

from practice towards articulating theory. I hope that andragogues (practitioners and theoreticians) would find in it useful information for a fuller understanding of certain concepts and views of andragogic theory and practice.

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Part one

Literacy as a Factor of Social and Individual Development and Basic Human Right

Literacy as a Factor of Social and Individual Development

The low level of literacy among certain sections of the population in every country indicates the position of these people in the social division of labour. A low literacy level obstructs the development of human potential. It is indicative of the quality of the life led by these categories of the population.

Research has established that human potential is lost not only due to misuse but also due to disuse. Illiteracy and semiliteracy represent some of the more important aspects of the loss of human potential, which remains artificially obstructed and undeveloped.

Research has also shown that there is a correlation between the spreading of education and low birth rates. Women who have completed elementary school on the average have two children less than those who do not have an elementary education. Nutrition studies have shown that a mother's education can substantially contribute to reducing incapacities of children in their intellectual development and education. Research has shown that lack of protein during embryonic development and in early childhood can have permanent consequences on the mental development of the child. Women play a key role in family planning, in nutrition and consumption and therefore also in the mental development of the child. In spite of these facts, women make use of educational facilities to a much lesser degree than men for the simple reason that there is a much higher percentage of illiteracy or semiliteracy among them compared to men. Teaching women how to read and write and raising the level of their education is thus not only for the benefit of one generation but of generations to come.

Literacy and education on the whole contribute to the bridging of the gap which exists between people and contributes to the exploitation of the intellectual and emotional poverty among people.

Without raising the level of literacy, successful professional education, continuous advancement and refreshment of knowledge are impossible. Literacy is therefore not a factor of "intellectual enlightenment" but is in the function of man's work, his social, family and personal life. In many countries, a rational integration occurs or an interconnection between general and professional education in such a way that the attainment of literacy and skills for carrying out the vital roles in life are interlinked.

The problem of low literacy levels is one of the most important problems faced by modern civilization. In the late 1970s the appearance of a new phe-

nomenon was noted – illiteracy and semiliteracy in the industrially developed countries (the Federal Republic of Germany, Great Britain, Sweden, the United States). It is being emphasized that the new phenomenon is a result of economic and technological transformations, that the problems lie above all with the individual who has failed to maintain and preserve acquired capabilities after leaving school. We cannot agree that the problems are solely with the individual. They must be sought in the education system, its organization, the quality of education, the system of promoting students from one grade to the next, even in secondary schools, in spite of poor literacy quality.

This has forced the industrial countries to take steps with the aim of raising literacy levels. Many countries (particularly the industrially developed) speak of functional literacy, but functional literacy is a dependent variable and is determined on the basis of the cultural, educational and socio-economic circumstances of a given community.

Literacy standards are continuously being raised. Literacy, especially functional literacy, thus appears as a developmental concept. New technology has led to the need for redefining the meaning of literacy. The modern concept of literacy includes visual and audio literacy, computer literacy and overall media literacy. The essence lies in the fact that people have the education and skills needed to enable them to participate effectively and with a new quality in social life, to contribute to its development and to the development of their own potentials. In this context, literacy is viewed as a value and not as a skill. It is a value in the sense that it contributes to the self-fulfillment of the personality and to the continuous enrichment of the individual's life. The value viewed thus forms part of the broader context of culture. In an environment where reading is not considered a value, there are no prospects for literacy to be taken into consideration as a concept.

The Family as a Factor of Literacy

Research and experience have shown that in many environments, what is learned in school is not supplemented or refreshed in family life. Children who do not have the opportunity of seeing older family members engaged in reading activities remain deprived in forming a model of the value of literacy. The supplementing of learning which occurs in the family can by its nature be of a formal or informal character. Active interest in the child's progress in school and in his learning is formal supplementing. The use of books, newspapers, magazines etc. in the family's everyday life is informal supplementing.

Children raised and educated in families where there is little or no reading activity become the next generation of non-readers. The attitudes of adults dictate those of younger generations. The process rarely occurs in the opposite direction. Therefore, no strategy for the spreading of literacy can neglect the family and its key role in the process. Without the active participation of the family, there is no prospect for literacy to become universal.

The school as a Factor of Literacy

Much criticism has been directed at the contemporary school regarding the fulfillment of its function in the field of literacy. Even though we are critical of the work and contribution of the school in spreading literacy and of its overall contribution to social and cultural development, it should nevertheless be said that the school does not act in isolation nor is it an isolated social oasis. What occurs in the school is a precise reflection of developments in society. The school is expected to be a factor of change and yet numerous activities and processes in society obstruct it in fulfilling this function. How can the school spread literacy and stimulate reading interest in an environment where reading is rare? It would be unreasonable to claim that the school cannot act positively in its environment, but if it lacks the support of the community, it will have great difficulties in carrying out its tasks.

It can justifiably be asked to what degree is the school responsible for the low level of literacy. What are the problems which exist in teaching itself? Has scientific thought measured out the right steps in the teaching of reading and writing.

During the 1970s, the concept of the development of communicative capabilities was dominant in the theory of teaching. It was considered that new forms of communication would become dominant and that the influence of written forms would decline. According to this school of thought, communication should be developed above all in verbal language. Pronunciation exercises and practice were believed to obstruct the creative potential of students who should have been encouraged in this direction. The first stages of learning to read and write were considered a "necessary evil" and the period in which students had to acquire basic skills became increasingly shorter. Those who progressed at a slower pace in their learning were brought into a situation to forget reading and writing skills.

Research in adult education shows that slow readers leave school because they have not mastered reading technique. Research should be carried out to es-

establish the negative effects of the concept of the development of communicative capabilities which neglects the mastering of reading and writing skills.

The Work Environment as a Factor of Literacy

People spend a great part of the day carrying out the function of work. The nature and content of work are continuously changing, as a result of which new demands are being imposed on the level and quality of literacy. The role played by employees with regard to participation in the management of work should also be added to this. Advancement at work, retraining, advanced training and refreshment of knowledge require the learning of new skills and a new quality and level of literacy. There are enterprises in certain countries which have introduced numerous programs to stimulate literacy, although they are perhaps not called by name. Of key importance is the question of how to organize the work environment so that it can both be an educational and a cultural environment which stimulates and advances literacy, broadens the educational horizons of its employees and contributes to the advancement of work productivity and of the individual's personality.

Mass Media as Factors of Literacy

Among the mass media, television is of particular importance in advancing literacy. Some research papers emphasize the connection between increased television viewing and a drop in reading activities. Two schools of thought can be noted in literature on the subject. One can be described as optimistic and the other as pessimistic. The optimistic view proceeds from the thesis that television in the life of people makes the obtaining of knowledge and participation in various processes possible, which was previously inconceivable. It provides information on a greater number of problems and brings people and events into the family life. The pessimistic view proceeds from the thesis that television viewing replaces reading and even those who would otherwise read, give it up in preference of viewing, thus combining entertainment with information. People who live in an environment where literacy is not viewed as a particularly important value will, by watching most programs, strengthen this view. Ideal characters who represent for the viewer a model of behaviour towards which he aspires are usually not presented as people who read books. Literacy is not presented as a factor which contributes to the attainment of the ideals of life. Thus television inadvertently supports non-reading.

The two views mentioned above are extremes. The truth probably lies somewhere between these two standpoints. Whether television will become a factor in the development of literacy or whether it will have a negative effect depends largely on the content of the programs broadcast via this medium. We must admit that most programs offered by television leave behind in the minds of the viewers an intellectual wasteland. The bulk of television programs is directed at providing information and entertainment. The educational function of television is neglected. In view of television's powerful influence on the forming of stands among all age categories of viewers, the program orientation should be altered and moved towards education as a human value and include the spreading of awareness on literacy.

To change the state in literacy, an intellectual mobilization is necessary in all countries. The struggle for advancing literacy is in its essence a struggle for people, for their advancement, for the development of the potential he carries in him. It is a struggle for his happiness. A rational and alternative utilization of all the ways and possibilities for acquiring literacy and for expanding and advancing education and culture is therefore necessary. A change in the concept and program orientation of functional literacy is also needed in order to revitalize the concept. The principles of scientific organization of work should be applied in this field and efforts made to ensure the timely training of teachers and their continuous advanced training so that they may be able to introduce and implement innovations and utilize research results.

