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**ABSTRACT**

At the "International Developments in Post-Secondary, Short-Cycle Education Conference," attention centered on the common interests of community colleges in the United States and institutions with like roles in other countries. Among the mutual interests and topics discussed were: community involvement in planning and conducting programs; changing needs for trained workers; lifelong learning; basic literacy education; problems of reaching disadvantaged adults with educational programs; use of professionals as part-time teachers; sending students to work and learn with practitioners at work sites; and opportunities for international cooperation and technical assistance among institutions providing short-cycle programs. Representatives from the following countries discussed advancements, trends, and problems on a national level: Netherlands, Great Britain, Iran, Taiwan, Jordan, Norway, Australia, India, Venezuela, Yugoslavia, Barbados, Costa Rica, and Ireland. Much discussion centered on programs for adults and variations in problems and approaches from country to country. Among examples presented were: the Open University in Great Britain; study circles in Norway; correspondence courses in India; language variations in Iran; teacher shortages in Venezuela; and experiments with new modes of teaching in several countries. The report concludes with a review of recent United Nations Economic and Social Council (UNESCO) activities in the field of non-formal, post-secondary education. (Author/AIC)

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# WINGSPREAD. REPORT

## INTERNATIONAL DEVELOPMENTS IN POST-SECONDARY SHORT-CYCLE EDUCATION

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INTERNATIONAL DEVELOPMENTS IN  
POST-SECONDARY  
SHORT-CYCLE  
EDUCATION

Report of a Wingspread Conference  
convened by  
The American Association of Community and Junior Colleges  
in cooperation with  
The Johnson Foundation  
at Wingspread  
Racine, Wisconsin  
October 25-27, 1978

Edited by Seymour Fersh

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Prepared by the Secretariat

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## PREFACE

In October 1977 a colloquium on Foreign Students in United States Community Colleges, in cooperation with the American Association of Community and Junior Colleges (AACJC), was held at Wingspread. The proceedings of that conference were later published by the College Entrance Examination Board.

Discussions at the 1977 colloquium indicated the need for additional conferences to address other aspects of international education in community colleges. The Johnson Foundation agreed to assist in two subsequent conferences.

The first of these, held at Wingspread in May 1978, served as the focal point for a broad national review of international education in community and junior colleges. A report of that conference, published jointly by the American Association of Community and Junior Colleges and The Johnson Foundation, contains the papers presented at Wingspread and the recommendations that were drawn up by the conference participants. The report, Internationalizing Community Colleges, published in October 1978, provides a perspective on how a group of community and junior college educators and other educational leaders view the relevance and place of international education in community colleges now and in the days ahead.

The second conference, International Developments in Post-Secondary Short-Cycle Education, was held at Wingspread October 25-27, 1978. At that meeting attention centered on the common interests of community colleges in the United States and institutions with like roles in other countries.

Attending the October 1978 conference were educators from fifteen countries in all parts of the world, presidents of United States community colleges, and representatives of national and international organizations.

When students complete compulsory and/or secondary education in different countries, various educational options are available to them. These include a wide variety of short-term, or short-cycle programs with different objectives and philosophies. What attracted keen interest and brought educators from great distances to the conference at Wingspread was the growing recognition worldwide of the potential of such programs for community and national development and for recurrent and lifelong learning.

While the comprehensive, community-based, community college has characteristics that are uniquely American, in their own ways countries around the world are expanding many kinds of post-secondary technical, vocational and other short-cycle educational programs at the community and national level to help in social and economic development. These programs are playing an important but little publicized role in education on a worldwide scale in both advanced and developing countries. Aimed at serving groups in the

population not enrolling in university degree courses, these programs are able to focus on community as well as nationally defined needs to raise educational levels and develop a wide range of occupational skills. Today in the United States over 50% of all college students enroll initially in community colleges. Similar institutions are taking on increasing importance throughout the world.

Among the mutual interests and topics conferees from different countries discussed at Wingspread were: community involvement in planning and conducting programs; changing needs for trained workers; lifelong learning; basic literacy education; problems of reaching disadvantaged adults with educational programs; use of professionals as part-time teachers; sending students to work and learn with practitioners at work sites; and opportunities for international cooperation and technical assistance among institutions providing short-cycle programs. One goal of the Wingspread conference was to broaden international networks for the exchange of information among those concerned with this growing educational field.

Much of the discussion at Wingspread centered on programs for adults and variations in approaches and problems from country to country. Among examples presented and discussed were: study circles in Norway; correspondence courses in India; the need to offer courses in four or five different languages in Iran; shortages of teachers in Venezuela; and experiments with new modes of teaching in the United States and other countries.

Attending the Wingspread conference were educators from: the Netherlands, United Kingdom, Republic of China, Venezuela, Canada, Norway, India, Iran, Jordan, Costa Rica, Zambia, Yugoslavia, Barbados, Ireland, West Germany, and the United States.

The widespread attention that the conference attracted and many requests for a report about it led the American Association of Community and Junior Colleges (AACJC) and The Johnson Foundation to undertake jointly the publication of the report that follows.

The Johnson Foundation feels privileged to have been a partner in this conference project. We appreciate especially the opportunity we have had to work as friends and colleagues on the project with Edmund Gleazer, Jr., President, Roger Yarrington, Vice President, Seymour Fersh, Director of International Services, and Rebecca Jacobsen, Associate Director of International Services, AACJC, and with the conference participants who came to Wingspread from countries around the world.

Henry M. Halsted  
Vice President-Program  
The Johnson Foundation



FOREWORD

This Conference and publication represent a continuing dialogue among our international colleagues which began in earnest as far back as 1970 with the first AACJC international assembly at the East-West Center in Hawaii. From that meeting came the publication, "International Development of the Junior College Idea" (AACJC, 1970). Likewise subsequent conferences in which the AACJC has been represented have contributed to the continuing discussions of cooperation among our international institutions.

From the proceedings at the Wingspread Conference, it is clear that these explorations will continue.

In my letter of invitation, the purpose of the meeting was set forth: "The conference will deal with the common interests of educators from about twenty countries in community-based education, lifelong learning, education for work, basic literacy education, and other themes common to community colleges in the United States and similar institutions in other countries. Participants will be invited to present brief reports on these developments in their countries. A network for the exchange of such information will be considered."

The publication will be of value to all who attended the conference and also to the larger audience beyond. This Foreword gives me the opportunity to thank all of the contributors who, in a variety of ways, made the conference successful and this publication possible. We welcome additional colleagues to join us in the continuing benefits from the international sharing of ideas, stimulation, and encouragement.

Edmund J. Gleazer, Jr.  
President, AACJC

## INTRODUCTION

This publication and the conference from which it proceeds is a part of two different series: the first series is the one to which Dr. Gleazer refers in his Foreword: the continuing international dialogue. The second series has been supported by The Johnson Foundation. This publication is the final one in that series of which the first two were, "The Foreign Student in the United States Community and Junior College" (CEEB, 1978) and "Internationalizing Community Colleges" (AACJC, 1978). Like this publication, each of them was derived from a conference held at the Wingspread Conference Center.

Planning for the conference, "International Developments in Post-Secondary, Short-Cycle Education" began about a year before the conference dates in October, 1978. In May of that year, invitations were sent to about 25 foreign educators and a similar number of United States community college leaders. In addition, invitations went to about ten representatives of other educational organizations, foundations, and government agencies. The original list of invitees from other countries was based on previous contacts that the AACJC made at other international conferences or from visits here and abroad. From the start, the conference planners were seeking representation from all over the world but it was difficult to assure such diverse representation because travel funds were not available from the conference sponsors. The roster of participants (see final pages) indicates, however, that a distinguished and generally representative group were able to attend.

The final number of visiting educators was seventeen. Within this number, seven were sponsored by the United States International Communication Agency as part of a new series of multi-regional grants designed to facilitate international exchanges of information and a sharing of international experiences and viewpoints. These sponsored educators were also able to visit community colleges; their four-week trip was arranged by the Institute of International Education.

The conference and this publication were planned to complement rather than duplicate each other. Each of the visiting educators and some selected Americans were invited to provide short papers; these are included here. At the conference itself, however, the intent was to give the participants an opportunity to become acquainted with the overall theme of the conference and with each other individually. To achieve this purpose, the conference schedule provided ten-to-fifteen minutes for each visiting educator and some representative Americans to make informal presentations. These remarks were followed with time for questions and discussions. These exchanges stimulated cross-cultural awarenesses and encouraged the participants to explore ways in which cooperative efforts could be continued and enhanced.

The format of this publication conveys also its sense of purpose. The collection of papers provides authentic and personal contributions from an international roster of educational leaders. We believe that it is appropriate that their papers be photo-copied rather than edited for a printed version; this way the original style and flavor is retained. The publication thus represents in its own medium the messages of diversity and individuality which characterized the conference itself.

Also, this publication can serve as a reminder that international developments in post-secondary short-cycle education are a continuous process. No single conference or publication can provide a comprehensive and truly representative balance of viewpoint and achievements. This publication can share more widely the benefits of our Wingspread Conference and provide a work of reference and record.

The AACJC appreciates the opportunity of convening the conference and preparing the publication. We express our gratitude to The Johnson Foundation for its gracious and generous hospitality as host at the Wingspread Conference Center and for helping provide this publication. Also, we are grateful to the International Communication Agency and to the Institute of International Education for their assistance. And, of course, we are happy to acknowledge the contributions from the distinguished educators who participated in the conference and provided the papers for this publication.

Seymour Fersh  
Director of International Services  
AACJC

THE VAST PROGRESSIVE TASK OF MANKIND

Introduction

It is a special honour and privilege for me to have the first opportunity to speak at this conference. I am always pleased to return to Wingspread and share in the wisdom and experience of The Johnson Foundation, known to many all over the world for offering the Pacem in terris conferences. There is a special talent about conferences at Wingspread, where people meet and talk deeply to and with each other, not at or by each other.

I am pleased as well to be in the company of so many representatives of short-cycle and community colleges. I have never been on the board or staff of a community college but no one appreciates their influence, potential or real, more than I. The 1960's in North America and many parts of the world was a passionate, a tumultuous and swiftly changing decade, remembered still for certain behaviours or excesses of the young, sometimes for the intransigence and inflexibility of their elders, but to be known in the future, of this I am sure, as the period when so many community colleges were created and extended. For it is these colleges that are the great heritage of the decade just as they are the fine instruments for development all over the world, even in places where they have not yet taken firm root.

It is always a privilege to sit with men and women from many cultures. I doubt if we really appreciate fully how fortunate we are in our calling, which is one that bridges over or leaps over language barriers, cultural differences and ideological blockades. Last May and June I was in successive weeks in Japan, China, Vietnam, Russia, West Germany, Sweden, the United States and Venezuela. Note the cultural and ideological differences represented. Yet in every country I found people who wished to share and to learn, who were deeply committed to

exchange and were determined to employ education as the chief strategy for development. Ours is a calling that advances the cause of peaceful co-existence and mutual support and we need not only to accept the blessing but extend the influence. And in what better way than through our colleges?

We are here to exchange experiences about developments concerning the human family all over the world and the place of education in general and the role of our colleges in development.

May I begin with the man whom I consider to be the finest teacher in the world, Julius Nyerere, President of Tanzania, whose self-given name is Mwalimu "teacher". At the International Conference on Adult Education and Development, in Dar es Salaam in 1976, the major statement by Nyerere was adopted by the participants from 80 countries as a Declaration on objectives and strategies. Nyerere established clearly the meaning of development in these words:

For development has a purpose; that purpose is the liberation of Man. It is true that in the Third World we talk a great deal about economic development--about expanding the number of goods and services, and the capacity to produce them. But the goods are needed to serve men; services are required to make the lives of men more easeful as well as more fruitful. Political, social and economic organization is needed to enlarge the freedom and dignity of men. Always we come back to Man--to Liberated Man--as the purpose of activity, the purpose of development.

But Man can only liberate himself or develop himself. He cannot be liberated or developed by another. For Man makes himself. It is his ability to act deliberately, for a self-determined purpose, which distinguishes him from the other animals. The expansion of his own consciousness, and therefore of his power over himself, his environment, and his society, must therefore ultimately be what we mean by development.

So development is for Man, by Man, and of Man. The same is true of education. Its purpose is the liberation of Man from the restraints and limitations of ignorance and dependency. Education has to increase men's physical and mental freedom--to increase their control over themselves, their own lives, and the environment in which they live. The ideas imparted by education, or

released in the mind through education, should therefore be liberating ideas; the skills acquired by education should be liberating skills. Nothing else can properly be called education. Teaching which induces a slave mentality or a sense of impotence is not education at all--it is attack on the minds of men.

Julius Nyerere is a head of state, working desperately against the clock, for programs that will share wealth and opportunity through education for his people.

Recently Lady Barbara Ward Jackson was to have addressed an international symposium in my country. She was too ill to come, yet sent a message which is as moving as it is prophetic. Because there will not be many more messages from this First Lady of our world, every one is to be cherished, and I will quote liberally:

If we look back at the Fifties and Sixties, when much of our "conventional wisdom" about development was formulated, I suspect we are now amazed by our extraordinary optimism. We saw the period of Western colonisation being phased out. We looked to the steady extension on a world-wide scale of the advances of modern science and technology which were making the developed states (about a third of mankind) wealthier each year. This process, extended in part by trade and the investment of the big and multinational companies, in part by direct aid from rich nations to poor, would let the wealthy's growing affluence "trickle down" to the undeveloped economies and they in turn, by comparable "stages of growth", would advance to the standards of the developed societies. All mankind would hasten on together to the felicity of the high consumption society. It was an appealing scenario, underpinned by oil at less than two dollars a barrel, sparked by an extravagant fall-out of new technology from the forced experiments of the war and sustained by the relief of millions of citizens to see the restrictions of the Great Depression and the World War at least falling behind them...

Today, over 30 years after the coming of formal peace, our perceptions of the future of development are, I suspect, more somber but not on that account less realistic....

...we confront a wholly new set of developmental issues which, even a decade ago, were not talked about because people barely knew they existed. Let us agree that the passionate desire for a more equal and equitable world distribution of resources and opportunities is the first and greatest issue of development. But what are we to say to those who argue that just as men and women as a whole are asking, for the first time, to enter into their heritage and share

the resources of the modern technological order, it turns out that there simply are not the material means available to realise the dream? Between deforestation, soil erosion, urban expansion, multiplying roads and airports, some estimates put the land we shall lose from cultivation in the next 20 years at 600 million hectares - and that is about half the land we cultivate without risk today from our present population (which is to increase by 50 per cent)....

Or take energy. In spite of considerable new discoveries and the likely increase of offshore oil drilling to 50 per cent of the total, it seems pretty certain that the peak of oil output will be passed by the end of the century. Coal has a century to go, oil shale and tar sands are possible supplements. But nothing can reverse the fact that the United States has run through half of one of the largest domestic oil reserves in the world in less than a century. The disappearance of other reserves may be a little less speedy but the trend is sure.

This in turn throws a question mark on a whole range of minerals which require large amounts of energy to be turned into usable metals. We cannot work out the equations exactly today. But the first centuries of industrialisation have skimmed off the best and cheapest supplies. Mining the deep sea bed or the earth's core or other planets would be an expensive alternative, especially for the half to three quarters of mankind who are starting their industrialisation from a level of desperate poverty and lack of capital.

Or take another example—

...in the North Atlantic, we eat very nearly a ton of grain a year, all but 150 pounds in the shape of beef, poultry and other high protein food, produced by feeding grain to the animals. For every 5 to 10 pounds fed to cattle, we with our steaks and hamburgers get about a pound of "energy equivalent" back. The Indian eats 400 pounds a year directly in grain. Between commuting, office work, TV watching and golf mobiles we live the most sedentary lives ever invented for a human society. High protein is really needed for only heavy manual labour. The result? A degree of digestive disorder which has led the American Medical Association to plead for a cut of one-third in meat consumption and which costs the West Germans \$7,000 million a year in cures for the beer-sausage syndrome. This is 2 per cent of Gross National Product.

So where are we? Heading straight for developmental disaster - by social disruption, over-population, toxic risks, the final destruction of our basic physical heritage? We cannot...cosily dismiss these possibilities on the grounds that a kind and forgiving God will not permit ultimate catastrophe.... If we behave like destructive fools, the undeviating consequences of the moral law will not be temporarily suspended for our especial benefit. Like

Jefferson contemplating slavery, we should rather say: "When I remember that God is just, I tremble for my country". But we must also remember that fear can be the beginning of wisdom and if nothing else - love, faith, dedication, generosity - is strong enough to move us, then let us settle humbly for the fear of the Lord and seek to avoid catastrophe simply because only the really committed terrorists and anarchists regard catastrophe as desirable in itself. We do not....

One more witness, this time an American, the President of the World Bank, Robert McNamara. Up until five years ago, Mr. McNamara knew very little about education, but, grappling as he has been with the problems of development, he was a "quick learner". His message is about what kinds of education are most appropriate and those that are not:

Developing countries have greatly expanded their educational systems over the past quarter century. But much of the expansion has been misdirected. The results are seen in one of the most disturbing paradoxes of our time: while millions of people from among the educated are unemployed, millions of jobs are waiting to be done because people with the right education, training and skills cannot be found.

Among the questions that must be answered are:

How can educational systems be reshaped to help with the poorest segments of society?

How can education contribute to rural development and thus respond to the needs and aspirations of the vast majority of the poor living in villages?

How can educational opportunities be made more equal in order to promote social mobilization in countries where educational systems have hitherto favoured the urban dwellers and the relatively rich?

McNamara's program for the Bank is based on several convictions:

That every individual should receive a basic minimum education as soon as financial resources and the priorities of development permit.

That skills should be developed selectively in response to specific and urgent needs, by training the right people, both urban and rural, for the right jobs - both in the modern and the traditional sectors.

That educational policies should be formulated to respond flexibly to the need to develop educational systems (non formal, formal and informal) so that the specific requirements of each society might be met.

That opportunities should be extended throughout an educational system for these underprivileged groups who have been thwarted in their



desire to enter the mainstream of their country's economic and social life. This must include more equitable access to education for the poor, the ill-fed, women, and rural dwellers, and must provide, as well, a better chance to advance from the classroom to the place of work.

- If economic progress is to be rapid and equitable, education will need to be supported by action in other fields such as agriculture, health, nutrition and employment. Only in such a context can education be effective.

I could go on with these quotes and comments, all of them pertinent, all of them eloquent testimony, footnoted with harsh facts that delineate our time and the immediate future. Notice that no one has resorted to magical or science fiction kinds of solutions. The answer to the human condition, as they see it, lies within the imagination and affections and intelligence of human beings. not

They do see education as a strategy, but through some pious hope that if somehow all children are put in school eventually all will be well. They are concerned about education for all ages, particularly for those who must make the life or death decisions in the 1970's and 1980's, decisions about food, health and jobs, about resistance to military dictatorships at home and against aggression abroad, about providing a life for everyone that enlivens, not stupefies, the human spirit. But they point out that not all that goes under the name of education is a contribution; some of it is bad and must be replaced. It must be an education related to the main problems of men and women. They also warn that the majority of the members of the human family are still not participants. Robert McNamara has the strongest things to say about this condition. He has only recently discovered how appalling is the general situation, one which most, more familiar with it, have almost taken for granted.

Education must now take into account not just the basics of reading, writing and arithmetic, but the basic concerns of all peoples. For example,

most people in education were unaware at the time, but action was taken at the United Nations in September 1975, that has many implications for them. A basic charter governing relations between rich and poor countries was accepted almost unanimously. The seven areas covered in the agreement include:

1. International trade and assistance to the developing countries to engage in trade on more equitable conditions.
2. Transfer of and sharing of resources for financing development as well as international monetary reform.
3. Development of science and technology on behalf of the developing countries.
4. Appropriate industrialization, particularly in developing countries.
5. Development of production and delivery systems for food and agriculture.
6. Co-operation in education and training among developing nations.
7. Changes within the UN system to facilitate growth of the developing countries.

There is nothing new or particularly newsworthy about that list, and your eye may have passed over it quickly. But please remember two things. It represents a charter of aspirations and activities that will govern international relations for at least a decade and answers will be sought and found in some form of international co-operation or international brigandage. Two, while only one reference is made explicitly to education and training, none of the items can be achieved without an extensive change in education in most countries. As Joseph Gremillion, who has just left his post at the Vatican where he headed up special committees on social policy, was saying last week in Canada:

For each country becomes truly developed only if its people awaken themselves, organize and participate as communities and functional groups, to become to an optimum degree "master of their own destiny" within and as living parts of the whole. The national elan vital must derive primarily from the soil and soul and situation of each people.

None of my witnesses has spoken specifically of the short-cycle colleges, yet every word is directed towards us and to our opportunity.

So what is our role?

Well, first of all I do not know enough to state it in explicit terms. Even if I did I would not announce it just yet because we are here to work together on such questions.

