

Final Report

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**International Bureau
of Education**

PART IV

RECOMMENDATION NO. 76 TO MINISTRIES OF EDUCATION
CONCERNING THE DIVERSIFICATION OF POST-SECONDARY
EDUCATION IN RELATION TO EMPLOYMENT

PREAMBLE

The International Conference on Education convened by the United Nations Educational, Scientific and Cultural Organization, meeting in Geneva at its forty-first session from 9 to 17 January 1989,

Recalling the aims and purposes of Unesco which are clearly defined in the Constitution, particularly in relation to education and international cultural co-operation,

Recalling 24 C/Resolutions 4.1, 4.2 and 4.3 by which the General Conference provided guidelines for 'the formulation and application of education policies', having regard to specific functions of the International Bureau of Education and of the 41st session of the International Conference on Education in the implementation of Unesco's programmes in this field,

Taking note of paragraph 15 of decision 4.1 on the third Medium-Term Plan, adopted by the Executive Board at its 130th session, by which it considered that the coherence of the Major Programme Area 'Education and the future' should be strengthened,

Recognizing the value of post-secondary education in the development and application of education for international understanding, co-operation and peace and education relating to human rights and fundamental freedoms,

Noting the great importance of the improvement of the international political climate and the initiatives of Member States seeking new opportunities for the development of post-secondary education from resources made available as a result of practical moves towards disarmament and the ending of regional conflicts,

Recognizing the role of post-secondary education in enhancing intellectual, practical and creative capabilities at individual and collective levels and its importance as a factor in the promotion and acceleration of cultural, socio-economic, scientific and technological development in all contemporary societies,

Emphasizing that post-secondary education should contribute alike to the all-round development of the individual and to his or her preparation for active life at the cultural, social and economic levels,

Noting that universal recognition of the fact that education is a fundamental right of the individual and a pre-condition of social progress has for the past 40 years brought about an unprecedented development of education throughout the world, including education at the post-secondary level,

Recognizing that the speed of scientific, technological and socio-economic development is creating new challenges which make it necessary both to extend and to improve the quality of post-secondary education, including changes of structure, in order to meet the needs of the individual, the world of work and society as a whole,

Emphasizing the role of post-secondary education in overcoming the global problems of humanity and in the shaping of models of sustainable development as recommended by the World Commission on the Environment and Development,

Noting that post-secondary structures and curricula have for many years been the subject of radical reforms or smaller-scale changes designed not only to enhance the effectiveness of such education, but also to make it more relevant to the demands of new population groups and to diversify its courses and curricula to meet the changing needs of the world of work,

Mindful nevertheless of the imbalance in many countries between the supply of and demand for highly skilled labour, resulting from the rapid expansion of the student body and the fact that their training is not sufficiently adapted to the requirements and to the limited absorption capacity of the economy,

Further noting that in many countries the problems of unemployment and underemployment afflict the entire population,

Bearing in mind, in this regard, the importance of taking additional practical, carefully planned measures designed to ensure that in terms of both quantity and quality, post-secondary education and training are matched more closely to employment requirements,

Acknowledging that the diversification of post-secondary education is an important means of achieving the twofold objective of, on the one hand, producing highly qualified persons with an all-round education and, on the other, satisfying the many different cultural and educational requirements of national communities, professional associations, age-groups, other groups and individuals for the creation of conditions conducive to spiritual development, freedom of self-expression and the humanization and intellectualization of work, social contacts and leisure,

Convinced that the exchange of information and of experience, including the most innovative experiments conducted by Member States aimed at the improvement and diversification of post-secondary education and bearing in mind the new trends in employment, will contribute considerably to the advancement of ideas and practices in a domain that is vital for the development of all nations,

Considering that the strategies to be adopted in the implementation of the Recommendation will depend on the particular stages and levels of development of individual countries,

Having regard to the relevant conventions, recommendations and declarations adopted at the international level, and more especially by Unesco,

Adopts on the seventeenth of January, nineteen hundred and eighty-nine, and submits for examination to the ministries responsible for post-secondary education and other competent authorities and bodies of the different Member States, to the agencies of the United Nations system that have responsibilities in this domain and to the intergovernmental and non-governmental organizations concerned, the present Recommendation:

A. GENERAL PRINCIPLES AND KEY CONCEPTS

1. Post-secondary education comprises the whole range of formal and non-formal education and training and of research systems provided by both university and non-university establishments and pertaining both to the public and to the private sectors.