Only if the problem of literacy becomes an integral part of development policy and education policy can results be achieved in a country. The task is neither of a temporary nature nor is it easy. Its fulfillment must be planned painstakingly, taking into account the needs and potential of every environment.

Correlation of Primary and Work Oriented Professional Education of Young People: Yugoslav Experience

Introduction

The problem of functional illiteracy has been present in Yugoslav educational policy for four past decades. The heavy burden of the past has been explicitly expressed in those parts of Yugoslavia where the network of primary schools has been underdeveloped, so that not all the children could have been involved in the primary education. This is how, in the postwar years, a young generation of illiterate and semi-literate women and men was created. Yugoslav experience shows that the state of literacy cannot be separated from the development of the productive forces of society. Thus in the Yugoslav framework, the maps of underdevelopment of certain regions coincide with the map of insufficient literacy or functional illiteracy. Yugoslav experience shows the correlation between the development of productive forces of the society and cultural and educational level of the population.

Realization of Universal Primary Education

The census from 1981 shows that there is a small percentage of illiterate ones among the young generation. In 1981, there were 0.9 per cent illiterate among those between 10 and 14 years of age; 1.2 per cent between 15 and 19 years of age; 1.7 per cent between those belonging to the group of 20-29 years of age, while there were more than 24.7 per cent illiterate among population of 50 years of age or over. The compulsory eight-year education has given positive results. In all republics and autonomous provinces, the children have been completely included in primary education. However, not all of those enrolled in the primary school finish it on time, due to various reasons. The school itself gets rid of such students when they reach 15 years of age, and they later enroll into a school for primary adult education. In some environments, it is possible to find that 50 per cent of students in schools for primary adult education consist of adolescents dropped out from regular primary school because they did not progress at the anticipated speed. It also should be added that they are the individuals who have lived in unfavorable family circumstances, in poverty, in incomplete families, families with deviant behaviour etc. Most of them were not born in urban envi-

ronments but in rural areas, and during the population migration they found themselves in a new social environment.

The research carried out in Yugoslavia shows that the education up to the level of four classes of primary school does not provide permanent literacy. Those who drop out from primary school before its regular finishing become functionally illiterate again unless they use the skills of reading, writing and calculating. Thus, reversible illiteracy appears possible in a part of the young generation. Reversible illiteracy is often the result of low literacy criterium. The research carried out in Yugoslavia also points to the need to check traditional literacy criteria being implemented during the population census. The reason to do it is the discrepancy between the results obtained in the population census and the realistic, objective state of literacy. Only on the basis of objective criteria it is possible to establish the state of literacy in the given population group.

Yugoslav society is vitally interested in raising the level of literacy, particularly of the work active population, because it is the precondition to acquire and increase the level of professionalism, to enable horizontal and vertical mobility in the work world, to increase productivity and efficiency in carrying out tasks that are to be performed, to take a creative part in self-management as well as to strive for quality of life in the family and meaningful use of free time. In that respect the social orientations are very clear. In all republics and provinces the action committees are formed and programmes to teach adults to read and write are in place. The government bodies as well as social and political organizations are engaged in these tasks as well. But it is not a temporary job. What is at stake is not only to root out illiteracy, but to raise the general educational and professional level of a part of population failing to reach this level in the system of formal education. General adult education at the primary level, that is connected with professional education, is based on a humanistic orientation; it is directed on people and their ways of living; it contributes to self-respect as a personality, as a producer and as a subject managing work, as a person determining the direction of work and responsibility for personal and social development.

The struggle to increase literacy levels is inseparable from the goals of primary education and from the function of primary school. The full inclusion of children in a primary school is the first step toward universal primary education. But, life dialectics are much more complex. Yugoslav experience shows that universal primary education cannot be achieved without increased responsibility, above all, of the primary school as well as of other social forces in the local environment. In practice, the primary schools easily get rid of those who progress slower in learning, or those who present a problem in behaviour. In Yugoslavia, a unique eight-year primary school is established, being a correct concept and long-ranging orientation. However, the uniqueness of primary education should

be understood in a wider sense, because, aside from the programme uniqueness, all other factors such as social, material, personnel, geographic, etc. are not unique. The abstract uniqueness expressed in a common plan and programme is convenient for children living in favorable social and economic conditions, while children not enjoying such conditions lag behind in the process of learning and do not finish primary school on time. Therefore a need arose for organizational and programme diversity, for different ways of acquiring basic education in regular school for children, in primary school for adults, in corresponding courses (for older classes), through inclusion of contents of primary education into programmes of professional education, etc. In the concept of life-long education, the primary school will continue to have a remedial function, a function of making up of what has been left out before.

Various Program Models

The basic problem of functional literacy, as it is seen in Yugoslavia, refers to the curriculum selection and differentiation. Attempts in forming programme curriculum were made as early as in 1960's so as to apply the concept of functional literacy. For the first time the curricula for primary adult education were formed in a new fashion. The subject schedule, as made in primary schools for children, was abandoned so as to introduce the following areas in education: the culture of speech and writing, introduction into aesthetic education, mathematics, natural sciences (including the basics from geography), general technical education, social-and-economic education. Such procedure in curriculum development tends to avoid the classical systematics, encyclopedism, historical thoroughness that are characteristic for programmes intended for general childhood education. In some areas attempts were made to prepare wholistic curricula for the so-called living situations integrating the contents from several scientific areas. It particularly is true in the area of social-and-economic education involving the basic development of social, economic and political systems of Yugoslavia, as well as family, home economics and child upbringing. Such an approach has meant an innovation in the choice of curricula and in its organization, respecting the needs and interests of adult people.

Yugoslav experience shows that it is possible to organize education at primary school level in three different models:

1. Primary education for children of 7-15 years of age;
2. Primary education for adults of 15-18 years of age;
3. Primary education for adults over 18 years of age.

The first model is based on the target and tasks of the compulsory eight-year school including all children between 7 and 15 years of age. Primary adult education (second model) is intended for those who have not acquired complete primary education in the compulsory primary school, because they dropped out from the school earlier, from various reasons. The specific features of programmes for primary adult education are related to programmes for professional education, particularly in the final phases, so as to qualify young people for a given job. There are wide possibilities to combine different professional contents. This model enables parallel obtaining of primary and professional education. At the same time a wider general educational basis is being kept, enabling further education. The education laws passed in the republics and provinces enable such a combination.

Primary education for those over 18 years of age relies even more on the concept of functional literacy and it is directly tied with functions of work and work management. The curriculum represents the combination of general and professional education depending on the nature of work and nature of a role a person plays. Through such approach in contents forming the impression among adults, about abstractedness and unusefulness of primary education is decreased, and their interest for learning increased, which is an essential precondition for success. The directions to achieve primary education according to this model can be very different. Such an approach creates circumstances for increasing number of young people to achieve at the same time both primary and first professional education, and thus to have a possibility to work and further advance and improve.

The reform of mid-level education that has been implemented during the last decade in Yugoslavia brought us to understand that almost 30 per cent of the young generation drops out of high school after the first or second year of studying, not acquiring the necessary knowledge to be included in the work world. The first two years of common general education in the high school represent a great difficulty for some young people. Therefore the correction has been made in educational legislature in the republics and provinces in order to provide lower professional education, namely, the 1st and 2nd degrees of qualification for "simple" and "less simple" jobs in the field of manufacturing and services. The first and second degrees of professional qualifications can be obtained even without complete primary education, provided that the general education is being acquired along with the professional education. Some areas of the economy such as: agriculture, forestry, civil engineering, food industry, leather industry, machine and energy industry, mining, artisanship have great needs for workers to perform simple jobs. A great part of the jobs offered by working organizations in recent years referred to the jobs of less complexity. This is due to

the structure, nature and contents of work in these organizations. On the other hand, there are problems employing young people possessing higher degrees of professional qualifications and higher levels of education, so that they are forced to accept jobs beyond their professional and qualificational level, or they simply have to change their qualifications in order to get less complex jobs from those they have prepared themselves for the formal education system. These contradictions cannot be overcome by education system itself. Changes in economic and social systems are needed.

