sent, but not presented at the symposium,
by E. Vassness on the care of handicapped children and the
training of special school teachers in Norway and by I. Skov
Jorgensen on the training of special school teachers in Den-
mark.

Other papers by participants from home and abroad dealt
with various aspects of the conception and realization of
the further education of special school teachers. We may in-
clude in this group lectures by L. Edelsberger on the partic-
ipation of the Central Institute for the Education of Edu-
cational Personnel in Prague on the further education of
special school teachers, by J. Vališová on the share of the
Regional Institute of Education in Brno in the further edu-
cation of special school teachers, by M. Řehák on adult
education and the further education of special school teachers
and by Z. Krejbich concerned with the question of logopedic
education for special school teachers. The role of the spe-
cialized journal in the further education of special school
teachers in the Czechoslovak Socialist Republic was the sub-
ject under discussion by J. Stanka, editor of the journal
"Questions of Defectology".

Interesting and stimulating remarks were made on this
theme by some of the foreign participants. K. P. Becker (GDR)
speaking of the principles for designing study plans for the
training of special school teachers, P. Eberhard discussing
the system of the further education of teachers in the GDR,
K. Tyborowská on the forms of post-diploma studies in Poland,
E. Tomasziková on the raising of special school teachers
qualifications with regard to raising difficult children in
Poland and B. Bröse on the unity of teaching and research in
teacher training at special schools in the GDR.

A suitable supplement to the programme were the contri-
butions made to the discussion by P. Ruprecht (GDR) "On the

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criteria of the connection between the basic studies and the further education of special school teachers and the need to educate handicapped children's parents", by A. Tuček, "On the content and specialization of the further education of special school teachers", by F. Kábele "On the importance of educating the parents of handicapped children and on the experience gained with courses for the parents of children suffering from cerebral poliomyelitis", by W. Lund "The need for European co-operation in the care of handicapped children and in training teacher and managing personnel in the field of special pedagogics" and by A. Hulek from Warsaw "The specialized training of teachers and the education of handicapped youth not for the present but for the future role they will play in society."

It is evident from this brief review that in the course of the symposium on the further education of special school teachers extensive material was presented and collected, which, when it has been edited and published in the proceedings will serve as study material for solving these problems.

In the final resolution and recommendation, prepared by the drafting committee consisting of S. Petráček (chairman), K. P. Becker, L. Edelsberger, A. Hulek, F. Kábele, and W. Lund, stress was laid on the responsibility of society for the raising of the qualifications of special school teachers and thus also the social care of handicapped children, further the need for international co-operation and mutual exchange of information in this field in the spirit of the Helsinki agreements and in collaboration with the UNESCO secretariat, EASE and the continued activity of the European Information Centre for the Further Education of Teachers affiliated to Charles University in Prague.
THE INTERNATIONAL SYMPOSIUM ON THE FURTHER EDUCATION OF TEACHERS IN THE USE OF EDUCATIONAL TECHNOLOGY
(PRAGUE, NOVEMBER 1977)

Dana Tollingerová
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The International Symposium on the Further Education of Teachers in the Use of Educational Technology took place in Prague towards the end of 1977 (15th - 18th November). The symposium was organized by the European Information Centre for the Further Education of Teachers affiliated to the Charles University in Prague, in conjunction with the Faculty of Education, Charles University in Prague and the Faculty of Education at Hradec Králové.

The symposium was attended by 38 Czechoslovak and 22 foreign experts from Belgium, Bulgaria, Finland, France, Hungary, the German Democratic Republic, the German Federal Republic, Norway, Poland, Austria and the USSR. Among the foreign participants there was also an official representative of the UNESCO secretariat resident in Paris, Mr. G. Berger, and an official representative of the International Council for Educational Media (ICEM) also resident in Paris, Mr. W. Cappel. Dr. Svatopluk Petrášek, CSc., director of the European Information Centre for the Further Education of Teachers, presided at the symposium, dr. Dana Tollingerová, CSc., scientific secretary of the centre, and its scientific guarantor.