2. The diversification of post-secondary education is a necessary consequence of scientific and technological development, of the need to ensure

access to this level of education for all, including new population groups, and of the new requirements entailed by the employment situation. Diversification in its turn affects scientific and technological development. It is reflected in the creation of new institutions, training courses and disciplines, and new structures to cater for student enrolment; it has a profound impact upon objectives, content, learning methods, procedures governing student admission and recognition of studies, and the management and financing of establishments.

3. The diversification of post-secondary education should be guided by the following general principles and key concepts:

- (a) making an active contribution to cultural, socio-economic and technological development, promoting sustainable development, based on scientific foundations, while taking account of specific national features and of the cultural identity of each people;
- (b) making a constructive contribution to defining the prospects for the development of post-secondary education and the ways in which it can be diversified in the light of humanity's common interests and of world problems, in the solution of which post-secondary education is able to play a positive role;
- (c) ensuring a high standard of teaching, training and research, which should be regarded as a paramount task in the context of the rapid expansion of enrolment in post-secondary education;
- (d) ensuring that all those who have the abilities required to accede to this level of education should enjoy equality of opportunity in equipping themselves for life, and more especially for professional life, and in participating in the various activities of society;
- (e) promoting the self-fulfilment and harmonious development of the individual by providing the requisite conditions for his or her intellectual, moral, professional, spiritual, physical, aesthetic and social training;
- (f) seeking to ensure a better match in both quantity and quality between the education provided and the ever-changing requirements of the employment situation;
- (g) associating the different social and economic partners more closely in the effective operation and development of this level of education;
- (h) stepping up the contribution of post-secondary education, particularly at university level, to the strengthening and extension of life-long education;
- (i) increasing the contribution of post-secondary education to the development of other levels and forms of education in the context of life-long education, and particularly to training and research activities designed to bring about a massive reduction in illiteracy;
- (j) encouraging universities and other higher education institutions to function also as centres for continuing individualized and distance education;

- (k) promoting education for international understanding, co-operation and peace and education relating to human rights and fundamental freedoms;
- (l) strengthening the culture and cultural identity of each country;
- (m) contributing to the solving of the global problems facing society, and to the promotion of international intellectual co-operation;
- (n) promoting teacher and student mobility at the international level.

B. PRACTICAL MEASURES AND PROGRAMMES AT NATIONAL LEVEL

4. The goals and functions of post-secondary education should be regularly reviewed with regard to their relevance to emerging social, economic and cultural needs and to technological changes. In view of the important changes in the composition of the student body and in order to keep pace with scientific and technological developments and the resulting transformation of the labour market, post-secondary educational institutions should adopt a more flexible and adaptable structure, related among other things to criteria for admission, duration of study, curricula, instructional methods, standards and methods of practical training.

5. Policies for post-secondary education in the 1990s should take into account developments extending into the year 2000 and beyond, which may entail drastic changes in the size and composition of the labour force and therefore have numerous implications for post-secondary education. Appropriate solutions should also be devised to counteract unemployment deriving from the applications of technology and the extensive automation of production and services, by offering wide access to lifelong education and retraining courses.

6. In taking decisions about the allocation of resources for post-secondary education and the distribution of these resources between different fields, sectors and institutions, due consideration should be given to long-term objectives in order to allow this education to respond to changing needs and fulfil its fundamental function in society.

7. At this level of education, it is essential not only to promote a more equitable sharing of education facilities among young people and working adults, but also to promote the extension of educational opportunities to outlying regions, to marginal, minority and disadvantaged groups and to handicapped persons, especially through local development programmes and organizations. Post-secondary education institutions should take the necessary measures to adjust to the increasing inflow of non-traditional students, such as adult part-time students, students of low socio-economic status, and working people in need of stimulation through refresher or upgrading courses or retraining. It is also necessary to respect the right of the populations of those territories still subject to foreign occupation to receive education adapted to their needs and to preserve their national and cultural identity.

8. In the expansion of post-secondary education, priority should be given in both teaching and research to those areas which are undergoing rapid development as a result of advances in science and technology, and to satisfying the labour and other essential needs of society.

9. In the context of national priorities, the orderly development of post-secondary education should be ensured through planning and through efforts at co-ordination and harmonization on the part of the public

authorities. The coherence of the post-secondary system as a whole needs to be improved, particularly in so far as the universities and their relationships with the other institutions providing occupational training are concerned, in order to ensure that the different types of post-secondary education complement one another more effectively. For this purpose it may be appropriate to consider the creation of permanent co-ordinating arrangements

10. Better co-ordination and greater continuity should be sought between secondary and post-secondary education. Measures will also need to be taken to increase the contribution of post-secondary education to the other levels of education, particularly as regards the training of staff and the development of educational research.

