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ABSTRACT

This final report of "Meeting of Experts" summarizes the major issues raised by participants of the spring 1974 UNESCO meeting on the psychological development of children from birth to 6 years of age and implications for the educational process. Five position papers, presented by individuals representing a broad range of interests and expertise in child development and educational administration, formed the background for these discussions and provided the experts with an opportunity to debate many current issues in child development such as language standardization, moral education, informal learning, nutrition, cognitive development, self-concept, teacher role, etc. The conference's conclusions and recommendations are summarized at the end of the report. (CS)

UNITED NATIONS EDUCATIONAL,
SCIENTIFIC AND CULTURAL ORGANIZATION

Final Report
of
Meeting of Experts
on
The Psychological Development of Children
and
Implications for the Educational Process
(Champaign-Urbana, Illinois, U.S.A. 4-9 March 1974)

(ED-74/CONF.623/8)

Introduction

1. This meeting of experts was organized by Unesco to review what is known about the development of young children from birth to six years of age, and the implications of this knowledge for the educational process. It was convened at the Levis Faculty Center, University of Illinois, Champaign-Urbana, U.S.A. from 4 to 9 March 1974. The meeting was the first of three planned for 1974 for the purpose of discussing the problems related to the structures of pre-school, primary and secondary education, as a contribution to the common (world-wide?) effort towards the renovation of systems of education.

2. The participants in this meeting were distinguished individuals representing a broad range of interests and expertise in child development and educational administration (See Annex I for list of participants and observers.)

3. Five position papers were prepared for the meeting for use as background material for the discussions:

Dr A. Babs Fafunwa prepared a paper on the development of African children and implications for educational programmes in developing countries;

Dr Geoffrey P. Ivimey presented a paper on the ways children acquire linguistic skills;

Professor Halbert E. Robinson wrote about the psychological development of children in developed countries and implications for the design of educational programmes;

Dr Tamas Varga prepared a paper on how children learn to think abstractly, with particular attention to the development of mathematical skills;

Professor A. V. Zaporozhets of the Academy of Pedagogical Sciences in Moscow (who was unable to attend the meeting) prepared a paper on "The Role of the State and the Family in the Education and Development of Children of Pre-school Age".

4. The introductory discussion (Agenda Item 3) opened with the presentation of the Secretariat Working Document ED-74/CONF/623/3. The purpose of the meeting was outlined and a general plan of work was proposed. The Secretariat identified the principal issues raised by the five papers prepared especially for this consultation. Areas of agreement and of controversy in the field of child development were identified, and some suggestions were offered about possible outcomes of the meeting. The Secretariat emphasized that the debates should be balanced between a discussion of what is known about the psychological development of young children, from birth to age six, and the implication of that knowledge for the educational process.

5. Under Agenda Item 4, the papers of Robinson, Fafunwa and Zaporozhets were presented by the authors (except for the latter who was unfortunately unable to take part in the meeting). These provided background information on the state of research and knowledge about the psychological development of young children in three cultural settings, the U.S.A., Nigeria and the Soviet Union. The discussion of these papers provided the experts with an opportunity to debate many current issues in child development. The discussions were wide-ranging and are summarized briefly below:

6. Some participants who were trained as psychologists, expressed doubts as to whether psychologists were qualified to give advice on the implications of current knowledge about early child development for the organization of the educational process. They asked in what ways psychologists can be useful to educators. Can they help to improve the educational process while respecting the cultural traditions of developing countries? Although these doubts were not resolved, many participants thought that psychologists could be helpful in suggesting educational strategies to achieve goals established by the community in question. And they could help evaluate educational programmes and undertake research focussed on the learners.

7. Several participants stressed that the potential contribution of psychologists (90% of whom work in Europe and North America) is rather restricted. Psychologists should focus on research which clarifies the ways children come to grips with their cultures. They should identify the best ways of reaching goals which should be selected by the assisted population. In this connection, one participant expressed his concern that psychological research results should be shared more widely, particularly with school administrators, teachers and parents. Many speakers emphasized our relative lack of knowledge about child development in different cultural settings. They felt a need for more cross-cultural research, in spite of the serious conceptual and methodological problems involved. There was a plan for the coordination of ongoing research through clearing houses for the exchange of information. For instance, regional cooperative research centres might be established in Africa, Asia and Latin America which specialize in child development.