The opening session was attended by the Deputy Minister of Education of the CSR, dr. Karel Čepička, CSc., who gave an account of the present reorganization of the Czechoslovak Education system and of its implications for the initial and in-service teacher-training. The opening of the symposium was also attended by the chairman of the Czech Trade Union
Committee of Educational and Scientific Workers, dr. Ladislav Halberštát, CSc., who gave a report on the various forms of the care given by the trade union to teachers and the improvement of their qualifications. Dr. Milan Jargál, CSc., director of the Central Institute for Teacher Training in Bratislava, informed the participants of the concept of a unified system of the further education of teachers and educational personnel. The information about the new concept of teacher training under preparation at higher educational establishments was given by dr. Jiří Fišer, CSc., Dean of the Faculty of Education of the Charles University.

The symposium was historically as well as conceptually linked up with the results of the preceding international events. They were mainly the 35th International Conference on Education (Geneva 1975), the International Seminar on Educational Technology (Budapest 1976), the International Seminar on Programmed Learning (Tbilisi 1976) and the International Seminar on the Use of Television in the Further Education of Teachers (Warsaw 1977).

The starting-point for the programme of the symposium was the disharmony generally felt between equipping schools with educational media and between their effective use in teaching. This fact particularly applies to the devices of educational technology which have admittedly become, on a large scale, a component of the technical material basis of the process of education, yet they have not substantially affected this process as such. It was pointed out that inadequate teacher training was one of the sources of these difficulties. The main objective of the symposium was to make a contribution to the solution of this problem by exchanging views on the following three groups of themes:

1. The changing role of the teacher in contemporary school.

2. The content, methods and organization forms of the training of teachers in the use of modern educational media.
3. International co-operation in the field of the further education of teachers in the use of modern educational media.

I.

The discussion on the theme on the changing role of the teacher in contemporary school and on the implications resulting from this change for an appropriate integration of modern educational media into the process of education was arranged in the form of a panel discussion. The main points raised at the discussion concerned the general questions of the various roles and functions of the teacher in diverse educational situations, at various levels of the school system, with the children and youth of various ages and in various school subjects. Those kinds of activities were sought in which the teacher cannot be substituted for by educational media but must always act as a human personality. On the other hand, also those kinds of situations were searched in which the educational media may aptly replace some of the teacher’s activities by modelling his "live human work!"

In conclusion, it was unanimously stated that the teacher is a factor that cannot be substituted for in the process of education and the technocratic ways of solving this problem, that is to say a mechanical replacement of the teacher by technology, were rejected. Educational media (even the most perfect ones such as audio-visual and computer technology) are merely a tool in the hands of the teacher. They do not eliminate his work, but make it more intensive, rational or promote its effectiveness in some other way. There is of course one assumption: educational media may become effective aids only in the hands of a well-trained and motivated educator willing to apply them, and knowing how to work with them. Only then they may be naturally integrated into the educational process and positively affect its efficiency.
This positive attitude towards modern educational media together with the appropriate skill to handle them and consciously make use of them in fulfilling the educational objectives do not, however, develop by themselves. Both must be fostered intentionally and systematically not only during the teacher's initial training but also later on throughout his teaching career. For this reason the preparation for the work with modern educational media must become an integral part of teacher training and further education as well as a component of the training provided for the leading educational and inspection personnel of the school administration authorities.

Yet even this will not be sufficient. As the demands made on the use of educational media are increasing and their technical operation and maintenance are becoming more complicated the discussants also suggested that it would be expedient to provide professional assistance for the teachers through specially trained advisers, instructors, technicians or laboratory assistants specialized in the field of educational technology. In this way also the second important source of insufficient use of modern educational media in teaching would be removed, resulting from the changing role of the teacher in contemporary school. It is the exacting manipulation of educational media (inclusive of the preparation of programmes and other bearers of instructional information) which with some of the devices of educational technology is complicated to such a degree that it distracts the teachers from carrying out his educational tasks and changes him into an operator of educational technology.