11. The formulation of policies and strategies and the planning of the development of post-secondary education should entail a wide-ranging process of research, evaluation and consultation, involving, in addition to the authorities responsible for this level of education, the representatives of the different sectors of socio-economic life.

12. The planning of post-secondary education should if possible take into consideration forecasts of future labour requirements. It would be desirable to improve the quality of forecasting of highly skilled labour-force requirements; such information should be regularly made available to the authorities in charge of post-secondary education.

13. It is desirable to establish multidimensional criteria for admission to post-secondary education institutions. Such criteria should ensure equity, objectivity, comprehensiveness, and balance between individual interests and societal needs.

14. It is important that aptitudes required by the employment sector, in particular because of the use of computers and information technology, such as versatility and adaptability, a broad general and technological culture, the ability to work in a group, to communicate and co-operate, a sense of responsibility and initiative, an inclination for learning on one's own, and so on, should be developed in the specialists of tomorrow.

15. Curricula, textbooks and teaching and training methods should be regularly evaluated, revised and adjusted and new forms of university teaching explored so that they can be geared to the changes occurring in industrial, agricultural and social processes, and keep pace with the accelerating rate of scientific and technological progress and the resultant new developments in knowledge and know-how. To this end, it will be necessary, inter alia, to strike an optimal balance in each course or stream between general, theoretical and practical instruction and training, and to provide students with opportunities for practical training periods in enterprises and alternate periods of study and work. Interdisciplinary and multidisciplinary programmes should be encouraged. It is desirable that theoretical and practical training should be combined as far as possible with an introduction to research work, and that the new technological options should be used to enable students to acquire knowledge by means of self-directed training.

16. It is important that post-secondary establishments should henceforth organize their courses in liaison with the professional communities. To this end, representatives of the economic and social sectors might be co-opted, as persons of note in the outside world, onto the boards of such establishments, the committees of experts responsible for drawing up syllabuses, and if necessary, onto the juries responsible for end-of-course evaluation of students' performance.

17. It is desirable that post-secondary establishments should recruit specialists from the world of work and from research institutions as teachers, and that appropriate legislative measures be taken in order to encourage such an undertaking.

18. While efforts should be made to provide established teachers and trainers at post-secondary institutions, particularly the younger ones, with the best conditions and appropriate resources to carry out their work, opportunities should also be provided for them to retrain, to update their knowledge and to familiarize themselves with scientific and technological progress in the actual conditions prevailing in the production process. For this purpose, training courses should be promoted in enterprises and in research institutions for the benefit of teachers and trainers.

19. In the process of further developing policies and strategies of post-secondary education in general and of setting up new courses and new programmes in this field in particular, serious consideration should be given to the training and further training of teachers, educators and other educational personnel. The establishment of new institutions, courses and curricula should be accompanied by the provision of appropriately qualified teachers and auxiliary staff.

20. In order to ensure the more effective linking and dovetailing of education, training, production and research, appropriate measures should be introduced to facilitate the development of relations of co-operation between post-secondary establishments, enterprises and research institutions, such relations being mutually beneficial, particularly as far as the production, dissemination and utilization of knowledge are concerned. A better linkage should be encouraged between the problems of society and research topics in higher education.

21. Material and financial resources for the appropriate development of infrastructures, laboratories, specialized facilities and libraries should be provided so that teachers and students remain motivated to promote education that is of a high standard. A larger contribution from the different socio-economic sectors would be desirable in this regard. In addition to the seeking of new sources of financing, particular attention should be given to rationalizing the processes of mustering, earmarking and using the resources that are available, as well as to the strengthening of international and regional co-operation for the production of low-cost equipment and supplies for educational and research institutions. The consolidation and modernization of existing institutions should be given precedence over the proliferation of new institutions.

22. For post-secondary education as a whole, it is important to preserve university autonomy and academic freedom, especially:

freedom of education and scientific research;

freedom of expression, association and publication;

free access to all publications.

Exercise of these freedoms should be in accordance with the International Covenant on Economic, Social and Cultural Rights and the International Covenant on Civil and Political Rights, adopted on 16 December 1966.

23. Changes in the roles and functions of higher education establishments call for major changes in their management. To this end, it is desirable to modernize the administration of post-secondary institutions in order to increase their effectiveness and their ability to employ new techniques and advanced equipment and methods which enable them to take sound decisions at the proper time. Efforts should be made to step up current research on the ways and means of making the management and administration of post-secondary education more efficient.