You may have expected me to provide you with a model, but I do not think there is any model to follow or adopt. Also, as anti-intellectual as this must seem, I do not believe much in the currently fashionable pastime of creating models. A model, as I understand and use it, is a tool or systematized description useful for analysis. Of course, rigorous analysis is a positive contribution. But nobody I ever heard of ever tried to emulate a model. People respond to practical acts, to attempted solutions, to demonstrations of principles and practices. Instead of offering you an abstract model I shall simply refer to a few examples that illustrate how educational institutions, particularly though not exclusively short-cycle institutions, have dealt with some of the problems and opportunities I have described. Taken together they do not constitute a model, but they do suggest avenues of action available to all of us and may stimulate further discussion. They all illustrate that no matter how impotent we sometimes think we are, there are practical steps that can be taken.

My examples come from several of the countries represented here: they could have been taken from most other parts of the world.

1. Community Colleges in the United States. The first and most obvious example is from your hosts, the community colleges of the United States. These comparatively new colleges have provided "second chance" education and training for hundreds of thousands of adult learners, have been flexible enough to

innovate in methods, to identify new educational needs, to reach publics and special groups previously unserved. They have sometimes offered a source of coherence and continuity of education for whole communities. I will not illustrate further because many of the best exemplars are here among us and some of you will be visiting their colleges. Not everything that passes for education in a community college is particularly noteworthy, so please urge them to deal specifically with the forms of education that they have developed which speak directly to the basic human problems.

2. College of Medicine - Turkey. Here my example is an approved medical school, noted for excellence in medical science. But the most significant factor in the education of its students arises because of one simple requirement and commitment. Every student entering the college on the first day must associate himself with a family and from that day on, throughout his entire medical studies, he is a "member" of that family sharing with them in living and dying, in sickness and health, in sorrow and jubilation, in triumph or failure. Sometimes he acts as physician and counsellor but always he is a family member and friend. And so, for him, medical science is absorbed and mastered within a human context. This essential condition could characterize all of our education, but is still rare.

3. An Institute of Technology - India. My friend, Dr. P. L. Malhotra, will be able to give you other examples from India, but let me refer to one from my own observation. In many parts of India it is a recurrent problem that the annual monsoon that brings the blessed rains sometimes brings destruction and death, with floods undermining and destroying most of the mud dwellings in villages. At such a time it is customary for some Indian students in secondary schools and colleges to volunteer, leave their studies for a few weeks and go to the aid of the stricken villagers or raise money on their behalf. This is one of the more admirable aspects of Indian education. However, on one occasion when such a dread situation occurred in a flooded area of Maharashtra,

and the students were organizing to leave their college and respond to calls for relief aid, the College president forbade them to go. He told them that for them the gift of a few rupees or a few days manual labour was not enough. They should first send emissaries to the stricken villages who would examine the kinds of huts that had been destroyed and similar problems. Then the students should spend two weeks applying what they knew or could learn of physics, chemistry, engineering, nutrition, and social work to the problems of the villages, and also pledge themselves to continue over the next three month period to work with the villagers in the reconstruction phase. The president asserted that their responsibility was to apply their experience and training to India's problems, not just to offer physical labour. I was not able to witness all the results, but I have rarely seen students apply themselves to their lessons as was evident in that week. Occasions where students are accepted as, or demanded as, partners in a significant public enterprise are few. But need they be?

4. Training in an Iron and Steel Enterprise - China. This summer I spent some time in an iron and steel enterprise near Peking which recruits labour from families who in total number 32,000. All of the equipment of the mills is antiquated and must constantly be repaired, redesigned and retooled, yet production figures continue to mount. I was interested particularly in the management of the enterprise, and was told that 85 per cent of all of the managers came from the ranks, typically after having completed only four years of elementary school. This was true of the man who held the position of general superintendent, and equally astonishing, with the 31 year old woman who was supervisor over the vast-clanging hall where five cauldrons were pouring out the steel. That means in the case of both of these individuals that all of their mathematics, science, technology and managerial skills had been learned <sup>inside</sup> the enterprise; that the enterprise was able to utilize

elementary and secondary schools and the knowledge of universities for education and training at a very high level. I cite this example not to suggest that countries should follow Chinese practice in utilizing part-time teachers for secondary or higher education, but that secondary and higher education can be grounded in, can be founded in the economic and social concerns of a society, without necessarily reducing it simply to technical training. The curriculum in this enterprise was not narrowly technological; it included general, political, and social education.

5. The Folk High Schools of Germany. The first home of the folk high school is Denmark, but the term is now used to describe educational institutions in a number of European countries. In Germany the largest single agency for adult education are the colleges under Deutsche Volkshochschul-Verband. More than a million adult students are enrolled in a variety of courses related to social and community needs, typically not offering any certificate (although this is changing), but providing excellent quality education. Because these colleges operate within a single system they can afford some services associated only with a large system, such as planning, research (the best adult education research agency in Germany), electronic media for instruction, and language specialists. They also have resources sufficient for sharing with developing countries: this group of colleges has found a formula for providing yearly educational aid estimated at a million dollars and probably worth ten times that sum.

6. The Workers Universities of Jugoslavia. These are institutions that are within the state-supported system of education but respond very much to the stimulus and direction of trade unions. They are planned to provide the technical and general education, including arts and culture, needed by a country that has been developing its own pattern of economic, social and political organization. These "universities" are perhaps the most important

single component of an adult education system that is one of the most remarkable in the world. Working people of all kinds have opportunities for vocational training, for learning how to manage the many kinds of enterprises that unions own and control, for participation with management in economic decisions, for community organization, for participation in the arts and in travel and, to a considerable extent, to become self-confident learners engaged in independent studies.

7. A New College - Bali. Many people have hoped that some of the more beautiful and fragile aspects of living in Bali will not be lost as "civilization" comes to that island. The Balinese are not over-romantic about their own culture but are determined not wantonly to throw it away. Accordingly, when a new college was planned, a number of people, including workers, fisherfolk, artists, as well as educators, took part in the selection of the curriculum. It was decided after discussion that the curriculum should major in the finest cultural aspects of Balinese life and that, of course, it should also offer languages, science and technology. What is significant is the priority of values represented, in a world in which many countries have simply copied the curriculum and organization from foreign educational institutions and have accepted the inevitable costs of alienation and losses in their finest cultural traditions. The college in Bali is nourishing Balinese culture, not destroying it, and for that very reason may also provide a better education in content and values that are international or human, not just local.

8. Beginnings of Simon Rodriguez University - Venezuela. This story might have been told about a community college, but it happened in a university based in Carracas. The president, Dr. Felix Adam, and the university, began their work using a shack in a barrio in the shanty-town outskirts of Carracas, working there with part-time teachers, developing services for the people of the area based on the needs which they identified. The second venture was

associated with two rural and economically destitute villages, where again they enlisted trained personnel for the solution of difficult problems. After four years working "in the field", having established the purpose of the university as intellectual service, the university recruited some full-time staff and a student body. Today the university is in appearance not so different from other universities, but the first initiatives continue to affect goals, choice of faculty, the students who apply, the kinds of research, and the special departments. For example, the first graduate training program in adult education for Latin America was offered here as well as the first centre for participatory research.

9. Study Circles, Education for Citizenship - Sweden. Much international attention has been directed recently to the Study Circles in Sweden because people who take part are credited with bringing down the last two national governments. These Circles <sup>foster</sup> informal and non-credit programs, with sufficient state support to guarantee funds for the preparation of study materials, but with organization in the hands of churches, unions, corporations, village councils or any other group willing to undertake responsibility for education about public affairs. Accordingly, every Swedish citizen has the opportunity for many weeks a year to engage in study and discussion of some important issue, sharing with a small face-to-face group of his peers and also to talk with these neighbours or friends about any other subject that is important to him or to the country. Very large numbers of Swedish people, as many as 35 per cent, do accept the opportunity. One noticeable feature is the number of school and college teachers who continue their own education in this fashion--at least half of them. In many countries it is common enough for educationists to arrange for the continuing education of others, but all too rarely for themselves. In the best sense the study circles represent a school



of citizenship and the Swedes maintain that it is needed every year as a sustained opportunity, in addition to one-time or short course studies of particular issues.

These are nine examples of institutions that have taken seriously their responsibilities to the community or to society and have planned intellectual activities accordingly. All of the examples are of practical education, but all go beyond mere skill training. There is a recognition of:

- .continuing need to develop and adapt science and technology to human problems without becoming fascinated with mechanical solutions;
- .attention to research, but not only research by and for academic elites as part of their pattern of promotion; it is research for the enrichment of people;
- .a growing concern for the participation of the people that McNamara refers to as "the thwarted";
- .involving learners of all ages and all levels increasingly in the management of their own learning, so that they can exchange and learn from each other;
- .a concern for high standards of excellence—but performance that is evaluated by appropriate standards not just by marks on examinations that may bear little or no relevance to the matters studied.

Two characteristics are that whether or not the studies are given for credit, they are all in areas that are served well by short-cycle institutions, and all have an impact on development.

These cases are all of institutions. It would be useful to identify action that is international or regional in character, or the result of co-operation in a particular field. This very conference may be a place in which co-operative action within a particular field of education but touching

many countries will result in enlarged and expanding impact on development.

"It is the vast constructive task of mankind..."

Earlier I presented some of the critical analysis by Barbara Ward of the perils that must be faced. However, she does not conclude her review, or contemplate her life's work, in a state of disabling pessimism. Indeed, her last testimonial is one of confidence if we will utilize the knowledge and institutions that we have, and do it in time.

For every difficulty that I have outlined there are answers. Indeed, they offer us better solutions, possibilities and opportunities than humanity has ever known before. No iron destiny is propelling us towards catastrophe. What we are offered is not disaster, but choice. No one can deny the possibility of destruction. Indeed, with 400 billion dollars a year being spent on what we, with almost unconscious humour, call "security", who can think otherwise? But the ways forward are not closed, and with every step away from the precipice of risk, we in the same measure move from the possibility of war. This is quite simply because peace is not the passive state of not happening to be fighting anyone this week. It is the vast progressive task of mankind - a task of learning - learning by joint effort and dedication, to do together the essential things required for planetary survival.

Ours is a task of learning—because joint co-operative action is not part of our inheritance. It has to be learned. For such a task what peoples or what institutions are better conceived, better staffed and better located than these institutions which we serve?

J. R. Kidd  
Secretary General  
International Council for Adult Education

DEVELOPMENTS IN THE NETHERLANDS RELATED TO POST-SECONDARY,  
SHORT-CYCLE EDUCATION

As this conference is being held in the U.S.A., it seems only natural to compare developments in post-secondary vocational education in the Netherlands with the growth in Community Colleges which has undoubtedly taken America by storm. However, this is not an easy comparison to make because such comprehensive institutes are practically non-existent in the Netherlands; not that this type of education is not being catered for in the Netherlands, but it is being done in an entirely different way. The basis for the comparison is the scheme of programs of the American Community Colleges, namely:

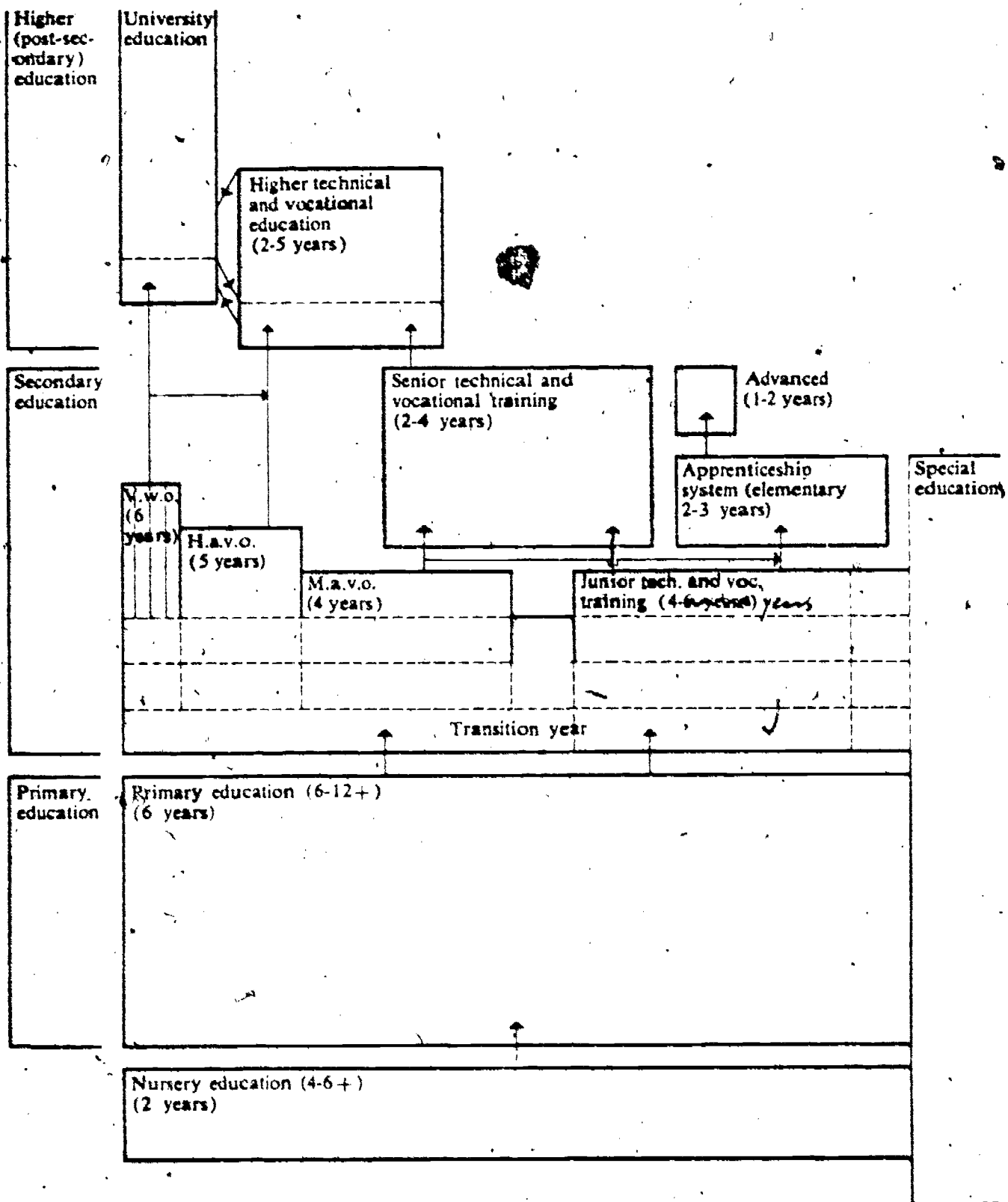
- A. General Education (Transfer/Liberal Arts/College Parallel)
- B. Vocational/Occupational/Technical
- C. Community Education and Special Interest Programs (Adult Education).

I would like now to show you the diagram of the structure of education in the Netherlands and point out a few specific points in connection with the topic we are discussing.

Though they are often housed under one roof, there are three types of general high school, VWO, which offers pre-university education with a six year course, HAVO and MAVO, which offer different levels of secondary education with a five and four year course respectively. Junior technical/vocational schools are open to boys and girls of 12 years of age. About one third of all 12 year-olds choose to go (or are advised to go) to these schools, which provide preparatory vocational training as well as several general subjects (e.g. Dutch, English and mathematics).

The types of institute which are relevant to our topic

THE STRUCTURE OF EDUCATION IN THE NETHERLANDS



are those providing senior technical and vocational training courses of two to four years duration. In the latter case, the third or fourth year consists of a practical year in industry. Students who have successfully completed the MAVO course or the course in Junior Technical/Vocational Training are qualified to attend these institutes, which, incidentally, are regarded as secondary education institutes and not post-secondary as in the U.S.A.

However, as far as I have been able to ascertain from my visits to Community Colleges, they provide similar programs with much the same standards and aims, i.e. to train medium-grade personnel.

One problem which arises from the present selective system is how to deal with the pupils who are incapable of completing the MAVO or Junior V/T courses. At present there are no facilities for them but, in an effort to improve the situation, special advanced two-year technical/vocational courses are to be launched on 1 August 1979.

The apprenticeship system, whereby students spend 1-2 days in school and the rest of the week in on-the-job training, is a Dutch example of what is called cooperative education in America.

There are various institutes of higher or "post-secondary" education in the Netherlands.

First, there are universities, which are only open to students with the VWO leaving certificate or after a colloquium doctum for mature students aged 25 or over. By comparison with those in other countries, the courses are long; the "doctoraal" or final degree examination can be taken after five years but in practice many students take six or seven years to graduate. Recently a memorandum

called "Higher Education on a Wide Scale" was presented to parliament and it outlined a plan to divide the study period into a "doctoraal" stage lasting four years and, for selected students, (about 40% of the students has been suggested) a second stage lasting a maximum of 2 years which would be spent on research or training for such professions as accountancy or medicine.

Secondly, there are Institutes of Higher Technical and Vocational Education with a lower entrance level (HAVO certificate or certificate from a senior technical and vocational training school) and a course lasting three or four years, in exceptional cases two. There are more than 300 such institutes attended by approximately 200,000 full and part time students. They are generally specialized institutes, for instance there are teacher training colleges, technical colleges, nautical colleges, economic and administrative colleges, social science colleges, health-care colleges, and academies of fine arts and music. The smaller institutes of six to seven hundred students are encouraged to merge but they cannot be forced to do so.

It is not yet possible to switch from a 2-4 year higher course to a university course but a Bill has been submitted to parliament which, if it came into force, would enable students to make such a transfer after one or two years, just like students at Community Colleges.

This description of the Dutch system, which is necessarily short and therefore incomplete, has so far been restricted to A and B of the Community College program. With regard to C or adult education, the following developments have taken place in the Netherlands:

1. there has been a rapid increase in participation in part time high school courses for people who did not have the opportunity to attend high school in their youth. The term "Moeder MAVO", or High School for Mothers, which has been given to this type of education indicates which sector of society has taken most advantage of this system.
2. The development of the Open School using modern media.
3. The development of the Open University based more or less on the British system, with university and higher technical and vocational courses.

These developments are bordering on the formal education system in the Netherlands and there is a lot more in progress. In the near future, the Ministry of Education and Science, the Ministry of Cultural Affairs, Recreation and Social Work and the Ministry of Social Affairs will present a memorandum on adult education to parliament.

There are indeed many "short-time" courses in the Netherlands, provided by adult education institutes for instance, but they operate mainly outside the education system proper. It is doubtful whether such courses can be integrated into the present education system like the 220 in Milwaukee for example. But one thing is certain: the Netherlands has a lot to learn from the U.S.A. in this field and therefore we are careful not to miss anything as we watch the spectacular development of the American Community Colleges.

Some facts and figures about the Netherlands:

Population: 13 million

National income 1978: f. 255.350 million

Total Government expenditure 1978: f. 96.205 million

Education budget: f 22.283 million  
(at present 1 guilder = approximately U.S. \$0.50)

Students:	full time	part time
1-9-78 High School	802.000	53.000
Junior Voc./Techn. Schools	405.000	129.000
Senior Voc./Techn. Schools	153.000	32.000
Higher Voc./Techn. Schools	144.000	57.000
Universities		156.000

Jacobus Bos  
Director  
Post-secondary Vocational/  
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## CONTRIBUTIONS OF THE BRITISH OPEN UNIVERSITY TO CONTINUING EDUCATION

Certain sections of the population with a need for continuing education may have difficulty in receiving it by conventional methods. The elderly, the disabled, house-bound women with small children, busy professionals, and especially people living in isolated communities may never have access to the full range of educational facilities they need. One solution to this problem is "teaching at a distance" - the use of a multi-media package of teaching materials, including texts, broadcasts, tapes and other audio visual aids. Rather than bring the student to the teaching institution, these methods bring the teaching to the student in his own home.

The British Open University has made a special contribution to the development of such a teaching system. It was originally set up to provide open access to higher education for people who had missed such an opportunity earlier in their lives. By using the mass media, and the postal services it reaches all students in the British Isles, who can study part time at home while pursuing full time occupations. Reinforcement of the students' learning is provided by a network of study centres where students can receive counselling and face to face tuition, and can meet other students, frequently to join "self help groups". The main tuition is by correspondence: students complete assignments at home and send them to locally based tutors who return them with grades and comments. Various forms of computer marked testing and learning assistance are also in use. Some courses run one week Summer Schools for their students.

To establish the credibility of the University in the eyes of a sceptical academic community in the U.K., the Founders considered it essential to concentrate initially on degree level work. If degrees awarded to students by the Open University were accepted by other educational institutions for credit transfer, as a basis for higher degree work, and by employers, then

this would vindicate the teaching methods. This stage in the University's life is nearing completion. There are now over 27,000 graduates and 60,000 students currently taking the University's courses. Its degrees are widely recognised as having the status of those gained by traditional means; and a large number of reciprocal credit transfer arrangements with other Universities have been set up in which degree level work can be pursued partly through the Open University and partly through the other institution. All undergraduate courses are now also available on a 'one-off' to 'associate students'. A developing higher degree programme will also enable the University's own graduates and graduates from other Universities to pursue further advanced study on a part-time basis.