Yugoslav experience shows that it is necessary to link the work oriented professional education of young people with the needs of working organizations. Education legislation in the republics and provinces enables and encourages such a correlation. The schools for primary and professional education of young and adult people, together with working organizations, prepare plans and programmes for lower professional education. Thus conceived education is correlated not only with the needs of a working organization but with the needs and possibilities of individuals as well. A flexible organization of work oriented primary and professional education exercises an encouraging effect on young people to acquire primary degrees of qualifications and to be included in the work world. Through their inclusion in the work, young people acquire new experience, establish new social connections and relations, include themselves into self-management courses and processes taking place in a working organization. The working organization appears not only as a working, but also as an educational and cultural environment. It supports young people, particularly in connection with creating facilities for learning: through adequate work-shifts, shorter work hours, leave granted to prepare examinations, consultations, shorter seminars, etc. Particular facilities are granted to female workers included in educational process: baby care while they attend the school. The experience is very versatile. Without linking educational institutions and working organizations it would be very difficult to accomplish the idea to integrate primary and professional education of young and adult people. From this concept, specific andragogical and didactical measures result, corresponding to the needs and possibilities of attendants. The teaching process is organized where the attendants live and at times which suit them best. In numerous cases teachers move together with the workers if the nature of work requires it. In seasonal work, a "patronage" teacher is engaged to visit students at their homes and to work with them. At all times the experience acquired in work is respected.

Conclusion

The link between primary and professional education leading to first degrees of qualifications is a reality that is unavoidable in Yugoslav educational practice. In spite of all attempts to avoid dualism in the educational system one cannot deny the fact that all students, due to either social or individual reasons, cannot progress at the same speed. The plans and programmes of primary and mid-level education, particularly their common basis, are formed for an envisaged average. One should not forget that there are students both above and below that average. Work oriented primary education tends to enable those who are slower in learning to finish it, and at the same time to become qualified for less complex jobs so as to be included in the work world. Achieving qualifications for such jobs does not in any way mean that the students will be unable to achieve further progress and acquire higher degrees in qualifications if they have an interest and a capability to do it. Working organizations have a particular role in implementing the integration of primary and professional education of young people in Yugoslav conditions. Only through joint efforts of educational institutions, working and social organizations, it is possible to successfully achieve the concept that has been put forward.

A Review of Research on Functional Literacy in Yugoslavia

In this paper, functional literacy is defined as that educational level comparable to the eight years of schooling required of children in the Yugoslavian elementary system. By contrast elementary adult education (EAE) lasts four years: the first cycle (Grades 1 through 4) lasts 2 years and the second cycle (Grades 5 through 8) 2 more years.

The standard of functional literacy among the adult population of Yugoslavia is unsatisfactory for the economic development of the country. According to the 1961 census, 19.7 per cent of the population age 10 or over were illiterate. Preliminary results of the 1971 census show that there has been little success in raising the standard of literacy in the past decade. A significant proportion of the Yugoslav population has not attained the eighth-grade elementary level, particularly in the economically less developed areas of the country. Hence there is a need to provide elementary education for the adult population, necessarily a long term project.

A new conceptualization of EAE came into being between the years of 1954 and 1958, with the reform of the total educational system. In the course of the sixties this concept of functional literacy has been maintained and is being manifested in new programs and new structures, as well as in selective target audiences and differential strategies in attacking the problems of literacy. This has been concurrent with the development of a department for EAE and special schools for educating adults.

Until 1960 there had been no serious empirical research on the elementary education of adults. This was also true of other areas in adult education. The last decade, however, has been characterized by increased efforts, both individual and collective, toward theoretical and empirical research on all adult education problems, including EAE. The results so far achieved may be regarded as starting points in research orientation. Although these results are rather modest, nevertheless they do reflect a tendency on the part of the research worker to depend less on authoritative pedagogical pronouncements and to use a scientific method to find solutions to EAE problems. Some Yugoslav authors (such as V. Andrilovic, M. Span and others) have concentrated their research efforts on this field.

This review will cover the predominantly empirical research projects carried out from 1961 to 1971, the results of which have been published. In our discussion we will consider the research findings under three major headings:

- I. The conceptualization and organization of EAE;
- II. The participants in EAE;
- III. Teaching problems in EAE.

I. The Conceptualization and Organization of EAE

In this group of studies we have pinpointed several theoretical and empirical research studies. One of these studies, and one of importance, is *The Elementary Education of Adults*.¹

In this theoretical study the conceptualization of functional literacy in Yugoslavia was reported by the Yugoslav Institute for Educational Research as embracing several issues: i.e., the concept of EAE, the relationship between EAE and vocational education, EAE curriculum, organization, structures, testing, teaching methodology and evaluation.

This study embodies a new programming orientation which contains speech and writing related to the field of aesthetics, mathematics, natural science, general technical education, family life and homemaking. Using a new approach to these subjects, each republic in Yugoslavia has determined its own programs in EAE.

For the most part, however, empirical research has dominated and surpassed theoretical research in elementary adult education. Much of this research has been published in the aforementioned study.² Work has been done on the attitudes of participating adults toward the contents of elementary education through studies made of representative samples (N=425) in Serbia, Croatia and Macedonia. These studies reveal that the dominant motive for enrollment in elementary education is the adults' desire for broader general culture in addition to the benefits they hope to gain vocationally by obtaining higher qualifications. It is worth noting that professionally less qualified adults are less interested in broader general culture than the more highly qualified, and also that older students obtain greater practical benefits vocationally through additional elementary education than do the younger students.

The subjects studied expressed a preference for a program of study whose contents would be linked to their vocational requirements and their social needs as well as to their own interests and inclinations.

These adults' attitudes toward teachers' traits were also investigated. From the adult students' point of view, the most important requirements for a good teacher

were as follows: adequate knowledge of the subject matter, interesting teaching methods, equal treatment of students and respect for their personalities, an interest in students' personal problems, and the encouragement of free expression of ideas.

A list of difficulties encountered by adults in EAE was also developed. Prominent on this list was the fact that eighty per cent lacked space and time for home study and also felt that instructions were at times unclear and textbooks lacked accuracy. These difficulties were experienced by virtually all candidates, irrespective of sex, marital status, and number of children.

The Yugoslavian People's Army has also conducted voluminous research in the methodology of EAE. Results have been published in *Investigation into Literature in the Yugoslavian People's Army*.³

This research has made it possible for the first time, in Yugoslavia, to establish a criterion for the quick, easy and accurate identification of illiterates and semi-literates. In the first part of the study⁴ a method was set up for the composition of the test and the test was then used experimentally on a sample of 305 students. A supplementary test for inclusiveness, discrimination, reliability, objectivity, economy and applicability was carried out, with positive findings on all these counts.

The second part of the study tests the literacy of the army recruits of 1961 and 1962. Sixteen per cent of the 1961 recruits and 13.3 per cent of the 1962 recruits who had completed four years of elementary school were found to be illiterate. The research team concluded that education at the fourth grade level does not secure lasting literacy. It was also found that those tested were more proficient in writing than in reading, which led to the conclusion that attention must be given to developing reading ability and comprehension.

V. Andrilovic and V. Spitek examined the relationship between general knowledge (independent variable) and general success in work performance, work versatility and capability for advancement (dependent variable). They tested two groups of workers: unskilled (N = 22) and skilled (N = 17). The aim of the study was to arrive at the essential elements needed to program the general educational curriculum for productive work. Results have been published in "Testing the Relation between the Fund of General Education and Work Traits of Workers in Jobs of Different Natures."⁵ The investigators conclude that "when the aim is the advancement of manual workers and the creation of flexible working power in the framework of similar tasks (horizontal advancement), the greatest proportion of time should be allowed to mathematics, economic and legal subjects and the least amount of time to reading and writing.