The third theme concerned with the question how to prevent modern school equipment from becoming an otiose inventory was based on the fact that the role of the teacher in the present conditions exceeds the narrow framework of instruction. The teacher is assigned a number of tasks in the field of up-bringing, particularly in the education apart
from the classroom. He is competent to co-ordinate the educative influence of all the outside school factors of education. Accordingly, the educational media must also exceed the narrow boundaries of school instruction. They must assist the teacher not only in the process of the pupils' cognitive learning but must also have their share in shaping the pupil's personality and promoting their individual imaginative and active work. For that reason educational media must get not only to the hands of the teacher but also to the hands of the pupils as a means of their self-education. The conclusions of the discussion were summed up by Dr. Martin Hargaš (CSSR), rapporteur of this theme.

II.

Twenty speakers took part in the discussion on the content, methods and forms of the training provided for teachers in the use of modern educational media. From Czechoslovakia they were: Jitka Dvořáková, who gave a report on the guidance provided for the teachers in the apprentice-training establishments with a view to modernizing the process of education and promoting their imaginative work; Dušan Hapala, who spoke about the post-graduate training of higher school teachers in the use of modern educational media; Vladimír Harášta, who gave a report on the use of video-recordings in practising the teaching skills; Aleš Chlebeček, who gave an account of the work done in the field of the preparation of teachers for the application of modern educational media at the Central Institute for the Training of Educational Personnel in Prague; Světla Karšíková, who expressed some thoughts on the classroom environment and its impact on the effectiveness of teaching and teacher's work; Štěpán Kolářek, who concentrated on the question of interlinking theory and practice in the training of teachers in designing programmed materials for self-instruction; Jaromír Kopřiva, who gave information about the arrangements made for the introduction of a special course of
studies in educational technology at the Faculty of Education at Brno; Luděk Kouba, who talked about the training of teachers in the application of teaching aids and computer technology; Josef Kubálek who worked out a report on the results achieved in investigating the effectiveness of a set of media in initial teacher training; Oldřich Lepil, who made some comments about the problems of the training of natural science teachers in the application of educational media; Miloš Řešátko, who spoke about the content, methods and forms of teacher training and about an effective use of the material educational media, and Boris Uher, who generalized the experience gained at the Faculty of Arts in Prague, with the initial training of teachers of social science subjects in the application of educational technology. The foreign discussants were the following: Karl Pardl (GDR), who gave information about the initial teacher training in the use of educational media included in the professional studies; Hans Conrad (GDR) gave a report on the initial teacher training at the Leipzig University; Asle Gire Dahl (Norway) spoke about the training provided for teachers in the field of educational media at the teacher training college in Bergen; Peter Flamme (GDR) talked about the application of educational technology in the higher training of prospective teachers; András Nádaszi and Péter Vári (Hungary) gave a report on the role of multimedia sets in the training of teachers in the use of educational technology; Erhard Strobl (Austria) gave an account of the content, methods and forms of the training courses focused on the application of educational media.

This theme was also the topic of the two plenary sessions at which comprehensive reports were given on the present state of the training provided for teachers in the effective use of educational media in selected European countries. Věcelav Stejákal spoke there on the theme "The present state and prospects for the further development of the training courses provided for Czechoslovak teachers in the use of
modern educational media", Erich Müller (CDR) on the theme "The application of educational technology as part of the training and further education of teachers", Tatiana Bednářová (USSR) on the subject "Some problems of the present state and the effective use of educational technology in the soviet general education school", Clive Neville (Great Britain) on the theme "The approach to the training of teachers in the effective use of educational media" and Walter Cappel (ICEM representative) on the theme "Teacher training courses in the use of educational media". It is also necessary to include the report given by Guy Berger informing of the viewpoint held by the UNESCO secretariat (Department for the system, content, methods and technology of teaching) on the topic under discussion.

The discussion on all the reports has shown that the countries participating in the symposium have developed a number of very interesting concepts of higher teacher training and the further education of teachers many of which would deserve to be made widely accessible.