The provision of degree level work has always been seen as only part of the service the University should provide. In its next phase of development, launched by the publication of the Venables Report,<sup>1</sup> it identifies a further major role for its whole teaching system in the development of continuing education. There are two major themes in this development which shift the emphasis away from the University as a relatively autonomous institution. The first is responsiveness: the University's success in contributing to the development of continuing education depends on its being able to mount programmes of study quickly in response to clearly identified local, national (or international) needs, which may range from health education for parents to in-service education for teachers. This leads to the other major theme, collaboration. It has become clear that in many areas of continuing education, materials need to be tailored closely to particular local and specialist needs. This makes the case for collaborative development of the teaching package, with close involvement of the "clients" in the design of materials which are going to serve their professional purposes. Sometimes this can entail the development of local materials to accompany centrally produced core television, radio and teaching texts. Examples are sets of courses for the in-service education of teachers - Reading development - Mathematics across the curriculum; courses for the 'caring professions' - 'The handicapped person in the community' and 'Care of the Elderly' and short 'community courses' in magazine format directed at parents - 'The first years of life' and 'The pre-school child'. A large number of other new courses are proposed in such areas as management education, environmental education.

Flexibility and collaboration in the development of the teaching materials brings out another major role of the Open University in this field. Its expertise developed now over a number of years in the production of attractive and effective learning materials can be put to the service of the whole educational community. In this capacity it adopts the role of a national learning resource centre. This use of Open University course materials for different purposes has already been widespread in higher education and may prove even more valuable in the expanding field of continuing education. In much of adult and continuing education, local education authorities have limited resources available to them for the production of learning materials. Thus rather than attempt to duplicate efforts throughout the country a coordinated approach via a national institution like the Open University can ensure that a single set of materials can serve a multitude of different local purposes.

Thus fears from some adult educators that national institutions like the Open University may encroach upon territory that they have considered to be traditionally their own should be dismissed. In serving the needs of the (geographically) deprived the Open University extends continuing education to many who would not otherwise get it. At the same time as a national learning resource centre it can help to reinforce a wide range of existing educational practices.

<sup>1</sup> Report of the Committee on Continuing Education under the Chairmanship of Sir Peter Venables, Open University Press, 1976.

John Bynner  
Open University  
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OUR TRADITION

In the past thirty years, the achievements in education have been considered a major factor in our phenomenal economic development.

The educational system in the Republic of China today has inherited its philosophical approach, its moral teachings, and its social attitude toward education from Confucianism.

Because of the social orientation and the emphasis on human relations of Confucian teachings, education in China has always been seen as an integral part of social and political administration. Hence, education is considered the essential means by which a person can cultivate and internalize the Confucian ideals. As a result, learned persons and scholars have always been highly esteemed. As far as the right to education is concerned, equality of opportunity for everyone, regardless of social and economic status, has been our proud and strong tradition.

SCHOOL SYSTEMS

The school system of the Republic of China begins with kindergarten, which is attended by children ranging from four to six years of age. Kindergarten, however, is not compulsory.

Following kindergarten is nine years of free education, of which six are compulsory elementary education and three are junior high school education.

Following the junior high school level is three years of senior high education, or vocational training.

The regular senior high school programs are primarily preparatory programs for higher education, which cultivate general interest and ability in academic subjects, whereas vocational training programs provide youths with specialized knowledge and skills which enable them to engage in productive work after graduation. There are 189 senior high schools with 181,150 students, while there are 183 vocational schools with 304,992 students which is a significantly larger enrollment than the regular senior high schools.

Higher education includes independent colleges, universities, research institutes and technical junior colleges, whose students are selected through an annual joint entrance examination. There are now 26 universities and independent colleges throughout this island. Graduate schools are attached to colleges and universities. There are all told 76 junior colleges with an enrollment of 158,674 students. Most of them are technical-oriented, and their primary concern is in teaching the applied sciences and training technicians.

There are three types of junior colleges. The three and two year junior colleges admit senior high school and vocational school graduates respectively, while the five-year junior colleges admit junior high school graduates. The National Taiwan Institute of Technology was founded in 1974 to admit junior college graduates who have had a minimum of a year's working experience. A bachelor of engineering degree is granted after two-year's study.

To summarize, after junior high, education is divided into two branches: (1) the regular or academic educational system composed of senior high schools and universities; and (2) the vocational technical educational system composed of vocational schools, technical junior colleges, and the Institute of Technology.

In addition to the above school system, the Republic of China also has a system of special education and a system of supplementary education. In special education, there are four schools for the blind, three for the deaf, one for the mentally retarded, and one for the physically handicapped.

The system of supplementary education provides opportunities for those who failed to receive education through the regular school system, or for those who wish to improve themselves.

#### CHANGES IN THE EDUCATIONAL SYSTEM

During the past 30 years, population growth, political modernization, economic development and social pluralization have raised people's aspirations for a better education, as a result, education has been adapting itself to the changing conditions.

From 1950 to 1978, the total number of schools at all levels has increased (2.12 times) from 1,504 to 4,693. Student enrollment has increased (3.29 times) from 1,054,927 to 4,522,037. The educational budget for both public and private institutions has increased 160 times from NT\$156,316,000 to NT\$30,855,400,000. The ratio of educational expenditure to the GNP has increased from 8.76% to 14.54%. And the number of full-time teachers has increased (4.34 times) from 29,000 to 155,021.

- 1) Today there are 4,522,037 students out of a total population of 16,882,053; that is, more than a quarter of the nation's population is now in school.
- 2) In 1968, free public education was extended from six to nine years, making junior high education part of the free educational programs.
- 3) To meet industry's growing demand for skilled labor and technicians, vocational education has also grown. In 1972, a decision was made to create a technical-vocational school system parallel to the traditional high school-university system. In 1965, regular senior high students constituted 59% of the total senior high level student population, while only 41% were enrolled in vocational schools. By 1977 the percentage of regular senior high students was reduced to 32.6% of the total senior high level enrollment, while vocational schools took in 67.4%. The results of the implementation of this policy are three-fold:
  - A) Social stability—students graduated from technical-vocational schools have less difficulty of finding jobs.
  - B) Increasing industrial productivity.
  - C) Release the pressure of competition of the high school graduates to enter universities.
- 4) In order to raise the quality of teachers, the number of graduate school have been increased to train teachers for junior colleges and above. There are training programs and international exchange programs for the teachers of technical junior colleges. The goals of the program are three-fold. One, to update their knowledge in their own field; two, to exchange teaching experiences; and three, to visit industries and exchange views with leaders in industry in order to bridge the gap between industries and the technical colleges and to discover projects which will benefit both.

5) As the Republic of China industrializes, division of labor becomes more and more sophisticated, and the social and economic need for talents has also changed rapidly. Under these circumstances the educational process as an instrument for social selection has become very important. The selection function of education means the selection of the right students for the right kind of education so that they can later pursue the right occupation, and thus facilitate their contribution to society and maximize the return of the country's investment in education. In today's junior high school, for those students who do not want to seek employment, counselling is stressed to advise them to pursue either the regular or the vocational channel of education after graduation. Those not suitable for high school and college education are encouraged and helped to transfer to either vocational high schools or five-year technical junior colleges. This helps to avoid the individual, family and social traumas which often occur when a student fails to pass the college entrance examination later on.

#### CONCLUSION

In conclusion, the goals of our national system of education should be the integration of the individual with the community and his environment, and the integration of the community with the nation. Again the idea is to equip the individual for productive work and active participation in the transformation, the revitalization, and the development of the community and the nation. The reform of educational structures is inevitable if education is to be made relevant not only to the goals sketched above, but also in bringing about a closer relationship with the changing world, so as to better prepare its citizens for active participation in this changing world of ours, in the establishment of our cultural identity, and for the understanding of major world problems and international cooperation.

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THE INTERNATIONAL APPLICATION OF ENGLISH FOR SPECIFIC PURPOSES  
TO POST-SECONDARY EDUCATION

With over two-thirds of the world's technology being written and reported in the English language, one of the fastest growing international developments in the support of post-secondary, short-cycle education is the new technical and scientific direction being taken in English language training. English For Specific Purposes (ESP), as this emerging field is commonly termed, is becoming an essential component of foreign student training in American community colleges as well as an increasing concern to the governments of Developing Nations. Both the American



two-year institution and the polytechnic and vocational training institutes of other countries have recognized this aspect of English language training, not as the language of former colonial domination, but as a tool for the understanding of certain technical subject matter of primary concern to national development. Karl Drobnic, a prominent writer in the teaching of English for scientific and technical purposes, stated the situation this way at a 1978 Oregon conference on English language teaching:

English, a language that once symbolized conquerers, masters, and the ruling elite, has become a language of service in the post-colonial era, a tool for the education, industrialization, and ambitious nation-building of our times.

Adding to the contributions made by the distinguished foreign and American leaders of short-cycle education who came together for mutual discussions in October of 1978 under the auspices of the American Association of Community and Junior Colleges in cooperation with the Johnson Foundation in Racine, Wisconsin, this article will briefly outline English for Specific Purposes training as a component of both American and international short-cycle post-secondary education. A model of a current program now serving the community colleges of the Pacific Northwest will also be described.

ESP directs itself toward three clients. In the still relatively few American two-year colleges having English language training departments, ESP is a service in support of the foreign student under scholarships from home governments to pursue a short-term middle-management or technical program in an area of vital concern to developing home technologies. Secondly, the methodology and content of ESP has been established abroad where it has been administered by native English speakers through international training agencies in support of locally trained technicians whose responsibilities for the operation of foreign-made machinery and newly acquired installations require a knowledge of the terminology necessary for their maintenance and repair. The third client for ESP, closely related to the second, is the international corporation which, during the installation of industrial facilities abroad, needs to overcome the communication barriers associated with training company counterparts

to undertake full and independent responsibility for the operation of the technologies being constructed.

Short-cycle education in Developing Nations is concerned with rapidly meeting practical needs. ESP is a similarly designed tool directed toward providing competency-based language skills specifically related to the communication needs stemming from difficult intellectual ~~needs~~ (Trimble, 1977).

As an example of two and four-year institutional cooperation in providing scientific and technical English training to the needs of Developing Nations, the English Language Institute at Oregon State University in Corvallis, Oregon, U.S.A., has established both domestic and international training programs for foreign technicians. Chinese and Libyan nuclear engineers have received training in both the terminology as well as the operational directions comprising the maintenance manuals of medium-sized nuclear reactors. Saudi Arabian science education instructors from post-secondary vocational training institutes have completed a year-long sequence of language training related to the fields of biology, chemistry, physics and zoology. One of the most interesting current programs of the English Language Institute involves middle-management technicians from an Arabian electric company who require the language of mechanical and electrical engineering. While the Institute provides them with the scientific language of these fields, Linn-Benton Community College in Albany, Oregon provides the technicians with a mathematics sequence in elementary and intermediate algebra and will continue to provide the additional mathematics required for the students to continue for either two or four-year degrees in their fields. While the students undertake their applied mathematics at the community college, a staff instructor from the English Language Institute accompanies them into class, providing terminology support and language assistance related to the field of algebra. Therefore, not only are the students acquiring applied mathematical skills, but also the communicative language skills which will allow them to understand mathematical terminology and its relevance to the maintenance of power utility facilities in Saudi Arabia. These students will be able to establish plant training facilities upon their return which will combine the technical English

of applied mathematics to subject fields of mechanical and electrical engineering.

In addition to the language programs conducted by the Institute on the university campus, the English Language Institute provides advance technical language training to the six member colleges of the Pacific Northwest Community College Consortium For International Cooperation. Providing training for contracted students sponsored by their governments to acquire technical expertise in a variety of important applied fields, The English Language Institute trains the students in the specific English required for these fields prior to the students' commencement of their community college studies. This advance support allows for the competent handling of language problems in advance of technical training thereby eliminating a common handicapp to student performance. For a pre-determined period of time which varies according to student needs in each case, a language instructor from the Institute is on hand to provide a continuing language support base for the students after they have begun their community college technical training.

The concept of a technical English language institute supporting a number of polytechnic or vocational training colleges is a model suitable for Developing Nations. A system of regional technical language centers could provide support for nearly all the applied scientific and vocational language needs of newly acquired industries or planned facilities to be purchased in the future. It was impressive the number of educators at the October Racine conference who outlined systems of post-secondary education in their nations which might make use of regional technical English language centers. Abdul Mostrashari, Head of the General Education Programs at the Free University of Iran, gave an excellent account of the organization of a collection of community or regional colleges emphasizing vocational and scientific technical training under the Free University. Curriculums in these subject areas are brought to people in all walks of life through study circles and by organizing local people as part-time instructors. Noting that one and a half times as many Iranians have been educating themselves outside the country as within due to the lack of appropriate educational opportunity and emphasis, Mostrashari lent credence to the general observation that a majority of these students from Iran re-

quire extensive English language study prior to undertaking their studies abroad. If this language training could be done inside Iran in conjunction with not only the traditional institutions of higher education, but more importantly, at the grass roots levels through adult, vocational, and extension education, the medical and technical development of rural Iran may be enhanced by providing independent technical language bases which would allow for eventual local control of the maintenance and operations of imported agricultural and medical technology. The distribution of technical language training would be more equally distributed, and bases for providing basic instruction in reading operation manuals for imported equipment might be substituted for the export of thousands of students.

Arthur K. Mismuko, Deputy Director of the Center for Continuing Education at the University of Zambia, provided a broad insight into the continuing and adult education system of his nation. One of his most engaging points related to criticism being made in Zambia that the adult education movement is failing to reach the broad masses of people. The reason given by Mr. Mismuko was that the villagers of outlying areas can not speak English well enough to understand the English-based training medium of instruction. Linguistically as the result of geographical position, Zambia's need to relate to the French, Portugese, and Swahili languages is most unique, and the fact that the medium of instruction in adult education is English, lends well to the concept of rural technical English language centers. The already existing Extension Division for Language Instruction of the Adult Center of the University of Zambia might serve well as the organizing arm to develop rural technical and vocational English language centers.

The participants at the October Racine conference were on the threshold of the development of the first women's community college in Jordan as Ms. Feryal Sa'ddeen reviewed the purposes and curriculum of the new institution scheduled to open in 1981. In line with the long-term labor power needs of Jordan, the college will be emphasizing the training of women in the important areas of pre-school education, secretarial skills, and business management. Of high priority in the college curriculum will be an emphasis on English as a Second Language. While nothing specifically was

mentioned in the well-written report of the development of the college regarding the channelling of English language training toward the specific skills involved in each of the above curriculum emphases, the women's college may well be in an excellent position to direct its English language training toward these specific subject areas, developing the English course work around the terminologies of business, child management, and clerical fields. Curriculum development materials are currently in use throughout the world in two of these fields.

ESP is not only geared toward the language of science and technology. As a "special purpose" teaching methodology, it can be applied to any skill-specific field of endeavor. While a majority of the examples used to describe the application to ESP in this article have been related to the scientific and technical subset of ESP, it should be re-emphasized that ESP is subject-specific and can, therefore, be applied to the language planning needs of any technical or sub-technical and vocational need. To teach ESP means to teach a restricted body of language that fits the specific objectives of a particular group of students, adults, or technicians who will encounter non-traditional and highly specific language in the development of skills necessary to either function internationally in a specific field, or who will have to interpret and apply technical or sub-technical language patterns related toward the operation or use of complicated imported technologies or international communications.

The basis for this article returns to the stimulation derived from the sharing of post-secondary, short-cycle educational models from an international perspective in Racine. The development of ESP as a support base for the training of personnel in the use of subject-specific English as a tool for national development is applicable to as many uses as the spread of English-based technology presents. If current international trends continue, it will soon be the vocational and polytechnic institutions which will represent the educational forefront of manpower development throughout the world. The concept of the regional ESP language center may be most helpful to fulfilling a part of the strenuous effort for this technical and vocational training derway in Developing Nations.

OHIO TWO-YEAR COLLEGE SYSTEMS  
AND  
POSSIBILITIES FOR INTERNATIONAL EDUCATION

INTRODUCTION

Ohio has committed itself to higher education early in its history. Today the system includes fourteen state-assisted universities and medical schools and fifty-two two-year campuses. The two-year campuses are broken down as follows: seventeen technical colleges, seven community colleges, twenty-five university branches, and three state general and technical colleges. The state of Ohio has met its goal of establishing a campus within commuting distance of every Ohio citizen. Our system of higher education places strong emphasis on the concept of institutional economy for the colleges and universities.

Primary authority for the managing of our institutions has been vested in individual boards of trustees. This practice has been one of the strongest assets of the system. Institutional economy is a powerful guardian of academic freedom with boards of trustees serving as a buffer against outside pressures. Guided by individual boards, colleges and universities are better able to respond to the needs of their respective students, their service regions, and community. The boards can develop personnel policies that best meet their individual responsibilities ensuring quality in both scholarship and teaching. Each institution being free to manage in their own resources can effectively supervise their allocation both in areas of proven strength and of emerging importance.

THE ROLE AND MISSION OF THE TWO-YEAR COLLEGE

Close relationships are maintained between the two-year college and their local communities. The two-year college movement is uniquely American and the laws relating to community and technical colleges require that they be established through local initiative. All of the two-year institutions, except the university branches, are governed by boards of trustees from the official district with some or all of the trustees appointed by the Governor of the state.

Local advisory committees are required for the development and continuation of technical degree and other occupational programs. The two-year

university branch campuses also appoint local advisory committees to assist with community campus interaction. State coordination of the two-year system is exercised through the Ohio Board of Regents which must approve the establishment of two-year colleges. The Regents also has the authority over the development of associate degree programs and the establishment of fees and tuition schedules.

Ohio has four types of two-year campuses and they include the following:

(1) Community Colleges

The community college provides a wide range of services including baccalaureate oriented general studies programs, technical education programs, and adult continuing education courses.

(2) University Branches

The university branch consists of a permanent faculty established and governed by the parent university board of trustees with assistance from local advisory committees. It offers two-year programs in general studies, adult and continuing education, and in some instances, technical education through the associate degree level. In addition, branch campuses often serve as locations for off-campus upper-division graduate programming offered by the universities.

(3) Technical Colleges

The technical college serves the community with two-year associate degree programs and in many cases shorter occupational programs. Because of the rapidly escalating interest in technical education, the technical college has had the fastest enrollment growth in the state for the past few years. If requested, they also conduct special adult continuing education courses for business and industry in their community.

(4) State General and Technical Colleges

State general and technical colleges are the newest form of institution in the two-year system. Their programming is similar to the community college. The general and technical college offers general studies including baccalaureate oriented programs, technical education programs, and adult or continuing education programs.

### INCREASING TRENDS IN TECHNICAL EDUCATION

A growing demand has resulted in the formation of technical programs which has paralleled the expansion of training opportunities for semi-professional jobs. This demand is reflected in steady increasing enrollments. A total headcount enrollment in Ohio for the fall of 1978 is 117,188. It is estimated

that in this particular group, over 80,000 are enrolled in technical programs.

A wide variety characterizes the thousands of students being served by Ohio's technical education facilities. Many are students who have enrolled directly from high school for which the system was originally designed. In technical education, enrollment patterns are changing. Today, large numbers of part-time students are seeking skills to upgrade themselves or prepare for new careers. Overall, technical education draws from many diverse groups of people attracting many who may not have previously considered enrolling in college. The main thrust of technical education programs is to train people for specific semi-professional jobs. Strong emphasis is also placed on general education insuring the students a broader educational base. Many of the two-year associate degree graduates will continue their education in four-year colleges and universities.

#### (1) Advisory Committees

Through the advisory committees, various technologies can be changed to meet the problems within business and industry. The recommendation for changes in course content has allowed the two-year college movement to expand with technical education becoming a factor in the world of work. In today's economy, it is estimated that people may need additional training or retraining three or four different times to upgrade their skills in the technical areas. The technical college has been able to achieve this rapid turnover by providing the needed training. Also, the continuing education division plays an important part in working closely with business and industry in the training of teachers or professors enabling the college system to make changes in the core curriculum so that the programs meet the changing technology requirement. Business and industry has been very cooperative in working toward this end. Cooperative education is another area that is fastly growing and is used by many of the colleges for the hands on experience so badly needed in the technical area.

#### (2) International Education

It is a well-known fact that we are producing a surplus of four-year college graduates and there is a tremendous need for the technician level two-year associate graduate. These needs are evidenced in countries throughout the world. One possibility is by increasing the number of students exchanged between countries. A great deal has already been done to improve international understanding. One problem area, that needs priority, is the language barrier between countries. It is necessary that American students studying in other countries learn the language, and the foreign student



attending technical colleges in the United States learn the English language.

### (3) Faculty and Staff Exchange

Additional cooperation should be given between colleges of all nations by a faculty and staff exchange program. There are a number of college faculty and staff members willing to participate in an exchange with other countries on a planned rotated work experience basis. Many countries throughout the world already have technical training divisions, however, many of the developing countries lack the skills and knowledge of the two-year college movement. The greatest contributions could be an exchange between these countries.

### (4) Smaller institutions

Smaller institutions in the United States have found it difficult to participate in international education and training due to limited budgets. It is important that developing countries who want to look at models, visit the small institution as well as the larger institution so they can visualize the model they will emulate in their own country. The smaller institution is often times more realistic with the larger institution being the eventual goal.