8. There was a rich discussion on the importance of the family, especially in developing countries. Several participants noted that Government support to families might be improved by coordinating the activities of all agencies concerned with health, education and welfare. It was suggested that child-parent centres should be created at the local level where all family support services could be provided at one place.

9. The plight of the young child and his family in some developing countries was dramatically described by an observer from UNICEF. The desperate problem of survival can be understood when we learn that 20 million children less than five years old die each year, and that 20 to 45 percent of all children in developing countries suffer from malnutrition. The full responsibility of rearing the child falls on the mother since the father is often absent, or plays no active role in rearing his children. The mother is so overwhelmed with work that she cannot provide for all of her child's needs. The observer concluded that our only hope of assisting children in such hopeless conditions is by helping the mother. We must lighten her work-load and help her to acquire the knowledge and skills required for effective parenting.

10. Most participants agreed that decision-making about education in a community should be widely shared. Policy decisions about education are political questions, and should not be made by educational specialists alone.

11. Many developing countries have been influenced in creating systems of education, by the values and assumptions which underlie European and North American education. Several experts warned of the tensions and conflicts which are created when local cultural values and traditions are not taken into account. Great care must be exercised to ensure that the community in question is not threatened by educational changes and that a supportive constituency is developed as a part of any reform strategy.

12. One speaker drew attention to the importance of providing appropriate physical and human environments to promote the cognitive development of young children. He argued for more space for children's play, more opportunities for informal learning, and more interaction with appropriate adults. In this connexion, he said that being a good parent not only requires enormous dedication, but also that most parents need help in the task. He suggested that programmes were needed in most communities for teaching or guiding parents to care for their children.

13. Some participants questioned the assumption that children should become increasingly responsible for directing their own education. They argued that many developing countries which are striving to change aspects of traditional culture, want teachers and administrators to be more directive, more structured in order to create technological societies. Most experts agree that there is bound to be tension in times of rapid societal change, and that new and old communities and practices must coexist. Schools may have to counteract some aspects of traditional family life; they may need to challenge the traditional authority structure of the community. For example, some participants asked if the elders of the community were the proper arbiters of moral value and the guardians of wisdom ? To what extent should these traditions be retained and reinforced by an improved system of education ? Many participants concluded that educators and psychologists are not the proper decision-makers in such issues.

14. The participants seemed to agree that some things must be taught, and others can be learned through casual, unstructured experience. Children need opportunities to freely explore and experience environment as a necessary preparation for subsequent formal study. They need concrete experience as a foundation for learning abstract concepts. Thus, unstructured, informal learning should be combined with formal methods, although the particular mixture of these modes depends on the local setting and the special needs of the learners.

15. No consensus was achieved on the use of vernacular languages (the maternal language) as the primary vehicle of instruction. This complex issue does not seem to have been fully clarified by research. In multi-lingual societies, it is often impossible to provide schooling in all the dialects and backgrounds used by the students, and unwritten languages pose special problems. Some experts feared that use of the vernacular languages as the languages of instruction at school might lead to the cultural isolation and immobility of the learner. On the other hand, others stressed the negative effects of plunging a young child into a formal school situation in which he could not understand the language of instruction.

16. Concerning the problem of transition from the informal patterns of learning at home to the formal arrangements of primary school, the participants felt that psychologists could identify ways in which these transitions violate the principle of continuous psycho-social development. Moreover, there was general agreement that psychologists could probably suggest practical ways to facilitate the transition from home to school. But some participants asked whether there exist empirical studies which show that the articulation problem would be solved by helping parents to do a better job. This was recognised as a valid, reasonable question, but was not answered.

17. Some participants noted that the existence of standards in formal schools (expected levels of achievement) are not consistent with the concept that all children are different, that they develop at different rates, and that the school should adapt to the child's individual differences. These standards are often arbitrary and have profound consequences for the way in which we arrange learning experiences. It is one thing to believe that all children should acquire certain cognitive and social skills, but it is another proposition to set a rigid time schedule, or calendar for their acquisition. These speakers feared that scheduled learning was insensitive to the capacities and readiness of the individual child.