In training skilled workers to embark on more sophisticated types of work (vertical advancement) equal numbers of teaching hours should be allotted to the

three areas: conversation (reading) and writing, mathematics, and economic and legal subjects. Until now, reading and writing, in addition to mathematics, have been given the majority of the teaching hours. Economic and legal subjects are taught for a limited amount of time."⁶

II. The Participants in Elementary Adult Education

Beside the statistical analyses of literacy in each of the regions of Yugoslavia, conducted on the basis of the data secured from the population census, and published in various Yugoslav journals, research studies on the composition and participation of adults in areas of elementary education were also carried out.

David Gaon investigated the characteristics of applicants, their motivation, and the possibility of influencing such motivation in the elementary adult education schools of Bosnia and Herzegovina (N = 764). The results are summed up in the paper entitled "Class Structure of Schools for Elementary Adult Education and Motives of Students for Enrolling in These Schools."⁷

Results show that the number of females in the schools for elementary adult education is disproportionately small in relation to the number of illiterate and semi-literate females in this republic. The percentage of workers participating is higher than that of farmers. The most frequent motive among adults for getting full elementary education is "to proceed to vocational education" and "to acquire new knowledge".

The results of research indicate the correlation of adult participation in social activities with the level of their elementary education. Candidates in the first stage of elementary education (Grades 1-4), participate in social activities considerably less than those in the second stage (Grades 5-8).

Joze Valentincic conducted research in the republic of Slovenia and published these results under the title: "Adults in the Elementary Schools."⁸ The sample included 10 per cent of all those attending schools for adult elementary education in Slovenia. The results indicate that all classes are predominantly composed of youths up to the age of eighteen. The number of adults over eighteen is declining slightly. The findings also indicate that a number of children who do not finish elementary schooling enroll later in schools for adult education. The basic motive of these young people for continuing their education in adult schools is the desire to adapt themselves to their environment in the hope that they may acquire suitable qualification for some occupation.

Teachers' reports testify that work with older youth who have dropped out of elementary schooling is more difficult than work in ordinary schools. A greater degree of success is achieved by those teachers who do not regard such young

people as responsible for their failure in the regular elementary school and who help them achieve self-confidence.

Similar research was conducted by Ranko Bulatovic. Results have been published in the study entitled: "A Contribution to the Research on the Characteristics of Applicants for Elementary Adult Education."⁹ The test was applied to a stratified sample (N = 252) in Belgrade. Data were obtained on sex, age, duration of level, amount of income, qualifications, educational attainment of the parents, and place of birth. It was found that the composition of applicants according to sex is proportionate; marital status does not present any obstacle to enrollment in the school; applicants in 63 per cent of the cases belong to rural families; the majority are unskilled workers; ninety per cent of the sample investigated live in large families with up to six members. They also have a shorter working history, minimal income; the educational attainment of their parents varies from 4th to 8th Grade of elementary school, and the majority of them were not born in Belgrade (86 per cent).

Nedeljko Trnavac in his work, "A Successful Attempt at the Discovery of Illiterates Among Adults and Recognition of their Basic Characteristics",¹⁰ describes a method used to identify illiterates in a certain town (Titovo Uzice) in southern Serbia. The instrument used contained: general data, data on family, attitudes toward work and economic status. In this investigation 170 students of teacher training school (IVth and Vth years) took part. They were required to identify all illiterate persons from 15 to 40. Two hundred ninety-two illiterates were identified. The majority (92.3 per cent) were between 30 and 40 years of age. They had moved into town between 1950 and 1960. A very slight proportion of them had been born in town. The illiterates who were identified lived mostly in the suburbs and on the outskirts of the town.

Other data are also relevant. The majority (62.1 per cent) had never enrolled in an elementary school; the second largest group had left school after the second grade. They were dominantly unskilled and semi-skilled workers. Their average monthly income was quite low.

However, this piece of research encountered difficulties. Citizens were not willing to admit that they were illiterate. The reasons given were: "So as not to be sacked from their jobs", "So as not to be reminded of school in the old days", or "Because they are embarrassed to go to school as adults".

From the results achieved through this piece of research, Trnavac draws an-dragogic and methodological implications for educational action.

III. Teaching Problems

Most of the research studies are related to teaching problems in elementary adult education: i.e., learning difficulties of adults, reading problems, value of aspects of work, experimental testing of the effectiveness of different approaches and problems of programmed instruction in elementary adult education. The most encouraging fact is that in general they are experimental pieces of research. This is significant not only from the viewpoint of results obtained, but also from the point of view of developing research methodology in this field. Gradually, through such inquiries, a considerable amount of practical knowledge is being acquired, which is enriching the general fund of knowledge of adult elementary education.

Vlado Andrilovic examined the order of difficulty of subjects in schools for elementary adult education. He compared the subjective assertions of students with an objective list of subjects arranged according to difficulty. The sample included 129 students and the results have been published under the title: "Difficulties of Students in General Elementary Education for Adults."¹¹

According to the opinions of students, chemistry is definitely the most difficult subject. Also, it was shown that there is considerable agreement between subjective and objective difficulty of subject-matter. Chemistry comes out as the most difficult subject and family rearing and housecraft as the easiest. Apart from chemistry, difficult subjects include mathematics, physics, the mother tongue, and community development. Among the easy subjects are: geography, biology and technical drawing.

The main reasons given by the students for difficulties are: lack of time for studying at home, "difficulty of the text itself". "too rapid coverage by some teachers", and an overly detailed text.

Djuka Kosak carried out research on accelerating the learning of reading by adults in elementary school during a period of seven years (N = 705). A test based on a selected text was given at the beginning of the school year, again after five months of work, and finally at the end of the year, and the progress was measured. The author published the results under the title: "The Problem of Reading in Elementary Education."¹²

The researcher concluded that among adults who resumed their schooling, 23.3 per cent had not developed reading ability beyond the third grade level; 40 per cent had reading ability at fourth grade level, and 33.6 per cent read clearly and correctly. When adults resumed schooling after having finished four grades of elementary school they were confronted with reading difficulties. The author found that the majority of slow readers leave school. In the course of seven years, testing at the school where this investigation was carried out revealed that

113 out of 186 (61 per cent) of the adult students whose reading rate was 45-90 words per minute left the school. The author concluded that in elementary adult education there are problems with both oral and silent reading. Adults can achieve better results if they are willing to apply themselves diligently to their studies for a period of two to three years.

Some empirical research is devoted to the issue of setting up curricula for elementary adult education. This is conducted largely in the Institute of Industrial Adult Education, Workers' University "M. Pijade", Zagreb.

V. Andrilovic *et al.* examined the possibility of introducing programmed instruction into schools for elementary adult education. They published the results of their investigation under the title "Programmed Instruction at the Lower Educational Levels."¹³ The experiment was applied to comparable groups. A control group consisted of pupils of one of the grades of an elementary school for children. Those investigated were grouped, on the basis of their achievement results as well as on that of other relevant characteristics. In order to assess gains adequately, an initial test was carried out, followed by a final one. The programmed instructional material "The Concept and Kinds of Triangles" was applied.

On the basis of the results obtained, the authors conclude that those who had less knowledge responded most favorably to use of the programmed instructional material. Also, results achieved by means of programmed material were much better than through ordinary teaching. This material facilitated the attainment of homogeneous results more effectively than ordinary teaching. It has been proved that by using programmed instruction the time needed for mastering the educational theme, "The Concept and Kinds of Triangles," was reduced; but on the other hand, less time was required in ordinary schools for children than in those for adult education.

In another work, V. Andrilovic examined the effectiveness of materials for programmed instruction.¹⁴ In this study he administered the programmed textbook "Economics" to two educational groups. Each group was divided into two subgroups according to intelligence, age, sex, educational level, and acquaintance with the programmed instruction.

Members of one of the subgroups mastered the programmed instructional material in the usual way; i.e., after reading the text and questions they would put down the answers in the space allotted for that purpose. Members of the other subgroup learned by reading the text and questions, "keeping the answers to themselves." In both methods, members of both subgroups got, after giving their answers, reflexive information in the same textbook.

Learning time was measured separately for each individual. A week later, the same members underwent the test collectively.