### (5) Technical Education in the Future

In the future outlook for technical education, it will be necessary to work locally as well as internationally in computer based individualized instructional education and television via satellite. Many of the programs already developed in the states and abroad can be changed for the delivery system languages into appropriate languages that will be suitable for use in the country wanting the instructional materials. Working through AACJC and international organizations, a bank of materials could be made available whereby the participating countries could use the materials for the education of technicians.

## CONCLUSIONS

The preceding sections give the reader some indication of the Ohio post-secondary educational system in two-year colleges. It is necessary for all countries to begin participating in international education. The priority area is in the two-year college movement at the present time and the needs for the technical level student is evidenced by the needs in every country. The beauty of such a program is that the individual has a choice of continuing their education by going on to a baccalaureate degree, master's degree, or even on to the doctorate level. The one thing that has to be kept in mind is the continuous need for updating community based programs to fit the

needs of individual communities served by colleges in all parts of the world. A continued cooperative effort should be made in the training of individuals and the exchange of information that is so vital to world understanding and world peace.

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DEVELOPMENTS IN JORDAN RELATED TO POST-SECONDARY, SHORT-CYCLE EDUCATION.

INTRODUCTION

The renaissance which Jordan had achieved in the past 25 years in terms of learning is one of the most important versatile developments in this country. Despite its political, economical, social and population growth dilemmas, Jordan had implemented marvellous deeds unattainable to any other developing country at such a short time. The Government's interest in education reflects its outlook in the importance of Education in economical and social aspects.

Jordan is passing a decade of development schemes which began in the Three-Year Development Plan 1972-1975, followed by the Five Year Plan 1976-1980, education had acquired the biggest place in these two Plans, which shows the greatest interest of the schemers to the educational role in the success of development plans.

Before 1972, Jordan witnessed other development schemes in economy such as the 5-Year and the 7-Year Development Plans. Others were implemented in education, the total expenditure of the Ministry of Education on different projects from 1952-1962 amounts to J.D. 23 millions.

The Ministry reclassified the secondary stage into scientific and literary, then to vocational and agricultural secondary, seconded by commercial, female education, nursing and Postal Secondary. In 1976 two comprehensive secondary schools one for boys, the other for girls. The polytechnique (The Engineering Technical Institute) was also inaugurated, this Institute will supply the market with 'technicians and engineers' assistants in fields of electrical, civil, chemical and architectural engineering, and the Institute also affords to train vocational teachers.

In 1962-63, the University of Jordan was opened, and in 1976-77 Yarmouk University was opened to absorb 25,000 students.

Education had become wide open to all citizens without discrimination, the number of students had doubled within the past 25 years. The number was 139,670 students in the Two Banks of Jordan in 1951-52, and become

577,469 students in 1975-76.

#### Educational fields of new technology

- 1- Educational T.V. within and past study hours
- 2- School Broadcasting and Recordings within and past study
- 3- Educational qualifying by correspondence
- 4- Vocational training by way of the Engineering Technical Institute
- 5- In-Service Training for teachers
- 6- Audio-Visual aids (slides and movies)
- 7- Laboratory Aids production
- 8- Basic Literacy Education
- 9- Printing for school needs of demonstrations
- 10- Language labs and programmed lessons
- 11- Maintenance of new technology machines
- 12- Examinations

#### HIGH EDUCATIONAL INSTITUTIONS

##### a- Educational Qualifying Institute

This Institute was established in 1971 to qualify teachers aided by UNICEF, the idea of this Institute stands on two basic principles:

- 1- In-service training without interrupting teachers' work.
- 2- Using different styles to upgrade teachers' standards.

Other Institutions which take part are the University of Jordan and Yarmouk University. A syllabus was put to the Diploma of Education after the first University Degree, and Master's Degree after the Diploma.

##### b- Engineering Technical Institutes.

- 1- Engineering Vocations Institute, 2-year study divided into four courses, grants a diploma.
- 2- Engineering Technical Institute (Polytechnique), 2-year post secondary study, campuses electrical, mechanical, chemical, civil, and architectural engineering, lab, technicians and vocational teachers training.

##### c- Business Administration and Commercial Institute, divided into Secretary and Accountancy branches.

##### d- High Technical Learning for girls/Secretary, aims at training female students to meet market needs.

##### e- Agricultural Institutes aims at training agrarians efficient to handle official and special agricultural works, graduating teaching able to teach in agricultural schools, period of study is 3 years.

##### f- Vocational training out of the Ministry handled by local and foreign

communities.

### COMMUNITY COLLEGES, COMMUNITY COLLEGE FOR WOMEN

Jordan enjoys a high level of social and economical development, education has a two pivots relevance:

1- Considering the widespreading of education and high standards of living and national aspirations, standards

We find more numbers of secondary school graduates, 1977 statistics show what follows:

males:	16,378
females:	9,148
total	25,626

It is expected to have an increase of future graduates with the increase of compulsory learning opportunities, the aforementioned figure is only 35% of these between 15-17 years, most graduates enter universities due to the nature of the secondary studies, in addition to the attractions of official employment.

The excess of University graduates lead to:

1- Brain drain, due to the facilities outside and the inability to absorb them inside.

2- Most of graduates, though academically qualified, but practically are not, new centers, social and economical had emerged, such as schools, hospitals, factories, hotels, business offices, and so on all of which need specialized staff. Womens' role had been considered by the Government, they entered Universities and schools, many of them enjoy posts in teaching, nursing, the army, and different industries. This project aims at founding a special Intermediate College for girls financed by donations and welfare societies, the YWMA in Jordan will take a big part in financial matters. This Association aims also at enhancing women's role in development. The YWMA is a voluntary Association, financed by membership fees and donations, it is headed by H.R.H. Princess Sarwat, Wife of Crown Prince Hasan.

The Association plans to inaugurate this college in 1980, it will comprise many classes with different elastic programmes to meet society needs which vary continuously, the curriculum which was completed with UNESCO's assistance was divided into two stages, based on functional priorities, stage 1 will begin in 1980. Five scopes of training were defined:

- 1- Child Workers
- 2- Executive secretaries
- 3- Business management
- 4- Home economics
- 5- Architectural drafting.

### BASIC LITERACY EDUCATION

The Ministry of Education had put down a Syllabus which aims at giving adults the basic skills in reading, writing, and arithmetic, also to provide them with the necessary information and experience necessary to enable them to act more efficiently in their every day works in an economically socially and spiritually developing society. The Ministry of Education opened many centres for basic

for basic literacy education in different areas to facilitate the possibility of adults to get thereinto. The Ministry is serious to overcome the problem of illiteracy in a short time to attain the following aims:

- 1- Opening basic literacy education for all concerned.
- 2- Developing manual and mental skills for productive powers in the agricultural and female production sites.
- 3- Upgrading individual levels to meet continuous changes in society
- 4- Co-operation with international bodies concerned.

Illiteracy rates decreases gradually, it reached in 1961 in ages more than 15 years 67.35%, males 49.9% females 84.8%, while in 1976 it reached 32.4%, males 19.1% females 45.7%.

#### The Ten-Year Plan for Basic Literacy Education

This project included many important aims among which are the following:

- 1- Connecting basic literacy education with the aims of Development Plan and improving the productivity of workers.
- 2- Giving the priority in basic literacy education to the labour power from both Sexes.
- 3- Providing the illiterate with vocational education necessary for their work.
- 4- Connecting basic literacy education with the different projects public and special. Each ministry or firm has to shoulder its responsibility to afford basic literacy education to its illiterate workers. The project includes publicity of education by means of press, radio, meetings, and lectures.

#### Life Long Learning

Education is not confined within a limited period in ones life, it is a continuous process from cradle to coffin. Jordan pays much efforts to ensure necessary human cadres, to train them academically and vocationally to meet the needs of a developing society.

The successive bursts in human knowledge made the Jordan society adopt education as a means of comprehensive development of society in all its aspects, thus connecting education with life. The Ministry of Education looks to achieve more successive education to make it available to all ages according to individual needs, the Ministry also aims at making schools offer social activities inside and outside them to meet all the needs of modern life. Despite the fact that some firms afford training programmes to their workers, but the need is still bad to make firms more concerned in training their staff in topics of technology and scientific researches. The Ministry aims also at widening the opportunity to adults especially the workers in agriculture, because of its major importance to development.

Ferial Hamed  
Chairperson  
Community College Committee  
Young Women Muslim Association  
Jordan

## A REGIONAL COLLEGE SYSTEM IS TAKING SHAPE IN NORWAY

### NORWEGIAN HIGHER EDUCATION: A BIRDSEYE VIEW

At present there are approximately 64,000 students in Norwegian public higher education. 40,000, or roughly 60%, study at the universities or university colleges and 24,000, or 40%, in regional colleges. Almost one out of two university students study at the University of Oslo. The University of Bergen and of Trondheim have 7,000 each, and the new university of Tromsø in the North 1,500 in 1978. Of the regional colleges the District Colleges (the regional study centres) have 5,000, the Teacher Training Colleges 10,000, and the Technical Colleges 4,500. The Health Colleges will add another 10,000 students to the regionalized system when they are organized as mainstream institutions of higher education in a year or two. The further development of regional study centers, from 10 in 1978 to 17 or 18, and the further extension of the northernmost university are tasks of the highest priority in the planning of higher education and of additional research capacity. It is a new trait in the picture that the district colleges have now been granted a vitalizing research mandate.

### LIFELONG LEARNING

Also of highest priority inside the sector of tertiary education is adult education based on the concepts of lifelong learning and of community orientation. Outside the universities and the regional colleges with their centres for extensive services state supported organisations for adult education also play a significant part in spreading elements of higher education. All plans for such activities are from now on to be submitted for approval to the recently established Regional Boards of Higher Education and for coordination with the institutional offers of extra-mural services.

### A SHIFT OF EMPHASIS

It is no doubt true that it is difficult for any institution to undertake substantial shifts of emphasis in its profile. Nevertheless this is especially the case with institutions which are old enough to have a tradition. Norway is in the almost unique position that two out of four universities and all the regional study centers are of very recent origin. The teacher training colleges and the technical colleges are also now undergoing fundamental changes in order to adapt to the new regional organization. During a period of general transition it will probably be easier to face the additional challenge represented by an introduction of a

policy of lifelong learning.

It should also be taken into consideration that general political objectives like "filling the educational gaps between the generations", "helping women catch up", "remove formal educational barriers", etc. also have an impact on the internal philosophy of the institutions. In a rather egalitarian society it is difficult to be very exclusive.

Besides, all institutions of higher education have at least some positive experience with adult students. The general impression is that this student category makes the learning process more realistic. Their valuable experience helps to create a frame of reference to working life and to social life outside the institution. The state allows parttime students their share of government loans, and in some cases, stipends, as a matter of course, provided they carry half the regular study load or more. Young fulltime students are also apt to get some work experience along with, or in between studies, when opportunity arises. Any amount of practical experience could prove valuable when the time comes to find a more permanent footing in a somewhat slackening labour market.

It is believed that the external members of the regional boards will support an open doors policy and thus make it easier to implement lifelong learning. Also in the university sector more attention is gradually being focused on the opportunities inherent in recurrent education. Both systems are aware that a prime political goal of make higher education spreadable cannot be ignored in the long run.

#### THE INSTITUTIONS AND THE REGIONAL BOARDS

As indicated already the regional boards will become important for decision-making in matters of higher education and research. The introduction of the boards and the mandate given to them serve as an illustration of a more general effort toward decentralisation of decision-making from the center to the regions and to the institutions located there.

The boards are normally composed of nine members of whom five are elected to represent the region and four (two staff or faculty and two students) represent the institutions. At first there was considerable debate about the feasibility of having the majority of representatives from outside the institutions. Critics who looked to the universities for a model, stressed the traditional autonomy



of institutions of higher education, and recommended that a similar model should be adopted in the regions. Some of the teachers in regional colleges and large groups of students supported this point of view; at some institutions a majority of students boycotted the boards. Some of the teachers and administrative staff at the district colleges accustomed to having a board of their own, felt that it was not advantage to share a board with a technical college and a teacher training college, and perhaps even with other institutions. It could take more resources than could be spared, they felt, to "upgrade" such institutions to "academic" standards. In the meantime the regional study centers could suffer. Also the community and vocationally and cross-disciplinary philosophy, and even the resources for research and development, might be at stake, it was felt. On their side quite a number of teacher training college staff feared that the profile their institution had acquired could be disturbed. Their role was to train teachers, primarily for the primary school, in a pedagogic milieu which should not divert its attention to a number of alternative objectives.

#### THE MANDATE OF THE REGIONAL BOARDS

Now the atmosphere has changed and there is a growing understanding of the importance of having a coordinating organ in the region to perform such tasks as to

- promote contact and cooperation with potential students, the educational system at large, central and regional authorities, working life, organisations, and institutions inside and outside the regions
- examine the demand for higher education in the region and to assign priorities to the various fields of study
- coordinate study programs, research, the use of facilities and other resources
- give advice to the competent decision-making bodies in matters of localisation, objectives, principles, framework and structure of the educational provision of the region

- prepare annual and long-term budgets for all the activities under the responsibility of the board on the basis of budgetary input priorities from each institution

It is still too early to form an opinion as to how successfully the regional boards will be able to perform their challenging tasks. Two criteria for success are very important and may sometimes be in conflict with each other. One is the fulfilment of the promise to the regions that the regional system of higher education shall be a resource for the region. In this context the research and planning and development expertise in the institutions must play a vitalising or revitalising part. The requirements of the region and its various districts and local communities should be of great concern to the institutions as well as to the board. At the same time it should be underlined that a school of higher education is something more than a new step forward in the process of regional development. It has an integrity of its own and it is a link in a chain of institutions which share the responsibility of higher education and research in a national context too.

The dimensions of the tasks allotted to the regional college system make it extremely important that the board members know their region and have a proper understanding of the functions of higher education in society. At best they can contribute to a cultural as well as to a full-fledged economic development of the region in question. The activities and skills developed through new resources should also have a dynamic impact on the local problem-solving process.

#### EDUCATION FOR WORK

The current labour market statistics reveal that there is a moderate rate of unemployment of university and regional college graduates. This unemployment, however, is "balanced" in the sense that both categories are vulnerable to approximately the same extent and that they usually do get jobs but not always commensurate with their training. In some instances this is due to the fact that the jobs are not always available where the candidates prefer to live, or that jobs are not forthcoming in sufficient quantity in regions or districts where the candidates are educated. In their study offers the district colleges try to adapt to a reasonable extent to the long-term and intermediate-term demands of the labour market as far as they manage to foresee them. For instance,

the relevance of study programs to local community needs or to the needs of the public and private sectors more generally may be obvious assets for candidates seeking employment. Instances of such programs could be History with special emphasis on local history, Welfare and social work, Community structure and planning, Religion and parish work, Combined studies of business administration and shipping, or transportation, or tourism, or agriculture, the fishing industry, environmental science, small business management, cultural heritage: its function in communities, and so forth.

The experience so far is that candidates who are educated in a particular district or region are much more apt to stay there than students who have gone elsewhere for training and education. The institutions and the board members are no doubt aware of this phenomenon and take it into consideration in their forward planning. A means to counteract regional imbalance could be to unite a concept of "a spreadable industrial enterprise" with a concept of "a spreadable educational organisation". In both instances it is fundamental that a development towards a diffusion of resources does not go further than it compatible with acceptable quality standards. The idea is not to offer the districts and local communities enterprises and study centers which are inferior to their counterparts in the central locations. Such a policy would only cement regional and intra-regional imbalances.

Thor Einar Hanisch  
Director  
Regional Colleges  
Ministry of Education  
Norway

# INTERNATIONAL DEVELOPMENT OF POST-SECONDARY SHORT-CYCLE INSTITUTIONS:

## THE AUSTRALIAN SITUATION

### Responsibilities for Education

Under the federal system of government in Australia, each of the six States is responsible for providing education services for its own residents. The Australian Government is responsible for education in the Australian Capital Territory and the Northern Territory (which has recently attained a large measure of self-government) and a few small external territories.

The Australian Constitution, however, empowers the Australian Government to make grants to the States for special purposes and to place conditions on such grants. This power has been used increasingly in recent years to provide financial assistance to the States specifically for educational purposes. Most of these grants are made under the programs of education commissions which advise the Australian Government on the funds to be granted to the States for the major sectors of education.

At post-secondary level the Tertiary Education Commission inquires into and advises the Australian Government on the need for financial assistance for universities, colleges of advanced education and technical and further education institutions. The Commission is required to consult State authorities responsible for matters relating to these different post-secondary sectors. Universities and colleges of advanced education are very largely funded by the Australian Government. Funding of technical and further education institutions is shared, with the major contribution made by the States. Local funding is not a feature of Australian education, and the staff of post-secondary institutions are not usually considered to be directly responsible to the local community in which they teach.

### Community Colleges

Although some colleges of advanced education are multi-purpose institutions and claim to encompass some of the roles performed by community colleges in other countries, the few existing community colleges in Australia are most akin to technical and further education institutions. It must be emphasised, however, that the development of the idea of the community college is still at an early stage in Australia, and it is more appropriate to refer to developments in particular States or Territories rather than seek an overall pattern of Australian development.

The Darwin Community College opened in 1974. Darwin is the only city in the Northern Territory but it was considered that in view of the small population the separate development of a university, college of advanced education and technical and further education college could not be justified. The College was consequently established as a multi-level and multi-purpose institution. It

offers trade training studies at certificate, diploma and degree level, and adult education courses.

An interesting feature in the Australian context is that through tutorial work and other forms of assistance provided by the college students can study for degrees from the University of Queensland.

Also in 1974, the Australian Committee on Technical and Further Education suggested that there would be advantages in developing community college type institutions for areas outside the metropolitan centres. In 1975 the Committee recommended that limited experimental development should take the place of comprehensive colleges embracing policies such as community involvement, responsiveness to community needs, open-door admission, provision of counselling services, flexibility of attendance patterns, diversity and comprehensive of educational programs and close relationships with manpower and employment agencies.

Subsequently the State of Victoria began to plan for pilot regional community colleges in two provincial centres. South Australia has renamed several of its regional further education colleges as community colleges in recognition of its intention to develop them further in this direction. Proposals or plans have also been developed for community colleges in New South Wales, Queensland, Tasmania and Western Australia.

In relation to these developments it is often stated that Australian community colleges should not be slavish copies of overseas institutions but well-suited to the Australian national context and the specific requirements of their localities. Proposals and plans have usually been preceded by detailed investigation of the needs of the areas in which new developments are being considered. Thus while there has been great interest in Australia in recent years in the possibilities for community colleges, mushrooming of colleges has not occurred. In the meantime it is often pointed out that the many technical and further education institutions that already exist are currently able to offer some community college type programs and facilities.

### Lifelong Learning

The idea of lifelong learning has become an important structural concept in the planning of Australian post-secondary education. The former Technical and Further Education Commission reported in 1976:

"There is a growing awareness of recurrent education and the concept that opportunities for lifelong learning should be generally available. It is expected that as the lifelong learning concept gains wider acceptance, the importance afforded initial education as a once-in-a-lifetime opportunity will decline."

The proportion of student of mature age is increasing in all sectors of post-secondary education. Universities and colleges of advanced education have made a limited number of places available for mature students whose secondary school results would not have met the formal entry requirements of tertiary education, and the success of these students would seem to confirm international experience that maturity is an important asset in undertaking advanced studies.

It is the technical and further education sector, however, that is most open to mature age students, comprising networks of opportunities for formal vocational education and educative experiences in leisure type activities. While there is now a reducing rate of expansion for post-secondary education overall, the Australian and State Governments are providing for the highest rate of growth in technical and further education. One effect of this selective development should be to boost recurrent opportunities available to adults. This special development should encompass community colleges and technical and further education colleges which perform community college type functions.

### Community - Based Education

Australian educational institutions, at all levels, are making increased use of community resources as components in, or complementary to, their educational programs. At secondary school level work experience is becoming common as a means to ease the transition from school to work. At post-secondary level work experience has long been a component of many courses of study, in apprenticeship training, for example, and in sandwich courses where periods in college alternate with periods in selected situations within the workforce.

All post-secondary institutions in Australia are expected to be responsive to community needs, and colleges of advanced education and technical and further education colleges have emphasised this as an important objective. Community influence is exerted on institutions in different ways. Members of the general community occupy places on the governing councils of universities and colleges of advanced education and all co-ordinating authorities. Some States have regional advisory councils for technical and further education. Community colleges and technical and further education colleges are the most likely of all post-secondary institutions to be identified with a local community, but some serve a more widely dispersed clientele through distance education.

Non-formal adult education is highly developed in Australia. Sometimes it makes use of personnel and facilities from the formal post-secondary system but it is very diverse and not centred on post-secondary institutions. A complicating factor is that voluntary programs are sometimes supported by public funds, but adult education is usually expected to be self-supporting from the collection of fees. In recent years there has been significant development of learning exchanges and educational ventures within community development schemes and these have often been supported by community colleges and technical and further education colleges and agencies.

### Education for Work

Most of the theoretical aspects in vocational preparation lie within the education system, and while there has been a tradition of on-the-job or in-plant training in industry, commerce and government, there has of late been an increasing shift of responsibility for practical instruction towards the education system.