18. One expert went on to stress that schooling should be based upon positive reinforcement. The difference between success and failure in school is largely arbitrary, and it is accepted that success builds confidence and motivation for further learning. A school system which is designed to fail a certain number of students, which requires that a year's work be repeated, is a system which frustrates the child and lowers his self-image. It encourages children to abandon school. The expert argued that no amount of change in the pre-school experience of the child would solve this formal school problem. We must, he argued, make the school experience more satisfying and less frustrating. The school must be adapted to serve the children; children should not be changed to fit the school.

19. Professor Fafunwa's paper calls for "a school system for the developing countries which will allow children to learn at their own pace, regardless of age, sex or area of specialization". He sees this as a direct implication of existing research on the psychology of the young child. Individualized instruction and non-graded schools (no arbitrary standards of achievement) are needed to meet the child's most fundamental needs. All participants agreed that education is a continuous process, like child development, and that dislocation, or discontinuities, should be avoided. The experts agreed that parents need help to assure the continuous learning of their own children.

20. There was general agreement that the psycho-motor development of the child determines to a large extent the manner in which he adapts to his environment. Since this development varies widely in children, there is no simple prescription or set of expectations which teachers and school administrators can use, even within the same community or cultural groups. Children of different ages, in different societies, require widely different educational provisions. There are apparently no convenient guidelines to help the educator in his complex task of designing appropriate experiences for the individual learner.

21. The group was concerned about the ways in which different societies transmit moral values and basic assumptions to their children. Even when there is broad agreement within a society or community, about values and assumptions, the experts noted that there are many ways in which the transmission process takes place. Since this problem is of fundamental importance, the experts agreed that further study of a cross cultural nature would be helpful.

22. The experts discussed the question of whether pre-school education should be organized for younger children in developing countries. Some experts suggested that the primary and secondary provisions were incomplete in most of these countries and that pre-school education was not as important as assuring primary schooling for all children. When the policy decision to provide pre-school education is made, psychologists and educators should advise governments by suggesting methods and structures which are theoretically sound. Moreover, they can help in designing evaluative procedures, and offer advice about priorities as they see them.

23. The experts asked if there was any evidence that psychological knowledge about the child and the learning process can be applied in the classroom. There was a suggestion in raising the issue, that much psychological research is theoretical rather than practical and has not been applied. Most participants rejected this view. It was pointed out that many psychologists are also educators and deeply concerned with the practical impact of their work. The problem of improving the teaching-learning situation is critical and broad. A great deal of our psychological knowledge is applicable. Moreover, it was argued, if psychologists cannot help in this area, who is better qualified to do so? Even if our present knowledge is limited, partial understanding of psychological development and learning is better than none. Examples of recent developments based on psychological research include programmed learning, modern (new) mathematics curricula, and new science curricula and methods of teaching. Recent studies of linguistics have been well utilized in the education of deaf children in the Netherlands. Compensatory education programmes in the United States and United Kingdom have been based upon research on young children (the instructional T.V. programme, Sesame Street). However, the experts agreed that none of these innovations have been fully evaluated to date.

24. The question of accelerating the process of child development, particularly cognitive development was thoroughly discussed. The experts asked if acceleration was possible and if it was desirable. There was some doubt about the meaning of acceleration. Research seems to indicate children in some societies are learning more at an earlier age than their parents or their grandparents. However, other experts described acceleration as intervention designed to speed up the acquisition of certain knowledge and skills over what would have been acquired without intervention. The concensus seemed to be that acceleration was possible, but much less important from the societal point of view than the prevention of retardation. Some experts pointed out that while acceleration is difficult to demonstrate scientifically, retardation or falling behind the norms for a society, is all too easy to identify.

25. The participants called for evidence that experiential deficits in early childhood lead to irreversible damage in the learning processes of children. The consensus was that the deficits experienced by most children in the early years, excluding extreme cases of deprivation, can probably be treated and improved, at least theoretically. But unfortunately, the conditions of deprivation usually continue, such as poverty, malnutrition, sickness, and lack of interaction with parents or other adults. The resources needed to treat deprived children and to deal with complex, accummulated, learning deficits simply do not exist in most communities. Therefore, the experts tended to agree that, in practice, the damage suffered by very young children tends to be irreversible.