In accordance with the results obtained, the author concludes that "the type of assignment in programmed instruction should be selected according to the aim to be achieved; the claim that various answers could be obtained in one set of programmed material could be justified, i.e., the material stimulated several ways of achieving the goal. In learning easy material, it was more effective to use an approach which would not involve writing, whereas in learning rather difficult material (where there were few or no suggestions), it was justifiable to use a method which would require writing.

V. Andrilovic crowned his research endeavors in the field of programmed instruction for elementary adult education by a doctoral dissertation which he defended at the University of Belgrade. The research problem of his thesis is "Experimental Testing of the Effect of Reiteration of Knowledge on the Effectiveness of Programmed Instruction in Elementary Education for Adults."¹⁵

This is the first doctoral dissertation devoted to elementary adult education in Yugoslavia. The following problems are tackled in this dissertation: the importance of elementary adult education, characteristics of programmed instruction in relation to the reason for difficulties in elementary adult education, the use of programmed textbooks, theoretical foundations of experimental research, the method of verifying the number of times of reiteration, research results, discussion and conclusions based on experimental research.

The fundamental method of this research on experimentation with comparable groups which are formed from more subgroups (N = 706, with 389 M. and 317 F.), for the purpose of testing six educationally programmed materials, were set up. Following are the general conclusions of this research:

1) The maximum number of times of reiteration in programmed instruction is lower than in ordinary teaching and learning. This does not mean that reiteration in programmed learning should be reduced to the minimum.

2) Through adequately limiting the amount of data reiteration, a significant saving of time for learning could be achieved.

3) The role of reiteration in programmed instruction is different from that in ordinary teaching and learning (orientation, selection time of latency, association etc.).

Some master's dissertations have been devoted to elementary adult education. The master's thesis of Gojko Babic, "Rationalization of Socio-Economic Education from the Point of View of Application of Methods",¹⁶ represents an experimental piece of research in the value of teaching methods in elementary adult education; an examination which was applied to parallel groups (N = 180). In the experimental groups a multiplicity of methods was applied; whereas in the case of control groups only one method was used. Groups were formed according to

intelligence, sex, type of work, age, introductory knowledge. The test was given three times: initially, intermediately and finally.

The researcher concludes that members of the experimental groups achieved better success in socio-economic education with a variety of methods than members of the central group did with one.

The master's thesis by Jurij Jug, entitled "The Functions of Technical and Specialized Museums in Adult Education in Yugoslavia,"¹⁷ relates, in its experimental part, to elementary adult education. The research workers conducted an experiment with parallel groups. There were six groups (N = 199). Three groups were composed of candidates for elementary adult education (N = 103), and three groups of pupils of secondary vocational schools (N = 96). Those investigated were divided into three major groups (A, B, C) and each of them was further divided into two subgroups: youngsters and adults.

Before visiting the museum, the subjects obtained similar results in a test on the subject of "mining". After the museum visit and examination of the exhibit on mining, candidates increased their knowledge of this particular topic by 56.6 per cent. The research worker attempted to redefine the results achieved by modifying the methodological procedures. One group examined the exhibit for 40 minutes, another one examined it for 20 minutes and also viewed a specialized film for 20 minutes while a third group examined the exhibit for 20 minutes and also attended a lecture for 20 minutes. Both the film and the lecture offered the same condensed form of information as the exhibit at the museum. The second and third groups, who attended the film and the lecture respectively, showed a remarkable improvement in knowledge when retested.

There was considerable difference between youngsters and adults. The younger ones acquired knowledge equally by means of the film and the lecture. With regard to the adults, the film did not give better results in learning the content than the usual way of examining the exhibit. However, when the examination of the exhibit was supplemented by the lecture, a significant difference in the amount of content learned by the adults was noted.

Silvije Pongrac, in his master's thesis, "The Function of Oral Examination and Evaluation of Participants in the Process of Elementary Adult Education,"¹⁸ applied many research methods and procedures (a historical-comparative approach, interviews, enquiry, and experimentation with parallel groups in the course of one school year). In accordance with his observations, the analysis of documents on testing and evaluation as well as concluding tests, it was demonstrated that there is a positive correlation between participation in oral examinations and results achieved in education. Recurrent information on the results of adult work during learning proved to be more effective than publicly announced and enlisted judgement.

Djuka Trbuhovic¹⁹ examined the effectiveness of educational papers (teaching papers) in teaching mathematics using a controlled experiment. He formed two experimental groups and one control group.

In the experimental groups the work was done collectively in learning the theory of Pythagoras. The following assignments were given to the experimental groups: a series of exercises of the objective type, the Purdue test of intelligence, teaching papers, and an individual programme for every single person.

According to the results, members of the experimental groups mastered the theory of Pythagoras considerably better than members of the control group. The author's interpretation is that the supervisor's performance is due to: independence in work, application of teaching papers, solving a greater number of exercises, the increased interest of students in such a working method. However, in the experimental groups weaker students exhibited more advancement than good ones, while in the control group the case was the reverse. Members of the experimental groups successfully overcame the difficulties involved in the application of the theory of Pythagoras.

Dusan Savicevic²⁰ examined the attitudes of students toward the most appreciated characteristics of teachers in schools for elementary adult education in Belgrade (N = 170). Prominent among traits which adults appreciate in teachers are good and clear presentation, a sense of humor, approachability, a readiness to explain, impartiality, friendly relations with students, and understanding. These traits correlate with the reported establishment of successful contacts between teachers and adults.

It is worth noting, in this review, that a research project now in progress is entitled "Functional Literacy in Serbia." This project is being undertaken by the Department of Education, University of Belgrade. The leader of this project is Dr. Dusan Savicevic. The aim is to obtain answers to the following questions: Does literacy affect work productivity (in economic life and agriculture)? What influence does literacy have on the geographical and social mobility of the people? How does literacy affect creative participation in self-management? What influence does literacy have on utilization of cultural services for leisure time? The historical dimension of literacy in Serbia will also be examined. Work on this project will last from 3 - 4 years.

Conclusions

Research in the field of functional literacy in Yugoslavia (particularly that of an experimental nature) is in its early stages. Such research consists generally of micropieces of research on separate problems of elementary adult education. It is

encouraging that increasing numbers of young research workers are becoming interested in this type of work, particularly those who are working for their master's and doctor's degrees. Only through interdisciplinary research will a definite body of knowledge be developed which will lead to the establishment of a theory of adult education. Such research has necessarily to be interdisciplinary.

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Cooperation among Non-Aligned and Other Developing Countries in the Field of Literacy: Future Outlooks

Introduction

In the post World War Two period developing countries emerged as new social and political forces on the world-historic scene. Gathered in the Movement of Non-Aligned Countries since the sixties, they also emerged as an important moral force in safeguarding world peace and promoting peaceful settlement of disputes throughout the world. Over the past quarter of the century the number of the Non-Aligned Movement member countries has increased to over a hundred. After World War II many countries were liberated from colonial domination. Nevertheless, the process of decolonization has unfortunately not yet been fully completed. Developing countries of Africa, Asia and America are the largest part of humanity, they account for 67 per cent of the world territory, and over 70 per cent of the world population. In spite of that, their share in the gross world income is only 15 per cent. The economic wealth is concentrated in a small number of countries, while a large part of humanity suffers from want and poverty. Such a state of affairs leads to the widening of the gap between developed and developing countries. Development of capitalism in the world led to even greater subjugation and economic dependency of developing countries, Developing countries in general are characterized by the following:

1. large share of primary production in the overall production;
2. low productivity as a consequence of insufficient utilization of mechanical energy;
3. low national income and nutrition levels;
4. underutilization of natural resources, especially potentials in the rural areas;
5. high birth rates (and still high mortality rates) due to poor family planning;
6. low social status of women;
7. high illiteracy levels.

Literacy and education in developing countries are closely connected to other changes: demographic, economic, political, etc, which influence the decreasing of illiteracy percentages and are related to the quality and volume of education. Thus, for example, accelerated population growth affects the quality of education in developing countries. Population growth rates in the post war period were such that the existing institutions and the economic potential could not provide

education for all who were in need of it, which means that demographic growth was considerably higher than economic and cultural advancement. This is best illustrated by the illiteracy problem in developing countries.