Now, coinciding with rapid changes in the world of work, and unaccustomed high levels of unemployment, the subject of education for work is presently undergoing a fundamental re-examination. This is true of education for work at both secondary and post-secondary levels.

A major national study, the (Williams) Committee of Inquiry into Education and Training is expected to be reported late in 1978.

Vocational education is a major objective of colleges of advanced education and of technical and further education. Colleges in both sectors maintain close familiarity with the world of work. Overall labour market requirements are taken into account in planning post-secondary education, and developments within certain vocational education areas are carefully controlled at the present time. It would not be true to say, however, that the system is tightly controlled to respond quickly to predictions of manpower needs.

### Distance Education

One of the reasons that some technical and further education and community colleges are not exclusively local community institutions is that they are involved in distance education. Some colleges produce their own courses while others act as agents for other institutions. The Darwin Community College is an example of a college which does both and is thus able to augment its own program of studies and offer access to post-secondary education to a small population scattered over a vast expanse of territory.

One of the most highly developed examples of distance education in Australia is the Victorian TAFE Off-Campus Study Network which offers 179 subjects through fifteen regional centres. Many universities and colleges of advanced education are also much involved in providing off-campus studies. Some have set up local study centres and these have on occasion taken on additional community college type activities such as adult education, educational counselling and providing a core for community development.

### Basic Literacy Education

While school attendance to the age of 14-16 has been compulsory in Australia since the nineteenth century, there has been increasing recognition in recent years that numbers of adults have not attained a level of literacy sufficient for the purposes of daily living and working in an industrial society.

There has been a growing response to this problem by governments and administrators of the formal education system, but the nature of the problem (involving the failure of people to profit from formal education) has meant that less formal means have been used in attempts to find solutions. In most States volunteer tutor schemes have been instituted with guidance and assistance provided by education systems, normally the technical and further education systems. There have also been classes established in literacy which are directly provided by technical and further education institutions and, in some States, by evening colleges associated with secondary schools.

Literacy and numeracy training is also an important element in programs to assist young unemployed people. Such programs have been funded by the Australian Government and provided by State technical and further education institutions.

## Conclusion

The preceding sections give some indication of the kinds of education in which the community colleges that are now emerging in Australia are likely to be involved. For some years to come the development of community colleges is likely to be in an experimental phase. At the same time it is clear that community college type functions are being increasingly performed by other institutions especially technical and further education colleges, and to a lesser extent by colleges of advanced education. A number of universities also have large programs of extension studies, particularly in the area of non-credit adult education.

The Committee of Inquiry into Education and Training has been required to review possible developments in (largely post-secondary) education and training up to the year 2000, and its report, due late in 1978, is likely to be an important source of information and of advice to the Government on community college type education in Australia.

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## EDUCATION FOR WORK

Many important historians, politicians, as well as persons in other fields, have written about the significance of work to the building of individual character, to the development of the nation's resources, to national survival, and to the fulfillment of self. In every American generation, moralists have criticized young people, and sometimes others, for lack of devotion to work as a way of life. In his autobiography, Benjamin Franklin recommended hard work, especially the appearance of being a hard worker, as a way to success.

Work is one of the fundamental human categories. Man is the animal that fashioned tools and built a world. Man is thus the only animal that lives in two worlds, the natural one shared with all other inhabitants of the planet, and that other nature -- or world -- that man has made by himself.

There was a time in our society when young people learned to work at a particular job or occupation by simply doing the work until it was mastered -- or moving on to something else if met with failure. Not so today. The technical evolution has demanded formalized training. Thus we come to the importance of "Education For Work."

Vocational Education -- training for the world of work that does not require a bachelor's degree -- has long been considered the stepchild of American education. The stepchild has emerged during the past few years to become a subject of increasing public concern. A recent study by the Department of Labor indicates that by 1980 about 80 percent of all jobs will require less than a bachelor's degree but very few will be available to the unskilled. It is estimated that approximately 70 percent of the students now in school will not graduate from college. Without some kind of vocational training, many of these young people will be unable to find work.

Even a college degree has offered no assurance of a job in the 1970's and, according to numerous forecasts, job prospects will remain dim in several professions for years to come. Professional journals and the popular press have told of overcrowding in many fields and of large numbers of new graduates being left unemployed. Even holders of advanced degrees are not immune from these conditions. The Ph.D. is no longer a meal ticket, especially in teaching and engineering, two of the professions hardest hit by changes in the job market. These changes were wrought by such diverse factors as uncertainty in the national economy, a slippage in the rate of population growth, and a large outpouring of graduates in the decade of the 1960's.

Despite the current opportunities for vocationally educated students, there remains some prejudice in many quarters against such training. The first annual report of the National Advisory Council on Vocational Education in 1968 stated: "At the very heart of our problem is a national attitude that says vocational education is for somebody else's children . . . We (Americans) have promoted the idea that the only good education is an education capped by four years of college. This idea . . . is snobbish, undemocratic, and a revelation of why schools fail so many students."

Dr. Bruno Battelheim, professor of psychiatry at the University of California, told a congressional subcommittee in 1969: "In my opinion, there are today far too many students in the colleges who have no business there . . . Many would be better off in a high-level program of vocational education which is closely linked to a work program."

The stigma of vocational education has faded tremendously as student disillusionment with college education has increased. The scarcity of jobs for graduates, especially those in the liberal arts, is encouraging many young people

to forego four years of college for vocational training after they finish high school. Such a trend is already apparent.

Thus vocational and technical education have recently assumed a new importance in this country. The dramatic rise in youth unemployment and underemployment, the shortage of badly needed personnel in many technical, semiprofessional, and skilled occupations, the retraining and continuing education needs of workers displaced by automation, and the rising demand for new educational opportunities both at the secondary and postsecondary levels have forced a re-examination of this nation's past neglect of occupational education.

Technological change has, rather suddenly, thrown up a dramatic challenge to the nation's political, economic, social, and educational institutions. Though the full scope to this challenge may not be comprehended for years to come, its dimensions are now clear enough to call for a massive response on the part of American education. All levels of education, and particularly post-secondary education, must quickly move to assume greater responsibility for preparing men and women for entry into the changed and changing world of technological work.

The one aspect of American education that has moved rapidly to meet this challenge head-on is the nation's junior and community colleges. Career education has become one of their most important educational services to the communities they serve.

#### CAREER EDUCATION IN CONCEPT

There are nearly as many definitions of career education as there are definers of it. Most definitions are descriptions of the applications rather than the concepts themselves. The following are among the key concepts of career education:

1. Preparation for successful working careers shall be a key objective of all education.
2. Every teacher in every course that has career relevance will emphasize the contribution that subject matter can make to a successful career.
3. "Hands-on" occupationally oriented experiences will be utilized as a method of teaching and motivating the learning of abstract academic content.
4. Preparation for careers will encompass the mutual importance of work attitudes, human relations skills, orientation to the nature of the workaday world, exposure to alternative career choices, and the acquisition of actual job skills.
5. Learning will not be reserved for the classroom but learning environments for career education will also be identified in the home, the community, and employing establishments.
6. Beginning in early childhood and continuing through the regular school years, allowing the flexibility for a youth to leave for experience and return to school for further education, including opportunity for upgrading and continued refurbishing for adult workers and including productive use of leisure time and the retirement years, career education will seek to extend its time horizons without beginning and without end.
7. Career education is a basic and pervasive approach to all education, but it in no way conflicts with other legitimate education objectives such as citizenship, culture, family responsibility, and basic education.

From these concepts it should be apparent that career education is not to be conceived as a time segment of education such as elementary, secondary, or postsecondary education, or as a separate subject matter such as vocational

education or academic education. Yet it encompasses all of these and more. It is a basic part to all education. It provides a specific objective -- successful career performance -- which is practicable, achievable, and measurable and not exclusive of other legitimate objectives. It treats all honest and productive human activity as honorable and legitimates preparation for it. It requires identification of those attributes which make for lifetime career success, whether as employee or employer, laborer or professional. It involves analysis of the entire educational process to design appropriate timing and ways in which the identified attributes can be furthered. It denies to the school any monopoly as a learning environment, yet gives the school a key role in identifying and coordinating all learning environments which can further the career goal.

Career education at present is best described as a concept in search of a definition, and there are many candidates for official designation. We prefer the following definition which seems to be in no serious conflict with developing usage: Career education is the total effort of public education and the community aimed at helping all individuals to become familiar with the values of a work-oriented society, to integrate these values into their personal value systems, and to implement these values in their lives in such a way that work becomes possible, meaningful, and satisfying to each individual.

## COOPERATIVE EDUCATION

### Meaning of Cooperative Education

Cooperative Education is a plan which allows students to gain work experience directly related to their academic major. This plan integrates classroom study with employment, and is based on the principle that learning does not confine itself to academic achievement but is equally dependent upon practical experience.

### Advantages of Cooperative Education

While the operation of Cooperative Education Programs may vary from school to school, the objectives and advantages are generally quite similar for students, employers, and the learning institutions themselves.

### Advantages to Students

1. Gives reality to learning. Students find that their studies have greater meaning through coordinating work experience with classroom instruction.
2. Increases educational motivation. The integration of work and study increases student motivation because it engenders a strong desire to learn.
3. Develops greater human understanding. Students develop greater understanding of other people and greater human relations skills by utilizing the job skills-oriented, work-a-day community as a laboratory for learning.
4. Accelerates maturation. Students discover that cooperative work experience in the existing real world of work provides them with opportunities to broaden their outlook and shape their behavior patterns to meet the demands of the working world.

5. Provides orientation to the world of work. Students have an excellent opportunity to test their interests and abilities in connection with real jobs and gain a new understanding of, and a healthy attitude toward, the real world of work.
6. Provides financial aid. While this is not its primary purpose, Cooperative Education does provide students with regular income-producing jobs to pay part of their college expenses and makes higher education possible and attractive to many qualified young people who could not otherwise afford to go to college.
7. Provides useful employment contacts. The Cooperative Program gives the student contacts which are useful in later occupational placement. For many students it provides a head start in salary and position in after-graduation employment.
8. Provides specialized facilities. In the working community, specialized facilities and equipment are available to the student that are sometimes not present at the College.
9. Provides greater career satisfaction. While still in college, students may insure greater career satisfaction by sampling fields before making a commitment.

#### Advantages to Employers

1. Provides a good source of labor supply. The Cooperative Program helps the employer maintain an infusion of new talent into the organization at the entry job levels. He also has an opportunity to identify and select students with the particular abilities and talents that he is seeking.

2. Facilities recruitment and retention. The Cooperative Program provides the employer with an excellent recruiting tool. He can use the system to tailor the cooperative job assignments so that the students can better appraise the long-range potential for after-graduation employment. In addition, the employer can use his own supervisory personnel to screen those "Co-op Trainees" with the most potential for permanent employment consideration.
3. Permits better utilization of personnel. The employer can use "Co-op Trainees" to fill assignments which fall between those too difficult for the high school graduate and those which normally do not require the abilities and talents of professionals. This means the employer can more effectively use highly-paid personnel for more specialized work.
4. The employer becomes a contributor to the educational process. Industry becomes a partner in the total educational program.

#### Advantages to Educational Institutions

1. Encourages greater community support. A college operating on the Co-operative Program has an opportunity to expand its service to the community and thus merit to an even greater extent the moral and financial support of the community.
2. Provides benefits to the teaching faculty. As new work programs are planned and developed and as students alternate between classroom periods and work periods, faculty teaching members are in an advantageous position to maintain a closer relationship with business, industry, and the professions. In addition, teaching effectiveness is usually enhanced because faculty members are kept up to date on the latest developments in their field by the students who are frequently exposed to the frontiers of



knowledge in their cooperative assignments. Although the Cooperative Program puts more pressure on the teaching faculty to keep their lecture material up to date, most of them find teaching in a cooperative institution stimulating and challenging.

3. Permits more effective use of plant facilities. Since half the student body is at work while the other half is attending classes, there is more efficient utilization of plant facilities because the institution can accommodate nearly twice the enrollment with the same given amount of classroom and laboratory space.
4. Eases the problem of placing graduates. Students graduate with the equivalent of six months of work experience related to their major field of study. Increasingly, employers are looking to hire new personnel with relevant practical experience.
5. Makes available facilities and equipment. Students are frequently afforded an opportunity to use industrial laboratory equipment and facilities the College can not financially afford to provide..

#### Objectives of Cooperative Education

The College maintains that certain conditions must be met in order to achieve the primary objective of the Cooperative Education Program: that of integrating classroom theory and practical experience to achieve a more meaningful educational experience. The foremost of these conditions is that educational and training values must be the paramount consideration in the placement of students, and must take precedence over such things as earnings, convenience of location, working conditions, and personal preferences. Employers must clearly understand the educational purpose of the plan and, while deriving direct advantages from participation in the plan, they should not exploit students by sacrificing educational purposes

to immediate employment needs. On the other hand, students must meet all employment requirements and should not expect special privileges. Cooperative training assignments are closely supervised and evaluated by college personnel to insure high standards of academic excellence.

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## EDUCATION IN INDIA: A BRIEF REPORT

The question of education in India, like the mid-summer heat is a prickly one. If it receives an airing each summer, it is only to introduce new policies and provisions and alter old ones. If it is equally quickly dropped, at the end of the season, only to be racked up again next summer, it is because the crux of the enormous problem usually escapes the backing of a political will to implement.

This happens largely due to the fact that modern Indian educational thought is the product of two opposing forces. On the one hand, the administrative, commercial and elitist requirements of the British Raj and on the other, the renascent idealism of Indian National Movement. The influence of the Raj proved to be stronger and the present structure is largely its legacy which has given unprecedented linear expansion of the traditional colonial system. It certainly bears out what Bertrand Russell said, "There is an imperialism of culture which is harder to overcome than the imperialism of power."

This is not to suggest that the ills of the Indian educational system have not been scrutinized. In fact, in the 31 years, since India's independence, the question of educational reforms has been bandied back and forth at the bureaucratic level without much implementation. As one of the most crucial of India's problems, education has so far barely touched the people (socially and economically backward section), who need it most; where it has made impact the feedback has only succeeded in producing more educated uneducated, - who barely possess any employable skills and are hardly equipped to face the social and economic situations of a modern Indian society.

The facts are somewhat staggering. The formal education in India covers about 7 lakh institutions (120 Universities, 4,500 colleges, 40,000 secondary schools, 600,000 elementary schools), 3.5 million teachers, over 100 million students and involves an expenditure of Rs. 25,000 million (about \$3½ billion), which is next only to that on defense. Yet, owing to population increase, and wrong priorities in education, the number of illiterates has risen from 247 million in 1951 to over 340 million by 1978. Besides, the benefits of such huge investment in education have gone to rich and relatively well-to-do classes who form the top 25% of the income groups.

Past experience indicates that at the planning policy level, great stress is laid on universal mass education, education for women, life-long education but at the point of implementation, highest achievements are in the field of secondary and college education. In fact, there is always much talk about the restructuring of our educational set-up but little has been done to translate it into action. Instead, with each passing day, even the greatest experiment and innovation embodied in Tagore's 'Shanti Niketan' and Gandhi's and Zakir Hussain's 'Jamia Millia Islamia' have come to resemble more and more the inherited imperial pattern of pre-independence India and to suffer from its worst effect.

Why has it been so? Primarily, because our educational planners are bureaucrats and majority of faculty members have developed a vested interest in perpetuating the prevalent system of education as they are its main beneficiaries. Otherwise, how can it be explained that those who talk of change and have been in position powers all these years, have accomplished so little to make education an instrument of change as to enable to improve the lot of socially and economically backward people. If there had been a linear expansion of the "colonial system", there has been an equal degree of linear expansion in the class of those who merely talk loud for change, write reports and develop cold feet at the time of implementation.

However, the most important and ambitious scheme launched so far in the country is the recent National Adult Education Programme with emphasis on functional literacy, acquisition of literacy skills relevant to the environment and learner's needs, flexible regarding duration, time, location, instructional arrangements, diversified in regard to curriculum, teaching and learning materials and methods. These programmes of adult education and literacy would be followed up by effective arrangements for continuing education, which would include library services, group discussions and other forms of organised learning and community action. The target for adult literacy is to educate 100 million people in the age group of 15-35 over the next five years. Perhaps for the first time priorities are set right.

There are certain other educational institutions like Gujrat Vidyapeeth, Kashi Vidyapeeth, Lok Bharati, Jamia Millia Islamia and Viswa Bharati, who have been involved with some measure of success, in imparting community based education and education for work. Gujrat Vidyapeeth deserves special mention. This institution reflects Gandhian thoughts in Education and prepared workers for rural work.

In order to meet the educational and economic needs of rural India the Government also established a number of rural institutions. These institutions were required to have programmes suiting the occupational needs of the rural students with emphasis on the application of knowledge gained in the classrooms to actual life situation. Unfortunately, this movement has not been a success. But there is need to develop innovative institutions with strong rural bias.

Many Universities conduct correspondence courses but all these courses are in the traditional areas and lay stress on undergraduate or postgraduate degrees. There is very little diversification, hardly any stress on practical and work-oriented education.

In India, there is no single comprehensive institution which may be called prototype of a Community Colleges as it is known in the United States. An important experiment aimed towards this objectives was started in Delhi University in 1972 with the opening of the College of Vocational Studies. This marked a small beginning of a great change, making post secondary education more meaningful and work-oriented.

The objective is to bridge the gap between the static university education and the changing social environment, to successfully interweave general and work-oriented education, to diversify education with a view to provide not only knowledge but also some skill which may lead to gainful employment in middle-level occupations, to relate class room experience with practical work-experience; to involve trained professionals in various topics who would also help prepare and design courses and provide instruction and training. By this way it will be possible then to release education from the stranglehold of the tradition ridden system.

The main and the long term objective of the Institution is to carry the message in India through implementation of new educational plans and encourage and develop short-cycle education, non-formal education, life-long education and education which combines the world of learning and the world of work.

In the next few years the college plans to consolidate the study on diversified, non-traditional and vocational subjects. The modality of the study can be treated in two ways: either blend them with general subjects or by introducing short term parallel vocational courses along with general stream of subjects.

The main emphasis of development will be in areas like (a) Tourism, (b) Book-Publishing, (c) Communications, (d) Office Management, (e) Television technology, (f) Polymer Technology, (g) Instrument Technology, etc.. In other words, subjects both laboratory and non-laboratory based, skill based and workshop based will be taken up. The courses can be full-time or part-time,

it may fetch a degree or diploma or a certificate. It is envisaged that the college will function 12 to 14 hours a day, offering varied programmes of varied duration. The enrolment will be as high as 10,000 to 15,000. The institution will also provide service facilities to students of other institutions who would be wanting to do part-time studies in certain vocational courses.

Another important activity, of the institution over the years will be to train teachers for vocational subjects for schools at the 10 + 2 stage. It will also attempt to develop resource centre for teaching and training in vocational courses.

All these plans, perhaps indicate that the work initiated at the College is a modest effort, however tentative, to translate into action proposals for educational reforms that have been talked about in our country for years. This institution will need to feel its way forward and may have to revise its programmes as it goes along. This need not worry anybody. What matters is the evolution of a really useful set of courses of studies that is both educationally relevant and socially meaningful. By now already seventeen universities in the country are offering short term vocational and work-oriented subjects.

Speaking generally the most noteworthy accomplishment of community based system of post secondary education is that it serves the community, its open door policy complements the populist aspirations with the concept of life long learning and what is more it is democratic in out look and perspective.

It is gratifying to note that the organizers of this conference have decided to set up a network for the exchange of information on programmes of life-long education, education for work, and other themes, common to the community based education all over the world. The developing countries, in particular, will need to share experiences and ideas among themselves as well as with the advanced countries. It is, therefore, natural that a new network like a World Community

College or International Council of Community Education or International Council of Community Colleges be formed in order to lead a world-wide movement and render post secondary education more relevant to the needs of all countries.

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## POST SECONDARY, SHORT-CYCLE EDUCATION IN VENEZUELA

I feel very fortunate in being able to represent the Ministry of Education of Venezuela regarding the international development of post-secondary short-cycle institutions, sponsored by the United States Government, community colleges presidents, and attended by representatives from various countries sharing problems and experiences in the field of education within Junior and community colleges here and abroad.

Venezuela is a Federal Republic consisting of twenty states, the Federal District, two Territories, and 72 islands (federal dependencies) in the Caribbean. The country lies on the northern coast of South America, between latitudes  $0^{\circ}38'$  and  $12^{\circ}13'N$  and longitudes  $59^{\circ}74'$  and  $73^{\circ}25'W$ . Its area covers 533,857 sq. m. (sixth largest country in South America) and it has a 1,750 m. coastline.

The population is 12,361,090 (1976). Grows at a rate of 28.9 per thousand per year (1974). Labor force, 3,355,126 (April, 1974). The Capital: Caracas, with a population of 2,497,743 (1976). Vital Statistics: Birth rate, 36.2 per thou. (1976): death rate, 6.2 per thou. (1976): infant mortality, 43.3 per thou. (1976) Education: 3,223,732 students, of which 224,600 in pre-school institutions 2,08,413 in primary; 669,138 in secondary school (1976). Institutes of higher learning, 46, centers for adult education, 1,364 (1976)

Emphasis on Education: About 20% of the 1977 Federal budget - or around \$1.6 billion - is devoted to public education. With over half of the country's population under 19 years of age, it is natural that much of this figure be allotted to primary and secondary education.