There was a consensus that the methods of teaching assuming the application of educational technology are something quite new for many teachers. For this reason the older teachers in particular feel that they need further training in this respect. However, even those teachers who have already completed a training course in educational technology during their higher studies or attended some other courses in educational technology must needs continue to systematically raise their qualifications as educational technology is making fast progress. They must of necessity receive further education in the field following other syllabuses. Their further education should take up the form of a deeper specialization.

In both cases, that is to say in the training of those who get acquainted with educational technology for the first time and of those teachers who were already acquainted with educational technology in their initial higher training, the
courses provided for their further education must be very specific and include practical examples of the appropriate use of educational technology in the teaching of a particular subject. Only advanced courses may include studies in the general theory of educational media and the technical, sociological, psychological and physiological aspects of this theory. All the discussants were in agreement with this viewpoint. There was, however, no agreement on the optimum balance between theoretical and practical components of the further education of teachers. Neither was there any agreement on how to ensure that the theoretical studies included in the system of the further education of teachers are related to the practice in the classroom.

But whether the training courses in educational technology are more theoretical or more practical they must be very closely related to the teacher's particular subjects. The instructors in the courses in educational technology must have understanding for the conceptual structure and methodology of these subjects. The training courses in educational technology which do not take into account the subject matter and assume that the teacher himself will carry out the application of the knowledge acquired to his own subject have proved everywhere to be little effective.

It was also found important that the lecturers in the training courses in educational technology should themselves have a good command of educational technology and should aptly integrate it into their own lectures as well as into other forms of their work.

The results of the discussion were summarized by Olive Neville (Great Britain), rapporteur of this theme.

III.

Of quite another character was the discussion on the third theme which concerned potential international co-opera-
tion in this field among the European countries. It was arranged as a free discussion and went on at a high level of activity on the part of all who were present. Nine proposals for a potential European co-operation were submitted for discussion and carefully considered. Five proposals were unanimously adopted and included later in the final recommendation of the symposium. These proposals concerned the cooperation in the field of:

- obtaining and disseminating information about the further education of teachers in the use of educational media,
- working out competitive and case studies on the best experience of this training in Europe,
- publishing national or European directories of institutions and persons engaged in this field of education,
- organizing international meetings which would continue in the work begun at the Prague symposium and finally,
- developing audio-visual aids (the so-called audio-visual atlas) which in the form of cassette video-tape recordings would present the best strategies used in the individual countries in introducing educational media into the teaching practice.

The rapporteur who summed up the results was Zoltan Bathory (Hungary).

IV.

During the symposium the following events took place. First it was a meeting with the teachers from the East-Bohemia region arranged in the form of a colloquium at the Faculty of Education at Hradec Králové. The colloquium was opened and conducted by dr. Jindřich Hellberg, CSc., Vice-Dean of the faculty.

The programme of the colloquium was divided into two parts. In the first part prepared by Jiří Nikl the care given by the
Faculty of Education to its graduates by providing various forms of post-graduate studies to those wishing to raise their qualifications in the field of the theory and practice of educational media was shown by giving specific examples of this training. All the reports were accompanied by TV shots of the instruction in the classroom and by the exhibition of do-it-yourself teaching aids produced by the teachers from the Svitavy district.

In the second part of the programme prepared by Jindřich Bim, the teachers in the Faculty of Education demonstrated the application of educational technology, mainly television, to their own teaching and showed how they train their students in the appropriate use of educational media of various types and kinds. These reports were also accompanied by television shots and supplemented by a visit to the television centre of the faculty.

The professional part of the programme of the symposium was also enriched by a visit to the Information and Methodological Centre Komenium, National Establishment, Prague, arranged by Karel Jíra. The guests were shown some selected exhibits as well as the short films and television recordings which the symposium participants had brought along to illustrate their reports in detail. In conclusion, a short film Schola Nova of Czechoslovak production was shown, dealing with the international exhibition of teaching aids, educational technology and school equipment held at Brno in 1975.

V.