Massive illiteracy and deprivation are the gravest problems facing developing countries. The world map of underdevelopment coincides with the world literacy map, and it goes without saying that underdevelopment and illiteracy go hand in hand. In spite of the fact that in the post world period developing countries scored considerable results in eradicating illiteracy, the absolute numbers of illiterates are increasing, as the result of the accelerated rates of population growth. In 1980, in Asia there were 604,3 million illiterates among the fifteen year olds and over; 152,2 million in Africa, 44,3 million in Latin America and 16,2 million in Europe and North America.

According to UNESCO's assessments in 1985, there were 889 million illiterate people in the world. The break down per regions is illustrated in the table below:

Region	Population aged 15+, 1985 (millions)		
	Total	Literates	Illiterates
WORLD	3,203	2,314	889
Developed countries	931	911	20
Developing countries	2,272	1,403	869
Africa	300	138	162
Asia	1,833	1,168	666
Latin America and the Caribbean	253	209	44
Least developed countries (LDC's)	179	58	121

Source: Unesco Adult Education information notes, No. 4/1985, p. 6.

Modern civilization is facing illiteracy as a global problem and consequence of underdevelopment. Illiteracy constitutes a barrier to further development, because millions of illiterates are unable to partake in development.

Concept of Functional Literacy

Literacy campaigns constitute the major activity in adult education in many countries. Many of them speak of functional literacy. UNESCO played a major role in explaining and accepting the concept of functional literacy. The crux of

this concept lies in the fact that literacy is inextricably linked to the socio-economic development of countries and the progress of individuals and social groups. According to this concept, literacy is closely linked to the functions, discharged, by people: in the process of work, sociopolitical life, family life, as well to the fulfilment of their personality. UNESCO rightfully advocated that learning one's ABCs should not be viewed as an end in itself, but as a means for acquiring other, higher levels of education for the purpose of performing different functions. According to the concept of functional literacy, acquiring knowledge for performing functions and acquiring elementary literacy, do not constitute two separate processes. On the contrary, they are interrelated and constitute an integral whole. The basic principle and the point of departure in functional literacy lies in the integration of reading, writing and basic with professional, socio-economic and health factors.

UNESCO tried to put into effect the concept of functional literacy in developing countries by implementing experimental programmes. Experimental programmes were based on the selection of certain environments (industrial and agricultural) with on-going literacy in general campaigns and closest links between industrial and agricultural development in particular. Such an approach rendered greater possibilities and shortened the time span between investment in literacy and economic effects. The concept of functional literacy brought about a series of novelties of andragogical and methodical nature. Experimental programmes constitute special laboratories for the implementation of novelties. Experience has shown that such an approach to the eradication of illiteracy in developing countries is not perfect. The basic shortcoming relates to the selectivity of the approach. The programmes of functional literacy covered only a small number of people while the needs of developing countries were for greater. Without underestimating the value of experimental programs in functional literacy, it is also necessary to examine the experience of those countries that have organized massive literacy campaigns in view of the changes in the existing socio-economic conditions (Cuba, Tanzania, Cameroon, Burma). Efforts to combat illiteracy, as shown by the experience gained since the mid sixties, must lead to a broad front linking all factors able to contribute to upgrading literacy levels and the universalization of elementary education. Depending on the conditions prevailing in certain developing countries it is desirable to combine selective and massive approaches to the problem of illiteracy. Mobilization of all social forces of a community is necessary. Accordingly, in some countries (Ecuador, Egypt, Iraq), the participation in the literacy process is compulsory. Comparative studies justify the utilization of different ways and approaches in upgrading literacy levels. The experiences in certain countries (Colombia, Venezuela, Mali, Senegal, Nigeria, Brasil, etc.) show that it is possible to utilize mass media (especially

radio and television) in upgrading literacy levels. If illiteracy is to be eradicated before the end of the century, it is necessary to mobilize all available material and human resources, and to make use of all the ways and means for a more successful fulfilment of this task of our civilization.

Basic Education Models

The experience of many developing countries points to the fact that a faster eradication of illiteracy is not possible without the full coverage of children by basic education. Millions of children in the age group from 6 to 11 have not been covered by basic education. This means that efforts to combat illiteracy are indivisible from the attainment of the objective of basic education of children and the functions and tasks of elementary schools. The attainment of those objectives is impeded by underdevelopment, the traditional ways of thinking and life, especially in families. In addition, we are facing the problem as to how to conceive a substantive and organization wise valid model of literacy and universal basic education. The experience of a considerable number of countries proves that there are three models in organizing basic education:

- 1) Basic children education
- 2) Basic adolescent education
- 3) Basic education for persons over 18.

The full coverage of children by elementary education constitutes a first step to universal basic elementary education. However, the coverage of children by elementary schools does not necessarily mean that a 100 per cent of them will complete their elementary education. Many countries witness a considerable number of drop-outs, as soon as the legislation allows that. Thus, the illiterate and semi-illiterate population from among the young generation is increasing. The problem also lies in conceiving a substance corresponding to an imagined average. However, just as there are children above that average, there also are those below the average, ones who advance more slowly than others in learning and education. Elementary school should not so easily let go those who make a slower advancement and have difficulties in learning. Elementary schools must be reformed in line with the philosophy of lifelong education, that would enable organizational and program diversification, utilization of various ways and means of acquiring elementary education.

Elementary education for adolescents up to 18 years of age should be organized and conceived in such a manner so as to enable individuals who did not acquire basic education while attending compulsory elementary school to do that under special programmes. The specific features of those programmes are mani-

fested in their close connection with professional training courses (agriculture science, industry, health, family life and up-bringing of children, etc.). This means that adolescents are offered a literacy framework and courses oriented towards a performance of a particular job or a fuller discharge of their role in social, political or family life. Such programmes should also enable them to continue higher studies.

Programmes of elementary education for persons over 18, even more strongly rely on the concept of functional literacy. They are directly linked to the work function i.e. management of work or functions individuals perform in the family and society or during leisure time. This model requires specific curricula, combinations of general and professional education depending on the nature of work or role to be played by individuals. The ways for acquiring literacy according to this model greatly vary: regular education, correspondence courses with consultations for higher educational levels, combination with radio and television, whereby the media would not only have the animation, but also direct educational function; independent individual work with occasional consultations with teachers and exams. Other variations of this model are also possible. Their value is checked and asserted through creative practice, such as, for example, "patronized" teaching methods, where teachers visit illiterates in their homes two to three times a week and give them impetus for individual work. It is important that as many young people acquire elementary education as possible, which gives them an opportunity to continue their education and professional training. Needs for combating illiteracy in developing countries are paramount and it is indispensable to exert efforts to achieve a rational and creative integration of formal and informal education. In order to achieve such an important objective of our epoch, it is necessary to carry out the reform of the traditional system of education. Assistance from social organizations and impetuses from the working environment are also required: shortening of working hours, granting absence for studying and exam preparation, consultations, shorter seminars, etc. Experience in this field are most diversified. It is necessary to seek best possible ways to achieve a more accelerated dissemination of positive experiences and creative practices to those lacking such experience.

Importance of International Cooperation in the Field of Literacy

The present day world is highly interdependent in the field of economy, technology, science, education, culture, etc. This vitally affects learning and knowledge. Learning from others and with others has become an imperative of our times, and it can well be said that it constitutes a prerequisite for survival. Isolation of

some countries means stagnation and retrogression of individuals and humanity. From this aspect, international cooperation is increasingly important. Ignoring results and experiences of others leads to isolation and ethnocentrism characteristic of the bygone times. Education and culture are, of course, inextricably linked to social and economic relations within a given community. There are large and small communities, developed and less developed ones; some communities are rich in economic potential while others are modest. However, as far as literacy is concerned, in the field of education and culture it is possible to benefit both from the experience of large and small nations alike.

Thanks to UNESCO, over the past two to three decades international cooperation in the field of literacy considerably expanded. International cooperation in this field goes far beyond the framework of the objectives of education and culture and, thus, lead to the promotion of international understanding, respect of human rights, promotion of social and economic development and environmental protection. Therefore, international cooperation among non-aligned and developing countries in the future should be strengthened both bilaterally and multilaterally. UNESCO is a vital factor in coordinating this cooperation. It is understandable that responsibility for the state of affairs in the domain of literacy rests on all countries alike, because each one of them must set priorities, establish targets, adopt and implement literacy and elementary education plans and determine the avenues of bilateral cooperation.