At the end of 1976, the Government estimated that 3.2 million students -or about one-quarter of the entire population -were enrolled in programs ranging from pre-school to university levels, nearly all of these in the public sector.

Pre-school children receiving regular classes now number some 300,000, up radically from the 16,000 registered in 1958. Over two million students are enrolled in primary schools and 818,000 in secondary institutions. Venezuela's fifteen universities and thirty-two post-secondary schools handled over 308,000 students in 1976. (All but five of the nation's universities are state institutions.) Total student population for the 1975-76 school year was up 7.8% over the previous year. In addition, 263,000 persons took adult education courses and 125,000 individuals studied specialized courses in a range of areas, including carpentry, mechanics, metalworking, plumbing, electrical installation and other skills. The latter group was trained under the auspices of the National Training Institute (INCE), which provides adolescents and adults with on-the-job experience in government-owned schools and in private industry. The Government has given INCE the unprecedented task of training tens of thousands of skilled workers and technicians who will be required as the Government's myriad projects in light and heavy industry, agriculture, transportation and public works take shape between now and 1980.

Of the many facts encountered on an international level of education in post-secondary short-cycle institutions, this report will focus on the evolution of these types of programs which have been established in Venezuela during the last fifteen years.

The following data indicate the number and type of educational institutions at present functioning throughout Venezuela:

- A. Twenty-two Junior Colleges, of which eight are private institutions and fourteen are government subsidized.
- B. Twelve Institutos Universitarios de Tecnologia, upon completion the student becomes a tecnico superior, (higher grade technician).
- C. Three institutos Universitarios Politecnicos, (Polytechnical Institutes)
- D. Six Institutos Universitarios Pedagogicos, (Secondary Teacher Training Institutes).

The following provides an overview of the types and functions of post-secondary institutions operating in Venezuela during the past fifteen years:

#### Colegios Universitarios:

The original purpose of this type of institution is to offer a two year non-terminal curriculum to high school graduates seeking a five year career, thus enabling such students higher institution for completion of their education. These institutions are to be located in geographical areas where the student population warrants the establishment of this type of institution. This plan provides an institution in close proximity to the population of students having monetary limitations, and further reduces the burden of traveling considerable distances. A plan of this nature increases the students' chance of success in a two year institution and prevents large enrollment at the Universities' beginning levels where normally only the top 10 to 15% of the high school student population is expected to succeed. This also prevents an overcrowded and distorted

situation in Universities' first year enrollment.

Institutos Universitarios de Tecnología:

These institutes are designed for students coming from secondary vocational schools, having a minimum of 1200 hours in laboratory and shop skills as a pre-requisite for these two year institutes. Institutions of this type have to be strategically located so as to offer students opportunities for a short two year term career leading to Técnico Superior, (higher grade Technician).

Institutos Universitarios Politecnicos; (Polytechnical Institutes):

This type of institute is designed to accept any high school graduate able to meet selective criteria established by the institute. The curriculum leading to Tecnólogo, (Technologist), requires three and one half years of schooling, with the last half year being devoted to on-the-job training in industry for each student. The intention is to produce engineers well versed in the practical aspects of production which are very much in demand in industry. To achieve those objectives the curriculum has been so designed that students spend about fifty percent of their time in shop and laboratory training, the remaining time to devoted to academic subjects.

Institutos Universitarios Pedagógicos, (Secondary Teacher Training Institutes):

The teacher training program is designed for the preparation of high school teachers. Any high school student able to meet selective criteria may enroll in this institute, which offers a four and one half year curriculum. This last half year allows students to get practical experience in student teaching. Upon completion students become qualified teachers in specific subject matter areas. The geographical location of these institutions is of great importance so as to enable them to draw students from nearby areas in different

states, with the hope that upon completion many will remain to teach in those nearby areas where there is a shortage of trained teachers.

At present the institutions previously mentioned are function as follows:

Colegios Universitarios (Junior Colleges), offer terminal careers within a three year period in areas related to administration, education and general services. Most of the institutions use the first year for general cultural purposes with the remaining two years devoted to specialization in a specific area.

Institutos Universitarios de Tecnologia, (Institutes) offer three year terminal careers in fields such industry and agriculture. Most of the institutions accept any high school graduate and the first year is used for general cultural purposes with the remaining two years being devoted to training of highly skilled technicians.

In the specific case of La Victoria Institute of Technology where at present I am a member of the faculty, we have a two year curriculum for those high school graduates coming from vocational schools with 1200 hours minimum in shop and laboratory training. For those students coming from non-vocational high schools, the IUT La Victoria offers an additional year consisting of forty weeks of intensive shop and laboratory training. This additional year enables students coming from non-vocational high schools to obtain the minimum 1200 hours in shop and laboratory skills needed as a pre-requisite for the two year curriculum.

If a student after finishing the required first year of training is unable to continue his studies, such an individual can get a job earning two thirds of the wages of a fully trained workman. By enrolling as a part time student in the

evening the student can complete his studies.

Institutos Universitarios Pedagogicos, (Secondary Teacher Training Institutes):

These institutes offer a four and a half year curriculum, with emphasis on excellence in the academic subjects curriculum and teacher preparation, however, in selecting students seeking the shop teaching areas special care is taken to select from among those students already having the minimum required skills, to become successful teachers.

Antonio Mauri  
Executive Secretary  
La Victoria Technological  
University Institute  
Venezuela

## COMMUNITY-BASED EDUCATION

The community college concept, as the name might imply, has necessitated an expansion of the concept of community-based education. Because the community college mission has included addressing the educational needs of its surrounding environment, the connotation of community-based education has come to encompass three sprawling facets: 1) Involving the community in the institution's decision-making processes, 2) providing educational programs in off-campus locations in the community, and 3) using college resources to impact upon the community environment. Initially, these components of the concept might appear to restrict community-based education to the realm of the community college alone; however, a trend toward greater community participation appears to be gaining momentum within other types of postsecondary institutions as well.

A brief consideration of each of the three facets of community-based education is suggestive of the current emphasis upon maintaining formalized and effective information channels within the community. Within each area, specific examples are cited, drawn from the activities of Florida Junior College at Jacksonville.

#### Involvement in Institutional Decision-Making Processes

Many educational institutions aspire to community involvement in the college's decision-making processes, usually by means of an informal mechanism. Such vague or sporadic attempts to acquire community input can ultimately place a severe strain on the management of an institution and can lead to misunderstandings or confusion regarding community and college roles. The community college concept of management, however, has sought to involve the general populace more directly in administrative decisions, via a formalized information mechanism within the community.

In conducting a community-based program, institutional efforts may be directed toward the utilization of three types of formalized groups: advisory committees, compliance committees, and open forums. The advisory committee is functional for technical and skill areas and may recommend in curricular and related instructional matters. Compliance committees include Equal Access/Equal Opportunity committees, Safety and Handicapped committees, and other groups which give attention to speciality group representation. Open forums, concerned with issues such as the status of the aging, sex education, and women, provide direct input from the community to the upper level of college management and the governing board.

A community college might utilize some 500 individuals from such groups and the community to aid management and staff in the coordination of educational services. These community representatives can provide assistance in the areas of curriculum, placement of students, the seeking of private and public funds, evaluation of programs, and recruitment of staff and students. At Florida Junior College, utilization of these formal groups has facilitated evaluation of current programs and provided insight for additional areas of educational concern within the community.

#### Provision of Off-Campus Programs

The second facet, provision of off-campus programs, has been expanded to include the placement of educational opportunities in almost any location wherein the need is evident. For example, Florida Junior College has sought to fulfill its educational mission in over 150 centers in the community. This mission includes literacy training, adult high school training, vocational and technical training, continuing education, and the Associate of Science and the Associate of Arts degrees. To discharge this responsibility effectively, the educational centers have been established in such locations as the public schools, community



centers, industry and business locations, churches, "half-way" houses, the county jail, storefronts, homes, military bases, and ships.

#### Utilization of Institutional Resources to Impact Upon the Community

The final facet of community-based education involves the college's utilization of its own resources to impact upon the community. One example of such use of resources may be found in the impact of Florida Junior College upon the cultural environment of Jacksonville. Of the present season's numerous civic artist series events, more than 50% are sponsored by the Florida Junior College Artist Series. Other examples of institutional influence are also apparent: the college staff is given released time to work with the community in such programs as the University Year for Action (students work in a social service capacity within the community), programs for the displaced homemaker, and services for the blind.

At this point, a caveat is in order. A commitment to this expanded concept of community-based education must not be taken lightly by the educational leader. Once community representatives come to perceive their functions as sanctioned roles within the college/community network, a firm pattern of communication has been set. The college may accept or deny recommendations from the community groups; but in either case, a sound rationale must be provided. If recommendations are perfunctorily denied, the community's response may be characterized by a potentially antagonistic relationship between the community and the institution, or even withdrawal from all participation in the endeavor. Thus, the community-based concept forcefully commits the college to interaction with the community, and the administration must not only exhibit a sound rationale for action, but also communicate it. Once this responsibility is recognized, the community representatives may be of ongoing benefit to the college.

In designing and implementing a community-based program, there are several other considerations of an extra-educational nature. When the institution's influence so penetrates the fiber of the environment, the ever-volatile political and economic conditions of the community become institutional concerns. Leaders within the local business community also will grasp the significance of community-based education as it contributes to their in-house training programs. Community action groups — including minority associations, senior citizens, ERA groups, and factions representing both open shop and closed shop labor concepts — these community voices will demand that educational leaders evaluate and clarify their institutional priorities. This cyclical relationship between college and community is inherent to the design of community-based education. The institution seeks the support of the community for its educational endeavors, while in turn, community groups request of the institution attention to their special interests. Within the successful community-based program, the community representative assumes an additional role which results in a fortuitous by-product for the institution; such an individual often functions as an effective public relations agent of the college within his or her unique frame of reference.

Finally, perhaps the greatest concern inherent to community-based education is another concept which originated outside the educational domain, and yet it remains at the heart of our institutional educational aspirations: quality control. An effective program of monitoring each class is necessary to evaluate congruence between the activities which take place in the educational environment and the educational goal for that course. Through the pursuit of such an intense program of supervision, evaluation, and re-evaluation, we move a step closer to the goal of assuring that what "is" is indeed, what "ought" to be.

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NEW TRENDS IN SECONDARY AND POST-SECONDARY  
EDUCATION IN YUGOSLAVIA

In Yugoslavia, similarly to the majority of other European countries, there are no institutions which are identical to the American Community and Junior Colleges. Usually, instead of one comprehensive institution, a number of institutions are doing the same work as these colleges in the USA. For example, in Yugoslavia these are: secondary (high) schools<sup>1)</sup>, two-year higher schools<sup>2)</sup>, universities, so-called national and workers' universities<sup>3)</sup>, institutions for adult education, numerous cultural institutions (community centers, libraries, etc.), recreation and sports centers, etc.

- 1) In contrast to American high schools, secondary schools in the European countries are distinctly divided into academic, liberal arts and vocational, professional schools. The greater part of the educational content in these schools is compulsory for all enrolled pupils.
- 2) Higher schools are two-year vocational, post-secondary schools. Only those candidates who have previously completed an academic course of study in secondary school or a corresponding vocational course of study in a suitable school are eligible for enrollment. These higher schools are specialized and prepare students for a particular profession (economists, machinists, technologists, agricultural experts, health workers, teachers for preschool institutions, elementary school teachers, etc.).
- 3) National and workers' universities are not a part of the formal system of education. These are independent, community-oriented institutions organized for adults and adolescents: short-cycle courses in any field of culture, science, labour, life, sports, recreation, etc., then lectures and discussions on current issues, literacy courses for illiterate adults, film presentations, the organization of preparatory courses for acquiring a higher level of professional ability, etc.

Yugoslavia is undergoing a radical change in its educational system. The sharpest alterations are being made precisely on the level of secondary and post-secondary education. The new system of education, which was initiated in 1974 and should be introduced in all the republics and provinces by 1980/81, will have two basic sections:

the first: preschool and elementary eight-year compulsory education, which is completed in the fifteenth year of age, and

the second: specialized education which is expected to become long-life education.

In light of the topic of this Conference, I will present only the major principles serving as the groundstone for the changes in secondary, higher and university education in Yugoslavia which have been ongoing for several years now. In this context, it will be easy to gain insight into post-secondary education in Yugoslavia, too.

These principles are:

1. In the course of specialized education, all students are provided with a two-year extension of the general education acquired in compulsory eight-year school. Ten years of modern general education (8+2) is considered to be a sufficient basis for the transition to university studies. This general education contains many new and modern components (in addition to the humanities and the social, mathematics and natural sciences, this education encompasses Marxist education, socio-economic education, polytechnical education) which should contribute to the training of youth for life and work in the Yugoslav socialist society. In addition to compulsory courses, this two-year program of secondary

education also includes a number of elective and optional courses.

2. At the age of 17, each student who continues education must choose one of the professional courses of study (stream).

3. Specialized education is organized on the basis of a step-by-step acceleration. The highest level in each course of study is the doctorate of science. In this way, the former division into secondary, higher and university education is eliminated in the new Yugoslav educational system and an integral multi-step system of professional education is created.

4. Specialized education on each step has the following two fundamental tasks: a) to provide a theoretical and practical base for studies on the next step, and b) to provide vocational education which will enable employment at those jobs corresponding to the level of training. This finally surmounts the former division of secondary schools into general education, academic and vocational, professional. In the new system, each student will receive general and vocational education simultaneously, progressing to the level of education which they desire or to the level which his personal abilities allow.

5. Elective and optional courses are organized for those who, on a specific step, wish to change the professional course of study which they had selected.

6. Specialized education may be acquired by continuous transition from one step to the next, or formal education may be abandoned on a particular step in order to join the labour force and then, while working, either attend evening and other courses for acquiring the next step of education or, after a certain

period of time spent in the labour force, a person may "return" to the formal system of education and continue full-time schooling at the next or higher levels of education. The objective here is to build a flexible and uniform system of education for youth and adults with the differences which formerly existed between these two systems.

7. Specialized education is organized in educational centers. These are comprehensive educational institutions in which one or more professional courses of study are offered, depending on the needs of the communities in which these centers are operating. Also, these centers can have one, more or all steps of specialized education, including the university level of education and can offer the degree of doctorate of science.

8. ~~The~~ programs of specialized education are composed by the educational centers in cooperation with all interested parties (the community, work organizations, citizens). These interested parties are organized into a Self-Management Community of Interest for Specialized Education and they adopt the corresponding curricula. On the level of each republic there is such a self-management community for specialized education (composed of the representatives of all district communities) which ensures that these curricula satisfy the standards set up and that there are a minimum of duplications and repetitions. Therefore, these curricula can fully reflect the requirements of the community, the work organizations and of all citizens.

9. These educational centers will employ a number of permanent full-time teachers as well as some part-time teachers. As all work organizations are keenly interested in the operations

of the educational centers, because the latter prepare personnel needed by the work organizations, they will gladly allow all their leading experts to take part in instruction.

10. The duration of specialized education will differ, even for the same programs. It will be shorter for full-time students and longer for part-time students. The organization of mastering the curricula will be orchestrated to the realistic abilities of particular categories of students.

11. As the educational centers were not, even in this new system of education in Yugoslavia, conceived as institutions expected to satisfy all the requirements of the citizens of a community, there will be further development and organization of institutions engaged in these areas (so-called workers' and national universities, community centers, sports centers, etc.):

The wealthy experience of the American Community and Junior Colleges in creating opportunities for the comprehensive satisfaction of the needs of the community, citizens and work organizations can serve to great benefit in seeking the solutions to numerous problems relevant to secondary and post-secondary education which we encounter in Yugoslavia during the building of this new system of education. This is also the reason why I am here among you today, at the Wingspread Conference.

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THE ROLE OF VENEZUELAN UNIVERSITIES IN THE  
DEVELOPMENT OF POSTSECONDARY SHORT-CYCLE  
EDUCATION PROGRAMMES

The present paper has been written more as a small contribution to the understanding of people in the world than to the development of education. It intends to summarize some of the ideas presented by the author in the last meeting on "International Developments in Post-secondary Short-Cycle Education" of the American Association of Community and Junior Colleges held in Wingspread last October.

I want to express my appreciation to the Embassy of the United States of America in Venezuela, to the American Association of Community and Junior Colleges and to the International Institute of Education that invited me to attend the meeting and participate in such interesting discussions where people from different countries had as the only objective of finding out the way to unify the World Education in order to make it more just to the millions of people all over the world.

INTRODUCTION

The Subsystem of Higher Education in Venezuela is integrated by two main groups of Institutions; the first one constituted by experimental, non experimental and private Universities, ruled by the "Ley de Universidades" (Universities Law) and coordinated by the C.N.U. (National Council of Universities), and the second one formed by University Colleges and technological Institutes (some of them private) under the General Direction of Higher Education from the Ministry of Education.

Despite the fact that most of the short-cycle higher education programmes are offered by the Ministry of Education and, as such, are



actually being offered by University Colleges and technological Institutes; some Universities offer programmes of this nature. Within these programmes we consider two main aspects as follows:

1. The kind of short-cycle higher education programmes actually offered by the Universities, and
2. the present policy of Universities in relation to this type of programme.

These are the two main points to be considered in this paper.

#### SHORT CYCLE HIGHER EDUCATION PROGRAMMES ACTUALLY OFFERED BY THE UNIVERSITIES

Considering sixteen Universities in the Country, some with several Campuses, only three of them offer this type of programmes:

##### UNIVERSIDAD SIMON BOLIVAR (U.S.B.)

The Simón Bolívar University in its litoral Campus, was opened by the University in 1977, after an extensive study of the needs and functions of higher educational opportunities for high school graduates from the "litoral central" region in Venezuela. It is a two and a half to three years Co-educational public College, offering day programmes all around the year. It grants an Associate Degree in Technology.

As most of the public or official Universities in Venezuela, the U.S.B. is a free tuition fees University. It has developed a day time enrollment of more than 600 students, men and women.

The University has a comprehensive programme which includes general studies and also basic and specialized professional studies. The

College is an open door institution which reflects and strives to meet the diverse educational needs of students. It tries to provide conditions under the belief that individuals learn differently, that they have an unmet potential and that they develop it according to their own rhythm or pace. This has brought as a result, that the University considers as its responsibility to provide a variety of learning experiences and Instructional techniques in a free educational or academic environment.

In this context ten different careers are offered: Tourism, Hotel Management, Electronics, Electricity, Mechanics, Aviation Mechanics, Custom-House Administration, International Trade, Work and Business Management and Port Administration.

The University College is still in the growing process and it is considered actually as an experimental situation. One of the main points of the experiment is the accuracy and applicability of the principles of the personalized System of Instruction.

#### UNIVERSIDAD CATOLICA ANDRES BELLO (U.C.A.B.)

The Andres Bello Catholic University in its San Cristóbal Campus, located in the western part of Venezuela, was opened by the University back in 1963 as a traditional four to five years programmes Institution. At present the University is studying the possibility of establishing a short-cycle program in Pre-school, which is being studied by the Planning Office of the University Sector in order to be approved. It is hoped that the Institution will grant an Associate Degree in Education with major in Pre-school.

#### UNIVERSIDAD DE ORIENTE (U.D.O.)

This University located in the eastern part of the country has six campuses. At present in one of them it is being studied the possibility of establishing short-cycle education programmes specially

in Civil building and Journalism leading to the Associate Degree.

Up to now such programmes have not been run because they are still being analyzed.

### PRESENT POLICIES OF VENEZUELAN UNIVERSITIES RELATED TO SHORT-CYCLE POST-SECONDARY EDUCATION PROGRAMMES

The consideration of the present policies of Universities in relation to the future of these programmes is perhaps more important than the review of what is being done at the present time.

In order to understand those policies it is necessary to make a previous comment about the general context surrounding them.

In relation to this subject some conclusions derived from the analysis of the short-cycle programmes actually being offered by Universities as well as by University Colleges and technological Institutes are very important:

Students have a tendency to choose the four to five years traditional programmes leading to a degree similar to a B.A. or a B.S. instead of these new short-cycle programmes showing at the same time an evident rejection for these institutions which offer Associate Degrees, since they have not been yet completely accepted as a part of our socio-economic status.

Even though the tendency of statistical data on student enrollment in higher education reveals a slight deviation towards the institutions offering short-cycle higher education programmes, this deviation is not the result of a real vocational guidance or motivation. It is only the product of such factor as:

- a) The tendency of Universities of limiting the enrollment quota.
- b) The system of distribution and placement applied by the "Sistema Nacional de Pre-inscripcion" or the National System of pre-enrollment; following resolutions from the C.N.U. which determines

the number of students to be admitted in Universities, University Colleges, etc.

c) The alternative of choosing different careers and institutions which allows the S.N.P. the placement of students according to the enrollment opportunities and omitting his real individual selection.