In conclusion of the symposium, the final recommendation was unanimously adopted. It was prepared by a group of editors under the guidance of dr. Dana Tollingerová, CSc., who was rapporteur general of the symposium.

The recommendation states that the further education of teachers in the use of modern educational media must
needs be considered as an integral part of lifelong education of teachers and an effort must be made to promote its further development and improvement. The UNESCO secretariat and the respective international organizations concerned with initial training and further education of teachers are therefore recommended to pay due attention to this task. The following activities are considered as priorities:

- bilateral and multilateral co-operation in the field of research and information services,

- collaboration of specialists and their exchange on the basis of respective cultural agreements,

- developing and improving various forms of the further education of teachers in the effective use of modern educational media, and

- further activities aimed at mutually advantageous co-operation among European countries.

All the participating countries were also requested to pay due attention to the identification of the organizations concerned with the problems of the further education of teachers in the use of educational media and to assist in compiling a national or European directory of the most important institutions and experts in this field. They should also attempt to raise the standard of the information provided on the further education of teachers in the use of educational media. They were further asked to make an analysis of the experience in their own country with introducing various forms of the further education of teachers in the use of educational media and to elaborate this experience for example in the form of a comparative or case study describing some of the significant situations, solution models and efficient strategies of the training and further education of teachers in the given field. They were also recommended to organize international monothematic seminars, working sessions and other active forms of exchanging experience gained during the past years.
One part of the final recommendation was addressed directly to the UNESCO secretariat. The symposium participants appealed to UNESCO to design its future programmes with a view to the problems of the further education of teachers in the use of modern educational media and support the proposals for further meetings of experts on the selected questions of this field. The next meeting of this kind, in the opinion of the symposium participants, should take place in five years at the latest.

THE INTERNATIONAL SURVEY

"E EFFECTIVE USE OF EDUCATIONAL MEDIA AND FURTHER EDUCATION OF TEACHERS"

(Praha 1977)

Jiří Táyler
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The applicants for the participation in the International Symposium on the Further Education of Teachers in the Use of Educational Media (a detailed report on this symposium is given in the present proceedings) were sent a questionnaire containing five questions about the use of educational media. The replies to this questionnaire were expected to provide a survey of the use of educational media in various European countries and to indicate the possibilities of their more efficient application in the educational process.

The first item in the questionnaire concerned the relation of the individual participants to the main theme of the symposium.

The second and third questions were related to the organization of the training in the use of educational media in
the individual countries. The second question concentrated on teachers' post-graduate studies whereas the third concerned the further education of teachers or in-service training for teachers. Replies to these two questions were to give detailed information about the number of lessons devoted to the instruction in educational technology and whether there are any specialized courses or whether the respective information applies to other specialist subjects as well, and about the teaching plans and syllabuses, textbooks, teaching methods available, etc.

The results of the questionnaire, unfortunately, did not come up to the authors' expectations. As a rule the replies did not give all the satisfactory information. The same applies to the fourth question (In what way is in-service training of teachers reflected in the use of educational media in the process of education?).

The last question, however, brought a number of interesting replies (What are the negative factors affecting the use of educational media and their impact on the teacher). The request for bibliography which was also made in the questionnaire, was partially fulfilled.

The Symposium on in-service training of teachers in the use of educational media was held in Prague in September 1977 and was attended by 22 experts from various European countries inclusive of the representatives of the UNESCO and ICEM \(^1\) and 34 representatives from Czechoslovakia, including official guests and observers.

Unfortunately, not all the participants from the European countries, except Czechoslovakia, sent their replies to the questionnaire in time, and some failed to send them at all. On the other hand, some of the foreign experts who could not take part in the symposium have sent in their replies to the

\(^1\) the International Council for Educational Media
questionnaire. The total number of the replies obtained from 12 European countries exclusive of Czechoslovakia finally amounted to 28 (including 5 from the socialist countries). The participants from Czechoslovakia submitted 9 replies to the questionnaire.

Several questionnaires have been incomplete and therefore the symposium of November 1977 was used as a base for collecting additional information directly from the participants. Some of the talks about the questionnaire were very interesting and useful and shed a new light on the problem of the use of educational technology.