24. Diversification of post-secondary education, however welcome and timely, should in no way lead to the lowering of standards in post-secondary education and training. It is necessary, in particular, to be aware of the dangers of excessive fragmentation in the provision of professional training which could result from a profusion of cheap, substandard courses claiming to meet the 'immediate needs' of career orientation. A warning should also be given about the possible risk of higher education becoming subject to undue pressure from business executives when it seeks financial support from industry.

25. In order effectively to combat unemployment and underemployment among graduates, it is essential that concerted action should be taken by all the partners concerned: government authorities, post-secondary education establishments, public and private enterprises and other bodies.

26. It is of fundamental importance, particularly in developing countries, that projects for industrial investment or other investment projects relating to post-secondary education and using new technology or involving the use of new scientific processes or equipment, should be evaluated carefully, prior to implementation, having particular regard to the conditions for the effective transfer of technology and scientific information, and to the investment programme's implications for training and employment.

27. It is important that the effectiveness of vocational guidance and information services should be improved. In particular, an effort should be made to improve information for students so as to direct them in a positive way towards the various branches of post-secondary education and help them in their choice. It is particularly desirable that specialized services should be organized with responsibility for ensuring that graduates find a place in professional life at the end of their period of training.

28. The rapidity with which knowledge and skills become obsolete demands that post-secondary education should provide various forms of recurrent and refresher education. Post-secondary establishments should offer all those who already possess a basic university diploma or professional qualification an opportunity to undertake refresher courses, specialized training or retraining, without needing to interrupt their professional activities for the purpose. They should give all who have reached the end of their professional career and all adults who have sufficient free time the chance to remain in touch with the world of science, new technologies and culture, so that they may continue to take an active part in the development of their society.

29. It is advisable to certify knowledge acquired in the course of refresher or continuing training so that those who have received it may, without discrimination, have the opportunity to improve their position and mobility within the employment market on the basis of their new qualifications.

30. It is important that the links between post-secondary education and the community and society it serves should be strengthened, particularly in the following fields: (a) promotion of basic and applied research and consulting services; (b) participation in national development efforts; (c) extension of

educational provision for adults in different forms; (d) participation in efforts to achieve the democratization of education, with special attention to disadvantaged groups; (e) improvement of students' practical training in enterprises; (f) the updating and continued improvement of the qualifications of post-secondary teaching staff.

31. At the research level, post-secondary institutions and, in particular, universities have an important role to play, being called upon to make a major contribution to the training of research workers. Since research, and particularly fundamental research, is often extremely costly, such institutions should pool their human and other resources for the purpose of carrying out co-operative projects.

32. Measures should be taken to avoid all forms of discrimination, including any distinction, exclusion, limitation or preference which, being based on race, colour, sex, language, religion, political or other opinion, national or social origin, economic condition or birth, has the purpose or effect of nullifying or impairing equality of treatment in education. To this end, it is essential to take appropriate measures to ensure that eligible students whose economic situation so requires are granted fellowships, loans or other forms of social and financial assistance. Special attention should be given to occupational training for women and girls. The enrolment of girls in scientific and technological courses should accordingly be encouraged. A larger place should also be given to the recruitment of women teachers at post-secondary level.

33. Distance education, correspondence courses and evening classes, as well as other forms of part-time post-secondary education, should be encouraged and diversified in order better to meet the educational and training requirements of the various population groups, in particular those of adult workers. Special attention should be paid to improving the quality of such education.

34. Post-secondary education should be concerned to make students aware of the major problems, both current and future, facing nations and the international community, such as violations of human rights, the arms race, racism, the deterioration of the physical and natural environment and the cultural heritage, the persistence in a large part of the world of poverty, hunger, malnutrition, illiteracy, etc., and all forms of exploitation, and to stimulate in them the will to contribute effectively to the solution of these problems.

C. REGIONAL AND INTERNATIONAL CO-OPERATION

35. In view of the growing importance of diversifying post-secondary education in response to the new employment situation, socio-economic change and the constant new challenges represented by advances in science and technology, a concerted regional and international approach is essential in order to enable Member States to perform their task more effectively in developing and improving such education.

36. Member States should take steps to foster the intellectual climate and material conditions necessary to favour the mobility of teachers, students, researchers and members of the learned professions, and to help overcome difficulties encountered by persons returning to their countries of origin after receiving education abroad.

37. Member States should continue to strengthen and develop bilateral, regional and international co-operation in order to bring post-secondary

education more closely into line with socio-economic requirements, and provide all necessary support to the centres of higher education set up by the United Nations and Unesco, to the networks of inter-university co-operation for the continuing training of higher education staff and to the regional networks of educational innovation set up by Unesco, in so far as the latter are concerned with post-secondary education.