Due to the previous considerations, besides others not mentioned here, the "Oficina de Planificación del Sector Universitario" (Planning University Sector Office) established, among others, the following policies: (See "Bases sobre Políticas, Estrategias y Acciones Concretas para el Desarrollo de la Educación Superior Venezolana" Unpublished Copy O.P.S.U. 1977).

1. Higher education institutions should be considered as centers of excellency and therefore, mechanisms of selection, enrollment and permanency should be established.

2. Universities should not offer short-cycle careers (this should be the responsibility of other higher education institutions).

3. Institutions offering short-cycle careers should enroll only those students with high academic level and highly motivated towards these programmes. (Remedial Programmes should be offered to those students who have not achieved the academic level required).

4. Short-cycle Institutions should not receive a large enrollment, unless they have covered the minimum in physical, academic and financial facilities.

5. The tendency of enrollment should follow mainly a motivational or a vocational selection to assure success of the chosen career.

6. Careers should be offered following the needs of the market as well as the different developing programmes considered as priorities by the government.

7. The need of a serious study of the salaries obtained by the graduates from a short-cycle programme has been recognized as a mean of leveling them to the salaries obtained by a B.A. or, a B.S. graduate.

8. The Curricular design for the short-cycle careers should be terminal but allowing graduate student to continue studies. Transfer programs, therefore, must be carefully established.

9. In relation to the transfer program there are various aspects to be considered such as:

- a) The lack of relation among the institutional components (academic, organizational, coordinational, etc.)
- b) The lack of a clear definition of programmes; careers, contents, Curricular design, etc.
- c) The agreement on degrees to be granted.

The necessity of a Continuous Curriculum is considered relevant to assure the inter- and intra-institutional transfer.

The aspects so far discussed define in general terms what is actually being experimented, in relation to short-cycle Post-secondary education, in Venezuelan Universities.

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AN OVERVIEW OF CERTAIN ASPECTS OF EDUCATION IN BARBADOS

The countries of the English-speaking Caribbean stretch across more than a thousand miles of ocean from Belize in Central America to Guyana in South America. Their total population is in the region of 5,000,000 with country populations varying from a few thousand in the smaller islands to about two million in Jamaica. Their political status varies from that of colony (such as Montserrat) through the stage of Statehood (responsibility for internal self-government but with defence and external affairs resting with the British Government, such as St. Vincent) to that of independent countries. This last category now includes: The Bahamas, Barbados, Grenada, Guyana, Jamaica, and Trinidad and Tobago.

Barbados, the most easterly in the island chain has an area of 166 square miles and a population of about 260,000 people.

Universal primary education has been available for a long time and the island has a high literacy rate, estimated at better than 98 per cent. There are some 126 primary schools catering essentially to children between the ages of six years and eleven years; however children are at times admitted below the age of six years, and some of the schools are still "all-age" schools, i.e., they retain pupils up to the age of fourteen years. These all-age schools are gradually

being phased out. The primary school enrolment in September, 1976, was 35,593.

In addition to those pupils attending Government-provided primary schools there are others who attend private primary schools and parents who choose this option must pay fees. There are probably some 2,500 pupils in such schools.

Transfer from primary to secondary education is by means of an examination called the Common Entrance Examination which is set for pupils between the ages of eleven and twelve years, and sufficiently good work qualifies the pupils to attend one of the 21 Government secondary schools where no fees are payable. All children in the stipulated age ranges are eligible to sit this examination. The remaining pupils can attend private secondary schools, of which there are about eighteen, and in such cases tuition fees must be paid by the parents. Government recognizes that these private secondary schools provide a useful supplement to those nationally provided, since there are insufficient places for all pupils in the age range 11 to 18 years in the Government system. For this reason, Government offers a considerable number of bursaries to offset some of the cost of tuition at the private secondary schools. The Government secondary schools accommodate some 20,000 pupils and the private secondary schools another 8,000.

The Government secondary programme provides a reasonably wide range of offerings including both academic and technical subjects and there is,

in addition, the Samuel Jackman Prescod Polytechnic which offers a mainly vocational programme. This institution has an enrolment of about 1,600 comprised of youngsters between the ages of 14 and 16 years.

Pupils completing the secondary school programme are eligible to sit the G. C. E. O-level (General Certificate of Education Ordinary Level) examination set by Cambridge University, and this examination is usually taken between the ages of 16 years and 18 years. Pupils who wish may remain at school for a further two-years in preparation for a more advanced examination set by the same body - the G. C. E. A-level (General Certificate of Education, Advanced Level) examination.

For those who wish to enter university the necessary requirements can be met by various combinations of subject passes at the O-level and the A-level examinations which are approximately equal in standard to Grade 10 and Grade 11+ in the U.S.A.

In 1969 the educational provisions for young adults (and older adults as well) were considerably broadened by the establishment of the Barbados Community College which now has an enrolment of part-time and full-time students totalling about 1,700. Admission to the academic programmes of the College is on the basis of four G.C.E. O-level subject passes, but for some of the programmes offered there may be no such requirement.

The College is at present organized into the following Divisions: Fine Arts, Liberal Arts, Natural Sciences, Health Sciences, Commerce, and Technology. Academic courses offered prepare students to sit the G.C.E. A-level examination as well as those of other Certifying bodies.



In addition the College awards its own Certificates for satisfactory completion of certain programmes. It is to be noted, also, that the College is giving increasing attention to the provision of short-term programmes designed to meet the needs of persons wishing to acquire certain skills needed for local industries, e.g., electronics manufacturing.

In addition to the Barbados Community College there are numerous other organizations/institutions which provide various forms and levels of continuing education through courses, workshops, seminars, conferences, study sessions, lecture/discussions, etc. Specific mention will be made of a few of these.

The University of the West Indies (U.W.I.) is a regional institution funded by and serving all the English-speaking territories in the Caribbean except the U.S. Virgin Islands and Guyana, this latter has its own University.

The U.W.I. had three campuses sited at Mona, in Jamaica, at St. Augustine, in Trinidad, and at Cave Hill, in Barbados with a total student enrollment of about 8,000. It offers the usual range of options including Arts and General Studies, Natural Sciences, Social Sciences, Medicine, Education, Engineering, Agriculture, Management, and Theology, but does not yet have available Dentistry nor Veterinary Medicine.

The Extra-Mural Department of the U.W.I. was established in 1948 as one of the first Departments of the then University College of the West Indies. Originally based on the English model of Extra-Mural (University Extension) work the Department has since made its own adaptations to Caribbean conditions, needs and requirements, and now provides for a

wide range of interests including classes geared to the G.C.E. examinations, adult general-interest classes (e.g., Carribean Literature, Car Maintenance, Child Development, Food Preservation) and some specialized training programmes such as a two-year Course for Executive Secretaries, a two-year Training Programme for Young Farmers, a ten-week Course for Small Contractors, and a Certificate Course for Teachers of Adults.

BIMAP (Barbados Institute of Management and Productivity) has been in operation for about seven years as a joint venture of the private and public sectors. Essentially established to provide a range of management training programmes, the Institute now offers about 15 such programmes including: Statistics for Businessmen, Management of Human Resources, Marketing, and a Consultancy/Advisory Service for small businesses. It also provides in-plant training for its member organizations.

The Government Training Division was established to meet the needs of persons employed in the public sector. It provides a number of training programmes including those geared specifically to the needs of both senior and junior officers in the Government service.

The B.W.U. (Barbados Workers' Union) Labour College, now some four years old, provides a regular programme of short courses designed to meet the needs and improve the skills of those involved in the labour movement. Since the Labour College also offers residential accommodation it is able to serve not only Barbados but other Carribean territories as well.

The Public Library service has been gradually expanded; a Mobile Service was introduced in 1976 and now serves some 86 schools. It is estimated that through this service direct contact is made with about 10,000 children of school age. In addition to the Central Library in the capital, Bridgetown, and the Mobile Service which also caters to adults, there are eight branch libraries sited in various parts of the island.

PAREDOS (Parent Education for Development in Barbados), a voluntary agency, had as its major thrust the preparation and promotion of adult-oriented programmes designed to help people improve the quality of their personal lives, and to understand better the needs of children.

Teacher Training. There are some 1,454 teachers in the island's primary schools, and some 1,010 in the Government secondary schools. Training for teachers in primary schools is provided at the Erdiston Teachers' College which offers a two-year programme, while training for teachers in the secondary schools is provided by the School of Education (U.W.I. Cave Hill Campus) which offers a one-year post-graduate course for this purpose.

#### Conclusion

This brief overview has necessarily had to omit specific references to a number of important provisions. Thus there was no reference to the Nutritional Programme, to the Pre-Natal Clinics of the Ministry of Health, to the Welfare Department, to the Community Development Division, nor to the varied activities in which they engage.

Also omitted, as was indicated above, was specific mention of a number

of voluntary organizations such as the very effective Family Planning Association, the National Council of PTA's, the Council for the Handicapped, etc.

Government's own commitment to education is evidenced by the fact that some 25 per cent of the national budget is allocated to the several education provisions, and the national interest in education is to be judged by the very considerable extent to which facilities provided are used, and by the very important contribution made by a large number of voluntary agencies through the educational programmes they provide.

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GENERAL ASPECTS OF THE  
EDUCATION IN COSTA RICA

Hernan Van der Laat

Costa Rica is a country of 50.900 km<sup>2</sup> with 2.000.000 habitants.

The interest of this country for its education dates from the first years of its existence as a free nation and has been maintained as a general aspect that characterizes Costa Rica not only in Central America and Caribe but also on a Latinamerican level.

Costa Rica actually appropriates 35% of the national budget to the Education and tries to maintain a high cultural level that has reached the nation in the last decades.

In the last several years the country has tried to orient the education toward the technical field to produce capable personnel in the different fields. Therefore, some of our high schools changed their systems of the traditional teaching to be Vocational Colleges where the students can have not only the regular high school education but also specialty in the technical field they want.

Costa Rica has 2905 Primary Schools with 367.026 students, 2838 of these schools are Public Schools and 67 Privated Schools. The former have 357.217 students and the latter 9808.

The High Schools have 216 institutions with 193.202 students, 80.090 of these High Schools students go to 38 private high schools, and 113.112 students to 178 Public Institutions. Of the 113.112 students that go to the public high schools 26.754 students go to the Vocational Education that we mentioned previously.

The student who has finished successfully high school has two choices: the first one is to continue a long career ( 4 5 or 6 years) in any of the universities, or a short career ( 2 or 3 years) in a Community College or any Institution of the national system of education (University level).

The national system of education have 43.524 students, the Community Colleges 1.500 students.

In Costa Rica there exists a National Learning Institute (I.N.A.) which has 50.409 students. The requisites to enroll in this Institute are: to have passed third grade of high school and to be 15 years old.

The following scheme has the purpose of giving you a clear idea of the possibilities of education in Costa Rica.

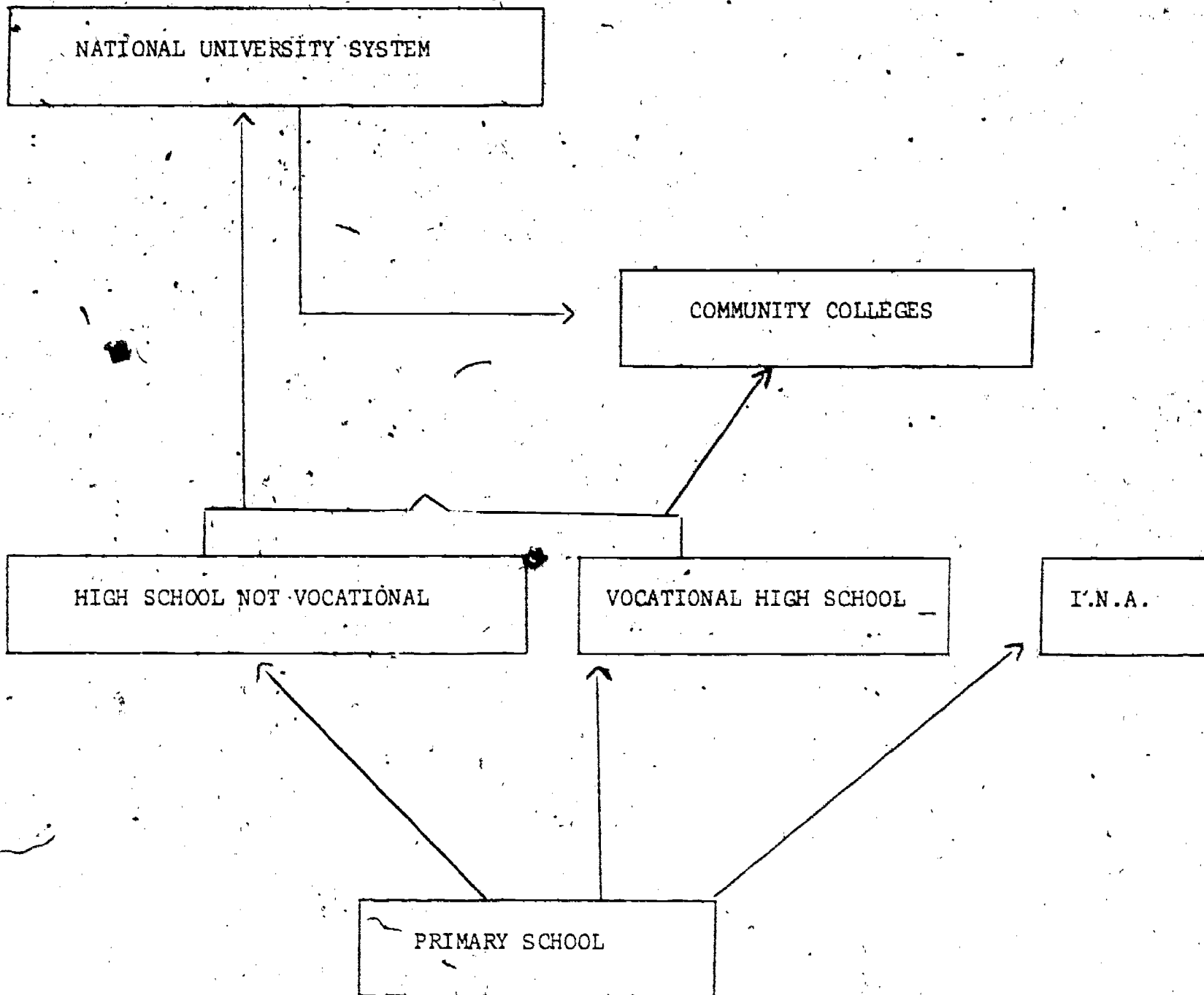
In this scheme we didn't include the Commercial Schools which also contribute to cultural development of our country.

INSTITUTIONS	PRIVATE	PUBLIC	NUMBER OF STUDENTS
PRIMARY SCHOOLS	67		9.809
PRIMARY SCHOOLS		2.838	357.217
HIGH SCHOOLS	38		80.090
HIGH SCHOOLS		178	113.112
I.N.A.		YES	50.409
UNIVERSITY OF COSTA RICA		YES	29.259
NATIONAL UNIVERSITY		YES	7.630

INSTITUTIONS	PRIVATE	PUBLIC	NUMBER OF STUDENTS
AUTONOMOUS UNIVERSITY OF CENTRAL AMERICA	YES		2.000
TECNOLOGY INSTITUTE OF CARTAGO		YES	1.635
STATE UNIVERSITY (BY CORRESPONDENCE)		YES	3.000
COMMUNITY COLLEGE OF CARTAGO		YES	900
COMMUNITY COLLEGE OF ALAJUELA		YES	600



BASIC SCHEME OF THE  
EDUCATION IN COSTA RICA



NAMES OF THE INSTITUTIONS OF SUPERIOR EDUCATION IN COSTA RICA

The Costarican Superior Education can be divided in two areas:

- a) University Superior Education and
- b) The Education of the Community Colleges (Parauniversitaria)

The institutions that are dedicated to University Superior Education are the following:

- 1- University of Costa Rica: the Principal Center in the Capital of Costa Rica (San José) and with the rural brunches.
- 2- National University, situated in Héredia and with two rural brunches.
- 3- Tecnology Institute situated in Cartago and with two regional centers.
- 4- Statal University, (by correspondencé) with the Principal Center in San José.
- 5- Autonomous University of Central America, in San José.

The Institutions of Parauniversitaria Superior Education are:

- 1- Community College of Cartago
- 2- Community College of Alajuela.

The institutions of University Superior Education dedicate mayor part of their, offer long careers but they also have short careers.

But Community Colleges are institutions of (Parauniversitaria Superior Education) whose purpose is to give short careers (2 and 3 years).

We also have to include the extension courses that have a duration of no more than 6 months, but which are also very important in the purposes of the Community Colleges.

ESQUEMA BASICO DE UN COLEGIO UNIVERSITARIO

EXTENSION COURSES	SHORT-CAREERS	TRANSFER PROGRAMS TO UNIVERSITIES
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SOME IMPORTANT NOTES:

- a) Of the population of the country between the ages of 7 and 12 years, 92% attend Primary Schools.
- b) Of the population of the country between the ages of 13 and 17 years, 68% attend High Schools.  
We must take into account the fact that many of adolescents don't continue Secondary School in order to enroll in the I.N.A.
- c) Of the population of the country between the ages of 18 and 25 years, 12% attend University Superior Education.

NOTE:

The data has been obtained from Department of Statistics of The Ministry of Public Education and from the respective offices of information of the different institutions of Superior Education.

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## DEVELOPMENTS IN IRELAND RELATED TO POST-SECONDARY, SHORT-CYCLE EDUCATION

**INTRODUCTION** Significant changes in the pattern of post-secondary education have taken place during the 70's in Ireland. Three principal factors have caused these changes (1) the growth of the business and industrial sector of the Irish economy (2) a birth rate which is the highest within the European Community (3) a significant reversal of traditional emigration patterns. In short there are more jobs available and a larger population seeking them. With loan assistance from the World Bank, the State has responded by constructing a system of Regional Technical Colleges throughout the country, and a National Institute for Higher Education at Limerick. In order to improve the skills of the Irish workforce an Industrial Training Authority (AnCo) was created and fourteen new training centres have been established.

**BACKGROUND** Virtually all third-level education in Ireland is publicly funded. Approximately 85 percent of current expenditure is derived from the State and most of the remainder is received in the form of student fees. Apart from the two established universities (Trinity College and the Federated National University of Ireland) the only other third-level institutions of significance in the mid-1960's were the Colleges of Education (teacher training colleges) and two technological colleges operated by the civic authorities in Dublin. Figure 1 indicates the percentage distribution of students enrolled in third-level education in the years 1970 and 1977. The significant change during the seven-year period results primarily from the establishment and rapid growth of the Regional Technical College system.

**REGIONAL TECHNICAL COLLEGES** The nine Regional Technical Colleges (RTCs) in the country provide training and education over a broad spectrum of occupations ranging from craft to professional and include art, linguistics, and other specialities. While a certain amount to work is secondary level, this is decreasing rapidly, and concentration is being placed upon a variety of programmes at third level. These programmes are of one, two and three year's duration and are accredited by a public body: The National Council for Educational Awards (NCEA). Graduates receive Certificate, National Certificate and National Diploma awards for the one, two and three-year programmes respectively.