Besides this, further information sources appeared in the reports given at the symposium and in the discussion comments made during the panel discussion of the symposium.

It may be generally stated that apart from the questionnaire filled in by 28 experts coming from 12 European countries the organizers of the symposium profitted by the talks with some of the symposium participants and by the respective ideas contained in the papers as well as discussions conducted during the symposium and used them as a source of further information in compiling this survey.

So it seems suitable to indicate the total information underlying this survey, and which will be further analyzed, as "replies and further findings".

Replies to the questionnaire and further findings General comments. It is imperative to note that most replies to the questionnaire came from the specialists in school education of whom many have a close personal relation to the use of educational technology in instruction and experience in this respect. Some replies came from the teachers, others from experts in educational media, only a few replies were given by the leading educational officials and one came from an educational sociologist. Several replies came from technical experts who were originally concerned with the development and production of educational technology.
The teachers with personal experience with educational technology taught mainly natural science or languages. This is not surprising as it is a well-known fact that there are subjects closely related to educational technology, such as chemistry, geography or modern language phonetics, whereas in other subjects such as social sciences educational technology is being only gradually applied. (Although it is sometimes argued that the largest extension of educational technology may be expected just in the social science subjects.)

As to the general characteristics of the replies, all of them testify to the authors' positive attitude towards an increasing use of educational technology in schools. These positive attitudes, however, differ in their intensity.

There is a marked difference between the attitudes maintained by the representatives of the science of socialist education and those advocating other trends. Some experts from the latter group share in the opinion that educational technology will substantially alter the school and may even put the teacher in a position widely different from the former one. The attitude maintained by the socialist educators can best be expressed as a conviction that the role of the teacher in the process of education cannot be substituted for and that educational technology used by a well-trained and motivated teacher who continues to raise his qualification may significantly promote the effectiveness of instruction. The use of educational technology is to strengthen and not weaken the key role of the teacher both from the formative as well as informative point of view.

Initial training and further education of teachers. It is neither simple and the less expedient to separate initial teacher training (basic education – leading to a diploma) from the further education of teachers.

The replies to the questionnaire do not provide any exhaustive or precise report on the situation in European
countries concerning the period of the time allotted to instruction in educational technology in teacher training. In initial training there are usually about twelve lessons per term or per two terms, when the teacher gets acquainted with the practical side of teaching his specialist subjects. There is not usually any subject dealing solely with the methodological aspect of educational technology, but the teacher-students are given the necessary technical data on the technology of educational media whenever it is considered to be most convenient and when this information is closely related to the prospective teacher's particular subject and is thus considered to be most motivating. It is, however, indisputable that the share allotted to educational technology in teacher training is modest and rather marginal.

The training in educational technology cannot, of course, include only a limited number of informative lectures and demonstrations. A number of experts are right in arguing that the students in the faculties of education need above all to get acquainted with the use of the technology of educational media in the lectures and practical training given by their educators. A live example is certainly most influential. The question of an optimum period of the time allotted to the training in educational technology can best be answered to the effect that apart from being informed of the technical side of educational technology the students should get acquainted with its use in the instruction given by their educators: there is nothing more attractive than a live example.

Thus, in this respect, the most influential factors affecting the teacher-student's habit of using educational technology are not the experts on educational media or educational technology but rather the teacher-educators in the faculties of education or other institutions, and the respective authorities should make them accept this role and widely use educational technology in their own teaching practice.
A due stress was laid on the fact that the information about educational technology should not be confined to only one particular device or its technical properties, which often serves as an argument for convincing the prospective users of technology that it is a means of a less demanding and easier teaching.

The experts stated that the situation is gradually improving. The new students entering the faculties of education are more technically-minded than their forerunners. Communication media have already become part of social life as well as of the leisure-time of each individual and so the introduction of technology into schools is becoming a common matter.