38. In view of the diversity of the experience acquired, Member States should initiate or develop, on a subregional, regional or interregional basis, the institutional co-operation that is essential if forms of diversification that are relevant to the solution of the problems of socio-economic development are to be implemented and strengthened.

39. The various centres of excellence in science and learning should be encouraged to find appropriate instruments for participation in actions aimed at reducing the research-technology gap between countries. The international co-operation of scientists should be encouraged with a view to solving global human problems. It is imperative that scientists adopt a responsible attitude to their work, to the use of science in general and to enhancing its intrinsic humanistic goals.

40. As an international organization serving as a driving force in the areas of education and science, Unesco should endeavour to:

- (a) provide technical support for the design and implementation of policies and reforms relating to educational structures, courses and curricula, in order to pave the way for the diversification and improvement of the various forms of post-secondary education and, in this domain, to facilitate the exchange of information and experience among the different countries and to enhance educational innovation programmes and support networks in this field;
- (b) take special note of the many serious problems facing developing countries in gaining access to science and technology, in introducing them into post-secondary education and training, in widening the spectrum of employment, and in making effective use of new technology;
- (c) promote the exchange of administrators, teachers and students in the context of co-operation between Member States and thereby encourage collaboration in research and training;
- (d) encourage the more frequent granting of fellowships for further training and short-term research courses for the benefit of the developing countries;
- (e) take the necessary measures to promote the application of the regional conventions on the recognition of studies, diplomas and degrees in higher education adopted to date under the auspices of Unesco.

41. Unesco and, under its aegis, the IBE and the regional centres of higher education set up by the Organization, as well as specialized NGOs, should also endeavour to:

- (a) provide all possible assistance, including negotiation of extra-budgetary resources, to enable developing countries to implement the policies and practical recommendations made by this Conference;

- (b) increase the exchange, synthesis and dissemination of information and experience on post-secondary education, and promote co-operative projects with relevant partners at the national and regional levels;
- (c) promote research and studies aimed at diversifying and improving post-secondary education, particularly with regard to the new procedures for recognition of academic achievement, work out criteria for assessment and create a data bank containing information on educational content at each stage for distribution among Member States;
- (d) within the framework of their documentation programmes, give due prominence to post-secondary education, to projects for the reform, improvement and diversification of such education, and to all other relevant information in this field, analyse the data thereby collected and make such data available to Member States;
- (e) carry out activities to follow up the present Conference and advise Member States, at their request, regarding ways and means of applying this Recommendation, having regard to the particular situation obtaining in each country.

42. The IBE, in co-operation with other Unesco units, and in particular with the established offices away from Headquarters, especially the regional centres of higher education, and with the intergovernmental and non-governmental organizations concerned, will give even greater prominence to the production and dissemination of information relating to the diversification of post-secondary education systems and to making available the results of national experiments aimed at matching such education more closely to socio-economic needs. In the light of such information, and on the basis of the studies already carried out, the IBE will undertake comparative studies and studies focused on innovative experiments conducted in this field. With a view to improving communication and comparability of statistical information concerning the development of post-secondary education and its growing diversification, there is a need to update the International Standard Classification of Education, especially its third level.

43. The Director-General of Unesco, when drawing up the third Medium-Term Plan, might study the desirability of including an interdisciplinary plan of action at the international level, possibly incorporating a Unesco world programme on the development of post-secondary education aimed at improving its quality and relevance, which would provide for the development of co-operation and for the study and satisfaction of the new demands made on secondary education by post-secondary training, including the creation and introduction of a concept of knowledge that is qualitatively higher, admits of a broader content linking cognitive with cultural aspects and is consonant with the prospects for the development of humanity in the context of the scientific information society now taking shape. Unesco, with interested Member States and international organizations, is urged to encourage the establishment of new machinery, structures and programmes of co-operation in the field of post-secondary education (similar to the project for the creation of a university of the peoples of Europe, for which the fourth Conference of Ministers of Education of Member States of the Europe Region recommended that a feasibility study should be carried out) aimed at deepening the understanding of the common historical destiny of humanity and of the intrinsic value of the cultural diversity of peoples, and at pooling efforts to make use of the potential of education, science and post-secondary training in solving global and regional problems.

44. Unesco, in co-operation with other international organizations, should strengthen activities concerning education for international understanding, co-operation and peace and education relating to human rights and fundamental freedoms, sustainable development and the protection of the environment. It should also promote in Member States measures of an innovative nature aimed at establishing or redesigning post-secondary programmes for this purpose and at encouraging the revision and updating of textbooks and teaching aids to that end.