Exchange of experience, contacts and cooperation among countries, will facilitate the attainment of civilization related tasks. Eradication of illiteracy, as one of the key tasks of our time crucially depends on effective international cooperation.

Priorities in the Field of Literacy

The urgency of the task of eradicating illiteracy until the year 2000 and upgrading non-aligned and developing countries general educational levels of the population call on to set priorities. Such cooperation is also needed between developing and developed countries. There are numerous possible areas of cooperation. We believe that the below listed targets should be included among priorities:

1. *Explaining the functional literacy concept* – It has already been pointed out that functional literacy is a changeable value. It is necessary to explain the new understanding of functional literacy as a theoretical concept so that each country could mobilize its material and human potential for its realization. Ex-

change of views, theoretical discussions at simposia, publishing studies in journals could vitally contribute to that end.

2. *Examination of substance and shaping of the model of literacy programmes* – The realization of the concept of functional literacy is closely connected to the shaping of the model and programme of education. Fruitful cooperation can be established in examining substances and models of functional literacy in developing countries. That is even so more necessary, in view of the considerable population mobility within one and the same region. This cooperation would be necessary also with developed countries, due to the fact that a part of the labour force migrates from developing to developed countries.

3. *Models of organization and evaluation of functional literacy* – A considerable number of countries adheres to the traditional approach to the organization and evaluation of literacy. Exchange of experience on modern forms of organization and evaluation of literacy would be especially useful.

4. *Manufacturing of the teaching means and media* – There are great possibilities for cooperation in this area among non-aligned and other developing countries on the one hand, and among developing and developed countries, on the other. Technology enables easier overcoming of language and culture barriers in the manufacture of teaching aids. We are thinking primarily in terms of the manufacture of teaching packages, production of various radio and television programmes, printing of books and other sources, teaching media for education in literacy, as well as the publication of the means aimed at maintaining acquired literacy levels.

5. *Staff training and the exploration of the phenomena of literacy* – This field offers scope for fruitful cooperation among non-aligned and developing countries, and between developing and developed countries. Universities and other institutions of higher learning in developing countries have, over the past two decades, considerably expanded the possibilities for staff training for adult education in under-graduate and post-graduate studies. Those programmes also deal with illiteracy problems. An exchange of experience, programmes and teachers would be useful as well as the establishment of certain regional centres offering assistance to those developing countries lacking conditions for staff training. It would be particularly useful to organize at some universities brief post-graduate courses in staff training in the fields of literacy and adult education. Cooperation in comparative examination of the various aspects of the illiteracy problem is possible and needed. Interdisciplinarity should be the main feature of such examinations: linguistics, sociology, psychology, andragogy, etc. There is no whatsoever reason why in the field of literacy we should not rely on science and science research.

Ways of Cooperation in the Field of Functional Literacy

Different ways of cooperation among non-aligned and developing countries in the field of literacy promotion are possible, both of bilateral as well as multilateral nature. Attaching priority to cooperation in the field of literacy, science and culture in inter-state agreements is of special importance. It would be specially useful to exchange expert in the field of literacy, to launch projects of comparative studies, to produce materials and teaching aids, organize conferences on the problems of literacy, to study modern methods and techniques used in each country, as well as to publish research results and other tests in professional journals.

Cooperation can also focus on the establishment of research as well as documentation and information centres with a view to accelerating dissemination of the most positive knowledge.

Universities and more developed institutions for adult education can play a special role in these activities. Cooperation may also cover industrial and trade enterprises, especially those dealing in the production of printed matter, paper manufacturers and those involved in technologies which can be utilized for an easier dissemination of literacy. Humanitarian and social organizations and trade unions play a special role in bilateral and multilateral cooperation since they deal with workers welfare. Cooperation may also extend to cover mass media in general and radio and television in particular, production of programmes aimed at animation, as well as programmes directly related to literacy teaching. Cooperation may also include staff training production of those programmes. Non-government organizations, particularly those professionally interested in the problem of adult education, such as associations of teachers, associations of professors, associations of institutions dealing in adult education, etc. play an important role in bilateral and multilateral cooperation.

Bilateral cooperation in this field is especially needed among countries with a considerable inflow of migrant workers and their children who need functional literacy and education in order to achieve better integration into the new social and cultural environment. In this respect, past experiences should be studied very carefully.

Marking of the International Literacy Year

Proceeding from the fact that the eradication of illiteracy constitutes one of the most important tasks of the Third United Nations Development Decade, the *International Year of Literacy* can contribute to the mobilization of material and

human resources at national and international levels in order to attain the set targets. Experience shows that selective approaches to literacy are not enough, and that it is necessary to launch national literacy campaigns. The marking of the International Year of Literacy in non-aligned and developing countries should contribute to heightening the awareness of society and individuals of this key problem of today's civilization. In order to channel the marking of the International Year of Literacy, each country should establish a supreme advisory body for literacy with a view to coordinating the efforts within the country. This body should, as a matter of preference, be made up of representatives of government and non-government organizations and institutions. Its task would be to elaborate the plan on the mobilization of material and human resources at local, regional and national levels. The involvement of youth organizations would be of special importance.

Equally important is the mobilization of the public opinion at the international level. In the marking of the International Year of Literacy, it is necessary to develop cooperation between developed and developing countries in expanding activities aimed at the eradication of illiteracy and the achievement of universal basic education. Cooperation is possible in many fields: exchange of information, establishment of regional centres, staff training, research, launching initiatives for collecting the means and resources for literacy classes in areas and regions where illiteracy should be eradicated as a matter of priority. Involvement of individuals, social groups and society as a whole are needed in order to achieve these civilization targets.

Cooperation with UNESCO and Other International Organizations

UNESCO plays the role of key coordinator in cooperation among developing countries in the field of eradication of illiteracy. Non-Aligned countries voiced their strong support to UNESCO at their Harare Summit, and emphasized that "the Non-Aligned Movement reaffirms its full support to the objectives of UNESCO as well as its role as the main and most appropriate universal forum for international cooperation in the field of education, science, culture and information." The importance of the assistance UNESCO has been rendering to non-aligned and other developing countries in the field of eradicating illiteracy and promoting education, in shaping educational policies and reforming educational systems should by no means be neglected. Let us mention, as important examples the regional conferences for Africa, Asia and Latin America, organized with the assistance of UNESCO, where strategies for the eradication of illiteracy, shaping of plans for further action in combating illiteracy were examined.

UNESCO's contribution, i.e. sending experts, ever since the fifties should also be pointed out. However, from the comparative point of view, certain failures were made in this noble goal which should be kept in mind in the future international cooperation. Experts almost always recommended models best suited for their own countries. Most attempts to transmit such experiences had limited success because experts did not study the circumstances (historical, socio-economic, cultural) in the receiving countries, which inevitably led to mistakes and attempts to simply transplant educational experiences from developed into developing countries. From the experience of the sixties and seventies we can learn the lesson which can be useful for future international cooperation. Proceeding from the present stage in development of science emanates the question as to whether selective borrowing in education is possible and theoretically justifiable. According to comparative andragogy, transmission of educational and cultural elements from one sociocultural environment into another presupposes: learning elements, their acceptance by other cultures and their integration into the existing frameworks of education and culture. In order to achieve this, it is necessary to be acquainted with the system of values, and the "spirit of life" of nations and countries which are to receive a foreign educational experience. It is necessary to shape the paradigms and conceptions as to what can and what cannot be transferred into another educational environment. The assistance developed countries are rendering to developing countries in combating illiteracy and improving education merits appreciation. As an example, we would like to mention the involvement of the Association for Adult Education from the Federal Republic of Germany in the activities aimed at promoting literacy in Africa, Asia, and Latin America. One could go on enumerating the examples of other countries. However, the theoretical question is important, i.e. whether the strategy for literacy and the educational system as a whole should be shaped according to educational models in developed countries. Here, we are dealing not only with the philosophy of education but also with the philosophy of development and life of man. Assistance from outside can be useful for a certain period of time, if such experiences are not followed blindly and to the letter. However, developing countries should accept and strengthen the philosophy of self-reliance and also mobilize their own material and human resources,