The main obstacle is evidently the older generation of teachers. The fact that they are substantially less acquainted with the technology prevent them from using it to a larger extent. The task concerning a widespread and immediate use of educational technology will be threatened unless further training of teachers fills in this gap in education which of course does not lie only in supplying the respective information but also in promoting the necessary motivation. And this task cannot be postponed until a new generation of teachers appears.

Some of the experts pointed out that the conservatism of the older generation stems from the fact that the teaching career is usually taken up by women who are said to be

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"... the objectives of initial training and further education of teachers with respect to the use of educational media should not be based on the taxonomy of educational media but rather on the problems approach aimed at developing understanding, analyzing the problems and problem solving so that education would not be lagging behind on account of the new development of educational technology, i.e. by introducing new types of material into the school education system." - From a report prepared by the UNESCO secretariat, Department of the structure, content and methods of education.
less technically-minded than men, to be weighed down by family duties and therefore less liable to make an effort to innovate or bring their teaching up-to-date. Some countries believe to have found a solution by establishing service centres, affiliated to schools, with a technical staff facilitating the teachers' work on the technical side. The teachers, they argue, would then be more willing to use educational technology in teaching, with the assistance of the school education authorities responsible for the appropriate curricula, syllabuses and programmes, and so the original unwillingness to use educational technology would be overcome.

It is a well-known fact that there is no unified system of teacher training in Europe. There is a large number of various forms of education not only in the individual countries in the German Federal Republic. This variety ranges from an absolute autonomy of schools and teachers in Great Britain where diverse forms of in-service training are provided for teachers and where the national institutions such as the Council for Educational Technology have only a stimulating and supporting role, and the experience in Norway and Denmark where the academic institutions providing the further education of teachers—among other subjects also in the use of educational technology—are attributed a decisive influence—up to the institutionalized systems of the further education of teachers prevalent in the socialist countries.

Some of the experience obtained will be described in detail. The Bergen Faculty of Education in Norway provides training in the use of educational technology (Mediapeddagogik) in two types of courses of full-time studies, one lasting a year and the other six months. The training received in these courses qualifies the students for school-broadcasts, production of films or printed materials, and the graduates are in a position to work as school librarians or heads of the centres for education in that country.
The further education of teachers in Norway is also provided by the faculty of education and to a certain extent by the regional faculties and is supported by the National Centre for the further Education of Teachers. These institutions have prepared an extensive programme (ranging from a few days' schooling and a fortnight's summer-school course up to one or two-term study courses) for the training in the use of technology in teaching. The courses include lectures on audio-visual devices, preparation of multimedia sets based on educational technology and practical training in the use of educational media.

The Hungarian National Centre for Educational Technology established with UNESCO assistance is concerned with a large scale project for education. The time allotted to educational technology within the framework of the teacher's specialist subjects in the training of teachers in Hungarian institutions amounts to 60 hours and is extended to two terms of these studies. The courses provide information about the basic technical data on various types of educational media and practical training in their use, but one of the main objectives is to encourage the teachers in their own production and preparation of simple audio-visual aids. The ratio of theory to practice is 40 : 60 in these courses. The same ratio is applied in the further education of teachers.

In Hungary there are twenty centres for the further education of teachers which in conjunction with the National Centre for Educational Technology provide teacher training in the use of educational media. The content of these studies is divided into units consisting of 15 lessons. The following target groups have been set up: headmasters and their deputies, school inspectors, teachers in primary and secondary schools and finally experts on educational media.

The Hungarian experts claim to have achieved positive results in introducing educational technology into the teach-
ing practice in schools. Thanks to the increasing use of multi-
media the slower students have achieved better results; si-
milar conclusions were drawn in Czechoslovakia where the use
of multimedia almost wiped out the difference between the
best and average students.

The further education of teachers in Czechoslovakia is
being systematically organized and covers almost the entire
period of a teacher's career. It consists of three stages:
the adaptation stage during which the young teacher is be-
ing introduced into practical teaching under the guidance
of his more experienced colleagues; the innovation stage
when the teacher gets acquainted with the new developments
in the theory of education with a view to his particular
subjects, and also with the new developments in educational
technology, and finally the specialization stage when the
mature teacher usually attempts to improve his professional
qualification by studying another subject.