26. The participants agreed that the first three background papers by Robinson, Fafunwa and Zaporozhets indicated that changes in the educational process should be planned as a part of a broader approach to improve child health and nutrition; that child development is continuous; that parents are critically important to the early education of the child; that programmes to promote better child development should take full account of local customs and culture, and use locally available materials, etc.; that parents need to be guided and assisted in raising their children.

27. Discussion of Agenda Item 5 centred on the presentation of a paper by Professor Tamas Varga on the development of mathematical concepts in young children, and a paper on the child's acquisition of linguistic skills by Geoffrey Ivimey. The central question in both cases was what implications can be drawn from our present knowledge of psychological development in these two special areas, for the arrangement of subsequent learning experiences.

28. Professor Varga noted that the growing importance of mathematical thinking was closely linked to the development of the computer and computer based technology. He expected that the computer and its widespread use will promote many changes in our view of mathematics. Especially since the quality and versatility of computers was rapidly increasing while their cost was diminishing, he anticipated, that even developing countries would soon benefit from this new technology.

29. Professor Varga agreed that there are some doubts and valid criticisms of the New Mathematics programmes, and that not all the new departures have been sound or successful. He stressed that some critics seem to view mathematics as a one-dimensional continuum with traditional maths at one end of the spectrum and New Maths at the other. They seemed to indicate that we may have moved too far in the New Maths direction and that a compromise between New and traditional should be struck. On the other hand, Dr Varga said that contemporary psychology suggests an even more radical departure from traditional practice. And contemporary mathematical thinking supports the need for fundamental reforms of the mathematical curricula.

30. The model curriculum which is emerging could be described as "mathematics as a whole". Instead of studying a series of carefully ordered topics like beads on a string for several years, each topic is now seen as an aspect or facet of mathematics, which is present in a child's thinking at a very early age. This view, Varga explained, implies that all important mathematical concepts can and should be learned starting in early childhood. This corresponds to existing theories that children learn probabilistic thinking, spatial thinking, sequential-functional processes, logical processes, concept of number, etc. starting from experiences in early childhood.

31. The participants discussed the role of learning materials or apparatus used in the teaching of maths and science. Although no-one advocated a return to "chalk and talk" methods of teaching, it was clear that these materials have no value in themselves, but only as they are wisely used. The act of exploring as a method of developing scientific attitudes was seen as a major goal in the study of mathematics. The feedback to the child from his own interaction with concrete things is more important for his learning than feedback from the teacher in maths and science learning.

32. There was some controversy about the potential usefulness of a relatively untrained teacher in the classroom. Whereas in England sixteen or seventeen years of schooling is considered by some critics as inadequate preparation for teaching, in certain developing countries many teachers have no more than four years of education when they enter the classroom as a teacher. Some participants suggested that raising the level of teacher training should have the highest priority, while others felt that the teacher's attitude towards children may be more important than the length of his formal training.

33. Broad agreement was reached that the educational process should be in harmony with the spontaneous development of the child. Mathematical learning should be based on the pattern of learning established by the child in the pre-school years, in his play, in spontaneous organization of materials, in games, etc. Schools should seek to maximize the child's contacts with reality, and provide him with a rich set of experiences which encourage him to explore, to question, to organize. This implies that the child's environment, especially in the pre-school years, is of primary importance for his development.

34. In presenting his paper on the development of linguistic skills in very young children, Dr Ivimey expanded on his written text. He presented a model for learning a language that could be applied to other forms of growth and development. He postulated a number of cognitive functions existing in the child from birth. The child applies these functional universals to sets of experiential data, each of which is marked by unique features and by other features which recur in similar experiences.

35. By a process of induction , the child comes to abstract these regularities of experience and to integrate them into a set of rules or schemata, appropriate to the experiences involved. These schemata then become part of the cognitive functions that the child uses in further interactions with sets of experience-data. The oft-repeated statement that development is a continuum may well reflect the regular nature of experience; when a child has formed some rule on the basis of this experience, the experiences themselves do not normally change suddenly. They continue very much as before; the child merely approaches them from a different standpoint.

36. Within the vague formulation, Ivimey said it was possible to notice the application of what appears to be a common strategy:

1. There is an initial period of observation and rote learning. The naive learner does not yet know what is relevant and what may be safely ignored. Any or every aspect of any experience might be critical. At a later stage, developing schemata enable the child to focus on significant features of his experience; learning becomes more rapid and more finely focussed.