Developing countries can successfully cooperate with UNESCO in clarifying the concept of literacy, in dissemination of positive experiences and in the establishment of regional centres for the reinvestigation of the literacy phenomenon and adult education on a comparative basis, staff training for this field of work at under-graduate and post-graduate levels. The possibility of establishing a fund under the auspices of UNESCO for research and staff training in developing countries for the production of teaching aids and for the involvement of mass

media in the great task of eradicating illiteracy until the end of the 20th century. Non-aligned and developing countries are vitally interested in supporting the activities of UNESCO and in expanding their mutual cooperation in combating illiteracy and adult education in general through this United Nations Agency. In this context, cooperation with NGOs UNESCO members is of special importance. Here we are primarily thinking in terms of those NGOs whose activities are most closely connected with the problems related to illiteracy and adult education: International Council for Adult Education (ICAE), European Bureau for Adult Education, Asian and South Pacific Bureau for Adult Education (ASPBAE), African Association for Literacy and Adult Education (AALAE), Arab Regional Organization for Literacy, Inter-American Federation for Adult Education (FIAEA) and the Council for Adult Education of Latin America (CEAAL). The majority of these organizations have as their members institutions and less frequently individuals.

Conclusion

Although we are approaching the close of the 20th century, modern civilization is faced with illiteracy as a global problem. It is particularly manifested in developing countries of Asia, Africa, and Latin America, The problem must be looked at in close connection with other factors such as: social, economic, political, demographic, and other factors. Illiteracy constitutes a serious barrier to development of societies and individuals. Eradication of illiteracy is indivisible from the achievement of the objective of elementary education of children. In this respect, it is necessary to resort to various ways and possibilities for achieving the objectives of universal elementary education, combination of selective and global approach to the eradication of illiteracy.

Non-aligned and developing countries are vitally interested in the closest possible cooperation on the implementation of programmes aimed at the eradication of illiteracy until the year 2000. There are numerous areas of cooperation in the area of literacy. It is necessary to mobilize the public opinion at national and international level and enhance the awareness of modern man on the need to mobilize material and human resources in order to ensure access of all to education as the good of mankind. The marking of the International Year of Literacy under the auspices of the United Nations can be an opportune way for the mobilization of public opinion at national and international levels in combating illiteracy. Cooperation among non-aligned and developing countries can evolve both bilaterally and multilaterally. UNESCO and other UN agencies and the NGOs can play a key coordinating role in cooperation in this area, These countries ren-

der their full assistance to the UNESCO objectives. As we approach the eve of the 21st century, the need for such a cooperation will be increasingly manifest. Learning from others and studying with others evolves as a prerequisite for survival of humanity.

International Co-Operation in the Struggle against Functional Illiteracy among Young People

The Importance of International Co-Operation in the Field of Literacy

The contemporary world is characterized by a high degree of interdependence in the areas of economy, technology, science, education and culture which significantly influences humanity's knowledge and learning. Learning from others and with others is an imperative today; a precondition for survival. Isolation for individual countries means stagnation and regression. Within this framework, international co-operation becomes increasingly important; ignoring the experience of others is the very road leading to isolation and ethnocentrism. Naturally, education and culture depend to a significant degree on the surrounding community's social and economic status. There are large and small communities, some developed and some less developed, some with considerable economic potential and others whose economic possibilities are modest. But in the areas of literacy, education and culture, large as well as small nations can be creative.

Unesco deserves credit for its efforts leading to a significant widening of international co-operation in the field of literacy in the last two to three decades. International co-operation here goes beyond the framework of educational and cultural goals, reaching much wider targets, thus contributing to the improvement of international understanding, to respect for human rights, to socio-economic development and to protection of the human environment. International co-operation should therefore be further reinforced in the future, both bilaterally and multilaterally. Unesco has an important role to play in coordinating such co-operation. Naturally, each country is responsible for literacy within its borders and must determine priorities, define goals, draw up and carry out plans for primary school education and teaching illiterate people to read and write, and determine the direction of bilateral co-operation. Carrying out these tasks will be eased through the exchange of experience and through contacts and co-operation with other countries. Eradicating illiteracy, one of the key tasks of our times, depends to a considerable extent on efficient international co-operation.

Priority Areas for Co-Operation in the Field of Literacy

Eradicating illiteracy by the year 2000 and raising the overall level of general education require determining priorities for co-operation among developed as well as developing countries. Possible areas of co-operation are numerous; those listed below are, in our view, priority areas.

1. *Clarifying the concept of functional literacy.* A theoretical concept and a construct of functional literacy are needed to allow each country to individually mobilize its material and human potential. The exchange of ideas, theoretical discussions at symposia and papers in periodicals would be a significant contribution.

2. *Research into literacy contents, model-building and programmes.* Implementing functional literacy involves model-building and education programmes. Research into functional literacy contents and models is a domain in which fruitful co-operation can be established. The mobility of population within some regions is significant in this respect.

3. *Organizing and evaluating functional literacy.* Many countries take a traditional approach to the organization and evaluation of literacy. Exchanging experiences would be particularly useful here.

4. *The production of teaching materials and media.* There is considerable scope here for co-operation among Unesco Member States, thanks to modern technology and today's teaching materials and media which facilitate overcoming language and cultural barriers. We are concerned here with producing teaching packages, specific radio and television programmes, books and other published resources involved in literacy teaching as well as illiteracy retention.

5. *Research and teacher-training.* This area provides many possibilities for fruitful international co-operation. In the last two decades, universities and other academic institutions have opened andragogy departments and initiated teacher-training programmes which include within their ambit literacy. Exchanging experience, programmes and teachers and establishing regional centres to help those countries which at present lack such teacher-training facilities would be useful; short post-graduate university courses to upgrade literacy and adult education teaching personnel would be particularly useful. Co-operation in the area of comparative research dedicated to literacy problems is both possible and necessary. Such research should be interdisciplinary in approach: linguistic, social, psychological, andragogic, etc.

Modes of co-operation

International co-operation may be bilateral or multilateral. At the inter-state level, priority should be given to co-operation in the literacy area. It would be particularly useful to establish a system for expert exchanges in this field, initiate projects for comparative research, produce teaching materials and media, organize conferences on literacy problems, study contemporary methods and techniques in use in each country, and publish research findings and other texts in professional periodicals. Co-operation can also take the form of setting up research and data and information centres concerned with literacy, in order to facilitate and accelerate the dissemination of useful information. Universities and institutions for adult education have particular significance in this effort and co-operation can be organized directly among them. Cooperation may also be extended to include industrial and trade firms, particularly those engaged in the production of printed matter, paper and other technology and media involved in extending literacy. Social and humanitarian organizations, particularly trade unions concerned with raising the level of workers' general education, enjoy a distinctive place in bilateral and multilateral co-operation. Co-operation can involve mass media, particularly radio and television. In bilateral and multilateral co-operation, non-governmental organizations, particularly those professionally interested in problems of adult education (associations of adult educators, teacher associations, associations of institutions for adult education, etc.) also enjoy a special place.

Bilateral co-operation in the field of literacy is particularly vital for those countries with numerous immigrant workers for whom, with their children, functional literacy is vital to ensure their successful integration in their new social and cultural environment. In that regard, considerable attention should be given to the experience gained so far.

Unesco plays a key role in co-ordinating international cooperation in the field of literacy, most particularly where non-governmental organizations are involved i.e. those specifically concerned with problems of literacy and adult education: the International Congress of University Adult Education (ICUAE), the International Council for Adult Education (ICAE), the European Bureau of Adult Education (EBAE), the Asian and South Pacific Bureau of Adult Education (ASPBAE), the African Association for Literacy and Adult Education (AALAE), the Arab Literacy and Adult Education Organization (ARLO), the Inter-American Federation for Adult Education (FIAEA) and the Council for Adult Education in Latin America (CEAAL). Most of these are concerned primarily with institutional members.

Part two

The Relationship between Work and Adult Education