In-service education and training of the Czechoslovak
teachers in the use of educational technology is mainly pro-
vided by the regional and district institutes of education
employing experts in the methodology of education.

To give at least one example, the Prague Research In-
nstitute of Education offers in-service training courses con-
sisting of ten three-hours periods mapped out for one school-
year. The training includes ten lessons of the theory of in-
struction, 14 lessons of practical training and the rest is
devoted to specific training in the use of particular tech-
nical educational media. The qualification thus obtained en-
titles the teacher to take up a post as specialist in the
teaching methods in the above mentioned regional or district
institute of education.

The difficulties encumbering the use of educational
technology on a larger scale.
In their replies to the fifth question of the questionnaire the participants were in agreement on the main obstacles to a widespread and more expedient use of educational technology in European primary and secondary schools. The replies may be grouped together according to the following categories: psychological and social reasons, technical and administrative difficulties and lack of information and motivation.

Psychological and social reasons. The conservatism and traditionalism of many teachers were often indicated as the relevant negative factors. It was stated that some teachers refuse to use educational technology at all, others are afraid that it might endanger their position or even their teaching career (which is analogous to the machine-breaking in the 19th century when machines were believed to be the cause of unemployment). The conservatism in some countries is also due to the feminization of the teaching profession. Another common reason lies in the fact that the preparation of the programmes is rather time-consuming unless they are centrally prepared by the school education authorities. Except for the educational technology used for demonstration purposes, which is sometimes believed to be superfluous, the possibilities of a further development of the existing educational technology designed to assist in self-education were welcome.

Technical and administrative difficulties. A widespread use of educational technology is hampered by frequent technical failures in some devices and also by their excessive weight which often discourages the teacher — and a woman teacher above all — from using them.

For this reason the devices should be as light as possible and easy to control. The service centres affiliated to schools would substantially improve the situation and assist in equipping specialized class-rooms with built-in
educational technology. (This method is used in particular in the socialist countries.)

Certain types of educational technology are most suitable for a wider use in smaller groups of pupils and too large classes (30 - 40 students) are considered to be an obstacle, mainly in foreign language teaching. The problem should be solved with a view to the technical as well as administrative side and should receive an adequate financial support.

We should note that the reasons concerning a lack of money or programmes for the use of educational technology did not prevail in the replies to the questionnaire. It is evident that only the school policy efficiently promoting the use of educational technology and providing a sufficient financial support, anticipating the use of educational technology already in the teaching plans and syllabuses and at the same time providing schools with the necessary teaching materials prepared centrally and sold at a moderate price, will best ensure that the use of educational technology will become more widespread.

Lack of information and motivation. A thorough examination of the replies has shown that insufficient education was not very often considered to be an obstacle to a wider use of educational technology.

One of the reasons lies in the fact that the further education of teachers which in some European countries has been institutionalized and provides a source of additional knowledge and motivation does not exist at all or is provided only to a limited extent in the other countries. Its influence has not therefore been fully investigated.

The further education of teachers should not be confined only to imparting knowledge of technology, however important it may be. If educational technology really is to promote the pupils' activity, first the teachers' enthusiasm must be
aroused and inspire them to apply educational technology to a wider extent. This of course goes beyond mere information about the control and operation of the devices and a superficial knowledge of their availability.

A certain propagation of good results achieved in the use of educational technology might also be of some help. Teachers' conferences, meetings, seminars, and newspapers would help, too, in many respects. Getting acquainted with the good results achieved in the teachers' innovation activities has become the main objective of the so-called "teachers' pedagogical readings" of long standing in Czecho-Slovakia.

The further education of teachers should thus not be considered as just another institution but as an effective means of breaking through the teacher's isolation and as a source of innovation, motivation and sound competition among the teachers.
MODERNIZATION OF THE TEACHERS' FURTHER EDUCATION SYSTEM
(Based on the experience from Czechoslovakia, Soviet Union and Poland)

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