2. On the basis of more frequent (or possibly more salient) features the child abstracts a partial rule.

3. He uses his partial rule to guide his own behaviour and to understand the behaviour of others.

4. The child gradually adds refinement and discrimination to his rules. These internalized rules approximate more and more closely to the increasingly closer external data, a process very similar to Piaget's equilibration.

37. Some signs indicate that the period of observation and rote learning may be comparatively lengthy and that the child needs to reach a threshold. Before he can do this, he cannot be said to have formed a rule. Once the threshold is passed, however, the rule can be applied to a wide range of data.

38. The sets of experience involved in the process are not merely linguistic, but may include problem-solving, skill-learning, value-learning, social learning, and so on. This point has two important implications.

1. In a natural setting, the child constructs many sets of rules in parallel: problem-solving situations involve value judgments and are usually accompanied by language. It may be this that underlies Robinson's probably correct statement that "emotional and social development are not necessarily inhibited through efforts to enhance cognitive development". The distinction between intellect and orexis, or cognitive learning and creativity is probably false and may have done a disservice to many children.

2. The associative links between various sets of schemata constructed in parallel may introduce many interference effects hitherto unrecognized in laboratory studies, which seek to avoid such unwanted"contaminations". It may be this that makes many laboratory-based findings seem unreal to teachers and other laymen. The experiment has been so artificial that it does not seem to refer to real children at all.

39. Several sets of evidence were discussed that seem to support the Ivimey model. These were mainly linguistic and arose from the problems of handicapped children, but other forms of rule construction were not excluded. Much previous work in concept formation would appear to be interpretable in terms of the Ivimey model. Of particular interest was the suggestion that, faced with a totally new set of experiences, adults and children often appear to use similar strategies and to pass through similar stages in the construction of their schemata.

40. Dr. Ivimey made the following suggestions which might be used by teachers in developing countries:

1. The model leans heavily on two concepts: (a) the need for experience preceding and accompanying learning, and (b) the need to encourage the learner to be active. Even when a school system encourages a generally passive approach, learners may, in fact, be active, but active in wrong ways. Teachers present material in the hopes that children may learn different things from the same lesson; their processes of active role construction may have been divergent, or they may have based their inductions on irrelevant features of the learning situation.

2. Teachers should conceive of their role in a new way. Since, in fact, their ability to teach is usually rather limited, they may more profitably concentrate on trying to create an environment which is rich in experiential opportunities and marked by some kind of order or structure. These two characteristics may sometimes conflict with each other.

3. Teachers today should give more attention to creating motivation and maintaining morale. In addition, they must pay increased attention to techniques for eliciting required behaviour from their pupils. To assess the skills, knowledge and attitudes, etc. of their pupils only on the basis of performance may give false results. There is evidence that some children may have rich and well-structured competencies which are not reflected in actual performance, since this is often influenced by what pupils and teachers expect and by what teachers reinforce or try to extinguish.

4. The actual technique of teaching may be less important than has generally been taught. Some children acquire a rich education under formal conditions, while others fail. Equally, some children fall under the more modern conditions with all available technological support, while others succeed. Once more, we see the principle in operation; no matter what the teacher does, it is the learner who must learn. It may be that successful teachers are marked more by sensitivity and enthusiasm than by high levels of knowledge (although these are desirable). If this should be true, then there is a good possibility that, with special guidance, parents, and teachers of limited personal education, may fulfil very useful functions in developing countries.

Conclusions

41. In the light of the foregoing discussions, the experts agreed that the following aspects of existing knowledge of the psychological development of young children were of primary importance:

1. The appropriate goal of the educational process is the overall development of the child, cognitive, emotional, social and physical. These aspects are closely related. However, emphasis on cognitive development does not retard or adversely affect development in other areas. Indeed, effective teaching in the cognitive domain enhances the child's social, emotional and physical growth.

2. The period from birth to age six is characterized by the rapid physical and psychological development of the child. While this growth is continuous from birth to adulthood, the period of early childhood is especially important in establishing his basic pattern of development: especially during the first three years of life, the central nervous system develops rapidly and is dependent upon the biological, psychological and cultural environment. By controlling or managing this environment, the child's psychological development can be influenced. To this end, interdisciplinary studies of the many aspects of development, psychological, physiological, sociological, medical and educational can contribute to the optimal development of all children.

3. Children should be actively involved in the learning process. They are assiduous explorers and exploiters of the physical and social worlds in which they grow up, constantly seeking new challenges and new solutions to the problems they encounter. The family, the community, and the educational system all share the responsibility for providing a broad exposure to a variety of experiences and problems of life. Children need to be challenged and guided toward effective solutions to the problems they encounter. Meaningful interaction with adults, whether parents, friends or teachers, is a necessary part of the child's early experience and helps him to integrate new experiences with past knowledge.

4. Since the development of children proceeds in a unitary or wholistic manner, it is imperative that those services which seek to foster the development of children be integrated. Service agencies in the separate but interrelated areas of health, education, and welfare must be coordinated. To achieve this integration, coordination of services affecting the child at the national, regional and local levels should be promoted through seminars, joint planning and joint evaluation of the effects of these services.

5. The family has an essential responsibility for guiding the development of young children. The term "family" has many meanings, including single-parent, single-child families, extended families, kibbutzim, etc. A more appropriate term might be "household", defined as a constellation of people living together as a unit. The boundaries between family responsibility and state responsibility vary from country to country. These boundaries should be identified and made explicit in each national setting in terms of the moral, social and political objectives of each society. The participants affirmed that the actions of the state should seek to support the family rather than to take over its functions. For example, the family provides the child with a variety of models of human behaviour. Children first learn to resolve conflicts by observing their parents as they settle their differences. By merely observing those adults closest to him, the child acquires a system of values and a style of life.

6. On the other hand, the participants recognized that institutions offering child care are necessary, and their importance is growing. The participants stressed that institutions providing child care services should provide for all aspects of the child's development, including the educational. Many pre-school institutions focus only on the safety and health of the child, and they should also provide for the other aspects of the child's development, such as the cognitive, psycho-motor, linguistic, social and emotional.

7. It is important that all adolescents and young adults of all societies should understand the basic facts of child development, and acquire the skills needed for effective child rearing. Educators around the world should focus attention on the transmission of this knowledge and practical skill.

8. Scientists in the field of human development agree that child development is a continuous process. It proceeds through ordered and sequential stages in physical, intellectual and emotional areas of growth. Childhood is seen as the time when development in these areas can be influenced more readily by social interventions, but children are not infinately malleable. The stages of development, as they concern cognitive growth, are influenced less in terms of the content matter the child is able to master than in terms of the modes he utilizes in the learning process. If learning situations are rich and stimulating, no matter whether in or out of formal schools, children will find their own methods of solving problems and build their own bases of knowledge. Teaching-learning situations should be flexible, continuously allowing children to experience actively and concretely the educational problems confronting them. Communication among children and adults, including teachers, should be strongly encouraged.

Closely related to this point is the concept of individualizing the learning process. Each child proceeds through the stages of development in his own way, at his own rate. When a school system provides education to children who are grouped by some arbitrary criterion, like age, or sex, or IQ, a high incidence of failure to learn usually occurs. (For many national systems, half or more of the children who enter school fail at least one year in the first six.) Great damage may well be inflected by such procedures to the child's self-concept or self-image. An individualized approach to learning seeks to guarantee continuous success for every student. Positive reinforcement is a more effective motivation than fear of failure.

9. While recognizing the importance of self-directed learning in the child's overall intellectual development, educators should also recognize that structured learning experiences are also needed. Research has shown that a structured curriculum can be effective in achieving certain educational objectives. Structured curricula must not be artibrarily imposed by teachers but must emerge from a deep understanding of how children learn and develop. Probably no particular structures programme is appropriate for all children.

10. The promotion of health self-concepts in children is an important goal for all educational programmes. To this end, acceptance of the child, an appropriate balance between success and failure, and opportunities to identify with "good" adults are among the most important ways to promote a child's positive self-image.

11. Provisions for a smooth transition between the different phases of a child's experience seems to be important for his continuous development. In this respect, more attention should be given to the moment when the child leaves the informal learning environment of the home, and enters a formal school. The abrupt change experienced by many children violates the principle of continuous development, and often leads to a state of shock or paralysis in the child. Educational programmes should be adapted to the individual needs and differences of the learners. Imposition of arbitrary standards of performance and behaviour, far different from the child's previous experience, does not help the child attain desirable educational goals.

12. Educational systems must provide for mentally and physically handicapped children. This refers not only to children with specific defects (e.g. the blind, deaf, emotionally disturbed etc.) but also to those children who are the victims of the multiple debilitating effects of poverty and misfortune. This latter category constitutes the majority of all children in some areas. They come from families which are economically disadvantaged, socially disorganized, or somatically deficient in some specific manner. They may suffer from biological pathogenic factors which, to a greater or lesser degree, cause general damage to the central nervous system, etc. Many of these children suffer from several such handicaps which interfere with their healthy development. Early diagnosis and, wherever possible, remedial treatment of the disorders, tend to be less expensive to the community than welfare provisions long after remediation is possible.

Recommendations

I. It is recommended that countries coordinate the services provided under their health, welfare and educational agencies. This should be done not only at the national level but it should also be implemented at the lowest political unit where possible. At the local level, it is hoped that this coordination will take the form of child-parent service centres. These centres would provide, at whatever level of assistance possible, support to the family and child during the pre-natal, post-natal and childhood years in the areas of health, welfare and education.

II. It is recommended that Unesco foster the establishment of child research centres in member nations which will be responsible for research and development, collection and dissemination of information in the area of child development. Particular emphasis will be placed on issues which pertain more or less directly to the educational process. It is further recommended that some of these centres shall be affiliated with and have as their prime concern the study of teacher training.

III. It is recommended that the child research centres referred to above be encouraged to engage in cross cultural research. The case for international research collaboration is easily stated. Most problems studied by research are common to most countries, though not necessarily equally relevant, and the findings should be valid far beyond the borders of any particular country. Furthermore, especially in the social sciences where controlled laboratory conditions are more difficult to stage, the world at large constitutes a laboratory of social phenomena, offering a far wider factor set and more varying conditions than any national situation. Only against an international background can the dependence of research findings upon special national conditions be identified, and the validity of results be put to test.

APPENDIX A

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APPENDIX B

AGENDA

1. Opening of the Meeting

2. Election of Chairman, Vice-Chairman and Rapporteur

3. Introductory discussion

4. State of research and knowledge of the psychological development of the child (0-3 and 4-6) and its implications for the educational process

5. Specific problems of early child development

   a) acquisition and development of linguistic skills

   b) development of abstract concepts including mathematical concepts

   c) respective influence of home and community environments and of pre-school education on the psychological development of the child

6. Summing up the implications of research and knowledge on early child development for the educational process

7. Adoption of report

8. Closure of meeting

APPENDIX C

MESSAGE

from

Mr René Maheu

United Nations Educational, Scientific and Cultural Organization

to the

Meeting of Experts on the Early Psychological Development of the Child and Its Implications for the Educational Process.

University of Illinois, Champaign-Urbana, 4-9 March 1974

The meeting of experts on the early psychological development of the child and its implications for the educational process is the first one of a series of three meetings being organized by UNESCO in 1974 in order to throw some light on a major problem now faced by most countries, developing as well as developed: the need for a re-structuring of education systems. It appears with increasing clarity that education, in order to discharge its responsibilities in the world of today, must be seen as a life-long process which aims at developing harmoniously the whole personality of the human being through a wide range of learning experiences, out of school as well as at school; and that education systems have to be reorganized accordingly.

Since educational research has emphasized the formative importance of the first years of the child, it has been felt necessary to review the evidence available on the early psychological development of the child in order to ascertain its implications for the subsequent phases of the educational process. A meeting bringing together eminent psychologists from various parts of the world as well as educators and senior officials with major responsibilities in the field of education has seemed the most effective way of doing this.

It is particularly appropriate that this meeting should be held in the United States of America, a country which has played such an active and important role in the process of educational research, and there could certainly be no more suitable setting for it than the scholarly and quiet atmosphere of the campus of the University of Illinois at Champaign-Urbana. I wish to express my gratitude to the United States National Commission for UNESCO for its generous contribution to the organization of this meeting, as well as to all those at the university and elsewhere who have lent their efforts in its preparation, and I send you my best wishes for the success of your deliberations.