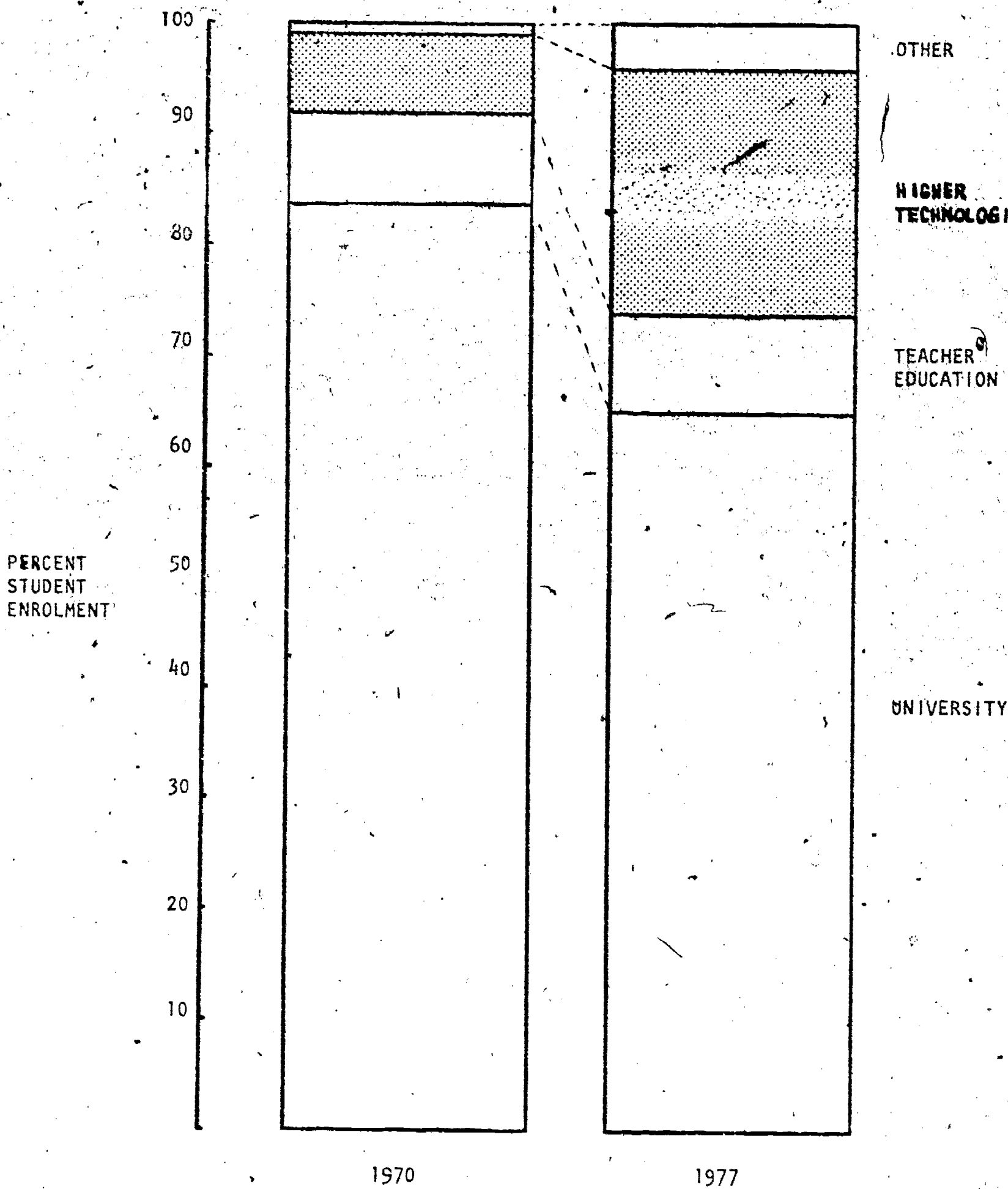


FIG. 1 Percentage distribution of students in Irish State-aided third-level education, 1970 and 1977. Ref. 3

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So as to avoid unnecessary duplication and to facilitate student mobility the NCEA exercises a co-ordinating function. As a result students who perform well can progress from one level to the next within the system. While the bulk of the work takes place at sub-degree level it is envisaged that a certain number of 4-year degree programmes will be made available within the system, and the first of these programmes now operate at RTC, Galway. The enrollment of fulltime third-level students in RTC's has increased from 154 to 3,497 during the 1970-76 period.

#### 4 NATIONAL INSTITUTE FOR HIGHER EDUCATION

The first National Institute for Higher Education (NIHE) was established in Limerick in 1972 and a second is planned for Dublin. These two institutions are seen as the twin pinnacles of the sector. As part of the World Bank loan-funded package they serve to provide a degree-level and post-graduate level top. Transfer of graduates from the RTCs to the National Diploma and four-year Degree programmes at NIHE is facilitated. The Higher Education Authority, which allocates funds to the universities and the NIHEs has recently authorised the introduction of post-graduate level work. As a result a reasonably well integrated system of programmes, ranging from one-year certificate at regional centres to degree and post-graduate level work in new national centres has been established during the 70s.

Students are encouraged (and in some cases required) to gain relevant work experience before progressing from one award level to the next. Work experience, based on the North American co-operative education system, is required for all students taking diploma and degree level work at NIHE, Limerick.

#### 5 LIFELONG LEARNING

While the established universities and other institutions have provided a wide range of adult education programmes over the years the broader concept of lifelong learning is now emerging. A recent discussion document published by the NCEA (5) adopts the guiding principles quoted below, and outlined by the OECD in "Recurrent Education: a strategy for lifelong learning" (6)

- the last years of compulsory education should provide a curriculum that gives to each pupil a real choice between further study and work;
- after leaving compulsory school, access to post-compulsory education should be guaranteed to the individual at appropriate times over his total life-cycle;

- distribution of facilities should be such as to make education, as far as possible, available to all individuals, wherever and whenever they need it.
- work and other social experience should be regarded as a basic element in admission rules and curricular design;
- It should be possible and important to pursue any career in an intermittent way, meaning an alternation between study and work;
- curricular design and content and teaching methodology should be designed to co-operate with the different interest groups involved (students, teachers, administrators, etc.) and adapted to the interests and motivation of different age and social groups;
- Certificates, Diplomas and Degrees should not be looked on as an "end result" of an educational career but rather as steps and guides towards a process of lifelong education and lifelong career and personality development; and
- on completion of compulsory school, each individual should be given a right to periods of educational leave of absence with necessary provisions for job and social security.

The document sets out a strategy for implementing these principles within the country and proposes the introduction of a new award level.

Thought is also being given to the need to plan career-oriented education in such a way that job mobility in later life is facilitated and the personal disruption and cost of re-education and retraining is minimised. (7,8).

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LIFELONG EDUCATION TRENDS IN  
COMMUNITY COLLEGES IN THE U.S.A.\*

Community colleges have become one of the leading providers of adult education in the U.S. There are 1,230 community, junior, and technical colleges in the country enrolling 4.3 million students for credit. Another 4 million are enrolled in non-credit programs.

These are two-year postsecondary institutions that grant associate degrees. "Postsecondary" is used to indicate age level more than grade level. The services are for persons who have left secondary school, but often include basic skills courses in reading, writing, and computation.

In present usage, "community college" refers to a publicly-supported two-year college; "Junior college" refers to a privately-supported institution; and "technical college" to an associate degree granting institution that is historically oriented to technical education.

"Community college" is increasingly used as a general term to describe all two-year institutions offering associate degrees. However, a community college, more precisely, is an institution that is community based. That is, it is responsive to the needs in its community. Most commonly this means it is governed by a board of trustees from the local community, financed by taxes from the local community, and serves persons from the local community.

Comprehensive Services

The services are comprehensive. They include occupational curriculums as well as curriculums that are parallel to the first two years of university education. A wide variety of community services are offered. An important part of the program is counseling services to help persons choose programs that will best fit their needs and interests.

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\*Adapted from Convergence, International Journal of Adult Education

Students usually live at home and commute to the college. To facilitate access the colleges use many off-campus centers to take classes to where the students are; apartment buildings, factories, offices, libraries, churches, shopping centers, and other convenient locations.

With few exceptions, the persons being served are over age 18. One of the dramatic stories in American community colleges has been the increase in the age level of the students. Nationally the average age is now near 30 years. More than half attend part-time and more than half are already employed.

About 500 new community colleges were established in the U.S. during the 1960's. They were created to provide access to higher education for the increasing numbers of young people coming out of the high schools who wanted to go to college. But, once the institutions were in place, older persons in the communities, who had not had low-cost, close-to-home colleges available when they were younger, also enrolled. Community colleges have adapted their services to meet the needs of the older students. Programs especially for middle-aged women seeking to enter the work force, pre-retirement programs for older workers, and programs to retrain workers who are already employed are examples of such services.

### Policy Structures

One of the problems that has now emerged is that the policy structures and the financing patterns that were originally developed for community colleges when they were seen as institutions for students of the traditional college ages do not fit as they try to serve more adult students. For example some colleges receive less tax support if they offer classes at night, or if they offer them off campus, or if they offer them on television rather than in a classroom, or if the classes do not result in academic credit, or if the student already has

a college degree.

In recognition of this problem, the W.K. Kellogg Foundation recently made a grant to the American Association of Community and Junior Colleges (AACJC) to work on needed policy changes to advance lifelong education services.

The grant made possible a national assembly of community college representatives, policy makers, and lifelong education experts. They formulated a report which is being published by the Association. Its introduction states:

Lifelong education is moving from theory to fact for increasing numbers of persons in our society. The growing complexities of earning a living and being a competent participant in the community are making this development a necessity. It is no longer feasible to plan on a period of education that extends only through the late teens or early twenties to carry us through life in the latter part of the Twentieth Century. If our lives are to be fulfilling, if our communities are to be livable, if our industry is to be productive, if our society is to be healthy, we must have opportunity for education throughout our lives.

Our educational system has developed many facets to meet this need: schools, colleges, churches, libraries, museums, businesses, unions, the Armed Forces, and other agencies have developed responsive educational services. Education in the arts and sciences, education for occupations and for leisure, are becoming available to more times. Useful patterns of cooperation among providers of these services have developed in many instances.

The policy framework, however, has not kept up with the developing needs and the variety of responses. Laws, regulations, guidelines, directives, funding formulas, and other elements that make up the policy framework need to be brought up to date — along with the data and attitudes out of which such policies are developed. The changing demography and life style of our society must be recognized in educational policies and practices. Assessments of educational needs, flexible responses to those needs, cooperation among agencies must be facilitated, not frustrated, by the policies of public or private agencies.

We believe the leadership for needed changes should be initiated at local levels through assessments of local needs for lifelong education made cooperatively by the institutions and citizens concerned. The support of public and private agencies and of local, state, and federal governments should be sought through unified action based on well-documented needs and priorities.<sup>1</sup>

The assembly report calls for community colleges to cooperate with other lifelong education agencies in assessing local needs and resources, and to report to public and private funding sources the financing that will be required to provide the needed services. It also calls on them to identify needed policy changes to facilitate cooperation between educational agencies and to make lifelong education services available to all citizens.

Community colleges are experimenting with new educational forms to involve more adults in their services. Two examples are community forums and courses using television.

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<sup>1</sup> Gilder, Jamison (ed.), Policies for Lifelong Education, Washington, D.C.: American Association of Community and Junior Colleges, 1979.

## Community Forums

Community forums are discussions of current issues based on well-designed study materials, aided by presentations by knowledgeable resource persons, and guided by skilled group leaders. A good forum will be on a topic that is of concern in the community, the discussion will be an informed discussion, and the participants will broadly represent all segments of the community concerned with the issue.<sup>2</sup>

The Association has demonstrated how such forums can work using materials on various issues developed for the Courses by Newspaper program. Both the AACJC Community Forums Office and the Courses by Newspaper project are supported by the National Endowment for the Humanities (NEH).

Now we are working with NEH and the Department of Energy on a new program of community forums called "Energy and the Way We Live." It is an ambitious undertaking that aims for a minimum of 600 community colleges sponsoring community forums in early 1980. We are working with the Foreign Policy Association (FPA) to encourage community colleges to do community forums on foreign policy issues using the "Great Decisions Materials" produced each year by FPA.

Community colleges have found that such forums can be used to reach previously unreached persons in the community and to draw them into a genuine learning experience and into a continuing relationship with the college.

## Television Courses

Courses using television as part of a complete instructional package are being produced by several community colleges for national distribution. Approximately 400 community colleges are using the courses, again to reach previously

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<sup>2</sup> Yarrington, Roger (ed.), Forums for Citizen Education, Washington, D.C.: American Association of Community and Junior Colleges, 1978.

unreached adults and to acquaint them with the college and its other services. A broad base of experience has been created in the past few years that documents the success of "telecourses" as good community education. Community colleges, which see the whole community as the campus and all of the adult citizens as the potential student body, are naturally led to the use of the mass media for learning.

The Association has activated a task force on the uses of mass media for learning. That group has recently published a monograph on how to use television, along with textbooks, course outlines, instructor's guides, and other print materials to offer high quality community education.<sup>3</sup> The task force has also prepared a catalog of 100 quality telecourses that are available for community education.

At the 1978 AACJC convention task force colleges used materials from current telecourses to send learning programs into each guest room in the convention hotel. More than 2,500 community college administrators attending the convention could hear about television courses in forums and they could experience the courses in their own rooms during the day and evening.

Now the Association, with financial support from the Fund for the Improvement of Postsecondary Education, is working on a national project to improve cooperation between community colleges and local broadcasters on the use of television for community education. A national assembly later this year will bring together college administrator and broadcast executive teams from the same communities for discussions of case studies and issue papers that are being developed.

The recent report released by the Carnegie Commission is expected to be of assistance in advancing the use of television for adult education in the U.S.

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<sup>3</sup>Yarrington, Roger (ed.), Using Mass Media for Learning, Washington, D.C.: American Association of Community and Junior Colleges, 1979.

One of its recommendations says:

We recommend that public broadcasting renew its commitment to provide programs and services which help fulfill the promise of telecommunications to aid in the education of all Americans throughout their lives. The major responsibility for this effort rests with the stations.<sup>4</sup>

#### Working with Industry

One of the most promising areas for continued development of adult education in American community colleges is through further cooperation with business, industry and labor unions.

AACJC has sponsored for the past two years a program supported financially by the Department of Labor which is developing cooperative relationships with community colleges and labor unions on apprenticeship training, journeyman re-training, credit for union learning experiences, pre-retirement education, and labor studies curriculums. We have also helped to demonstrate how community colleges can serve as local initiators of community education-work councils: organizations that bring together education, business, and unions to promote local manpower needs analyses, job training, and placement services.

We see increasing evidence of community colleges working closely with the training directors of local unions and industries to analyze training needs and to develop educational programs to meet industry specifications -- both pre-service and in-service experiences. This is a vital partnership to help keep local industries productive and competitive in the world marketplace.

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<sup>4</sup> A Public Trust, New York: Bantam Books, 1979.

The important point in this type of activity is for the college to be truly responsive to the needs identified by the employer or the labor union and not to try to force students into existing college curriculums which may not fit the needs very well.

The National Manpower Institute is using funds from the National Institute of Education to study how worker utilization of tuition benefits can be increased in this country. There is also great interest in observing how well educational leave policies are working in other countries.

An increasing interest in international exchange of information is developing in American community colleges, much of it centering around experiences in adult education. An interesting prospect is that someday soon the exchanges will involve not only administrators and faculty, but also adult students.

Currently community colleges enroll about half of all of the undergraduate foreign students in the U.S. But, they tend to be students of the traditional college ages. Perhaps it will not be long until students from other countries coming to American community colleges will more nearly resemble our domestic students: skilled workers seeking retraining, retired persons seeking stimulating new learning experiences, and so forth. That will add an element that will be challenging and beneficial for all concerned and another important step in the direction of the global lifelong learning network visualized by Gareth Williams in his book Towards Lifelong Education.<sup>5</sup> We hope the community college will be an active part of the American connection when that network is achieved.

<sup>5</sup>  
Paris: UNESCO, 1977.

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REVIEW OF RECENT UNESCO ACTIVITIES IN THE FIELD OF NON-FORMAL  
POST-SECONDARY EDUCATION

I. INTRODUCTION

1. In recent years, many countries have felt a growing need to reform their higher education systems. Indeed, the change over from education for an elite to mass education, industrial development, scientific and technological progress, the increasing demand for lifelong education and in-service occupational training have brought about a new dimension to the mission of higher education and the tasks which devolved upon it. It has been confronted during these last few decades with the new requirements of the population and of the community. New occupational categories and new age groups have claimed access to higher education. Institutions of higher learning are increasingly called upon to make a more active contribution towards the solution of various problems which are of vital importance to the respective societies. Higher education is required to become an effective factor of national and community development. These new types of public and these new roles have generally made it necessary to diversify and revise the policies, the structures, content and methods of higher education, and to improve its management and administration.

2. The traditional higher education, although attempting to adjust itself to the new situation, has come to coexist with institutions and methods which enable it to respond to the growing demands from public and society. Non-traditional post-secondary educational institutions have appeared as useful means for the purpose. Indeed, the most important trend during the last two decades has been the creation and rapid expansion of the types of institutions and programmes which, by a combination of major features, significantly differ from, and represent a complement to, the traditional university pattern. Generally speaking, the new institutions are financed almost entirely from public funds, their admission policies are more flexible than those of universities, most of them offering a number of non-academic courses which are open to part-time students, and all are deeply involved in community programmes. At the same time, the traditional universities have not escaped the evolution towards new policies, new forms and new methods.

3. Unesco has witnessed this evolution with considerable interest.

In 1971, it launched, a long-term programme to promote new trends in higher education in the light of the Organization's commitment to life-long education as a guiding principle for the fundamental renewal of educational systems. Efforts have been focused primarily on the following interrelated areas:

(i) development of higher education and the new roles of institutions of higher learning in the context of life-long education;

(ii) alternative university structures and non-traditional forms of higher education;

(iii) post-secondary education for persons gainfully employed;

(iv) community service of institutions of higher education.

Particular attention has been given since the beginning of the seventies to the theoretical elaboration and practical implication of the concept of life-long education for the post-secondary education.

## II. LIFE-LONG EDUCATION: DEVELOPMENT OF THE CONCEPT AND ITS APPLICATION TO POST-SECONDARY EDUCATION

4. The development of the concept of lifelong education has been gaining ground since the beginning of the sixties. It was in the documents of the Second World Conference on Adult Education (Montreal, 1960) that the term "life-long education" was first used and given prominence. During the sixties, the place and importance of the concept gradually won recognition and support. Unesco played a major part in the evolution. The events of 1968 in many countries, not in the last turn in the university campuses contributed to focusing attention on life-long education. They highlighted the critical state of education and raised a series of crucial questions with regard to the sociological context and the psychological factors of education, its purpose and objectives, its content, the worth and efficiency of its means, its links with the evolution of ideas and customs and with the advance of technology and science. Life-long education has been seen by many as an essential factor in the solution of problems faced by higher education and education systems at large.

5. In 1970, Unesco's General Conference, at its sixteenth session, reached a wide consensus on the principle of lifelong education; it also called on the Organization to move from the theoretical consideration of the concept, to its practical implementation in the Member States. In 1970 as well, Unesco published a basic work on the subject - An introduction to lifelong education - written by a member of the Secretariat, Paul Lengrand.
6. A decisive contribution towards further expansion of the concept of lifelong education has been made by the work of the International Commission on the Development of Education established in pursuance of the decision of the Unesco General Conference at its 16th session (1970). The report of this Commission - Learning to Be - propose "life-long education as the master concept for educational policies in the years to come for both developed and developing countries."
7. The nature of life-long education is described in a Unesco publication<sup>(\*)</sup> as follows: "the important point that is the essence of lifelong education proper lies in the integration of education with the other activities of all individuals in society. Education should not be seen as an activity separated from work but as an integral part of the career development of individuals. Similarly, it should not be seen as something to be distinguished from leisure-time activities but as a satisfying way for people to spend a part of their leisure-time."

"Lifelong education from a structural point of view must be conceived of as a learning system incorporating not only schools, colleges and universities, but public libraries, correspondence tuition, the mass-media and work-related activities."

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(\*) G. Williams: "Towards life-long education: a new role for higher education institutions", Unesco Press, 1977.

8. A document prepared for the nineteenth session of the Unesco General Conference (1976) on the results of Unesco action in favour of lifelong education brings out the salient features of the concept. It is described as "neither limited in time to the period of schooling, nor in space to the school and its methods; it links up the whole of the community's educational activities and resources, aiming alike at the full development of the individual's potentialities and at the advancement of a society undergoing transformation, which is consciously resolved to change". The same document calls lifelong education "a source of coherence and integration" making it "possible to synthesize many elements already included in existing educational systems", and a source of "guidelines for the restructuring and reform of the various components" of educational systems.

9. Since 1972, Unesco has endeavoured to spell out the implications of the life-long education principle for the various components of educational system, including post-secondary education. Resolution 1.321 related to higher education and adopted by the General Conference at its 17th session authorized the Director General:

(i) "to study the problems inherent in higher education policies as a whole, giving particular attention, in view of the need for life-long education, to the relationship of higher education with the other components of educational systems and also with countries' requirements in the matter of highly qualified specialists;

(ii) to study new trends and achievements relating to post-secondary systems and teaching establishments with regard to both the organization and the methods and content of education; to disseminate information that has been collected concerning these new developments and to encourage and organize experiments in this field..."

Pursuant to the above-mentioned resolution, Unesco undertook a number of publications and studies and convened several meetings which dealt with various implications of the life-long education principles for the post-secondary institutions.

10. In 1973, the Centre for Educational Technology at the University of Sussex (UK) undertook, with the support of Unesco and the Ford Foundation, a project devoted to open learning systems at the post-secondary level involving the use of modern media. The project team headed by Professor Norman MacKenzie, Director, School of Education, University of Sussex, produced a book entitled "Open Learning: systems and problems in post-secondary education" comprising 17 case-studies dealing with open learning in a number of countries - among them, Australia, Japan, Kenya, USA, UK and the USSR - preceded by an analytical survey of the subject. This survey attempted to provide a check-list of operational questions which arise when an open learning system is set up and to examine current activities in various parts of the world. It indicated the procedural and organizational problems encountered together with the opportunities and limitations involved in the transfer of experience.

11. A symposium on the role of higher education in lifelong education held in Moscow in 1974 provided an opportunity for a general exchange of ideas and experiences in this area. The symposium examined the tendency towards the establishment of integrated systems of higher education and evaluated the present and potential role of post-secondary institutions in life-long education. Lifelong education was considered as a key idea relating to all phases of education for all age groups, whether formal or not, and the adult education was seen as a very important aspect of life-long education.

The need in the new coordinated relationship between initial and further education and the necessity of defining in detail the transition between the two stages of education was stressed.

12. The symposium stressed the necessity in changing the curricula in higher education as soon as the concept of life-long education is put into practice. The personal experience of both young people and adults should become the starting point and the basic element for these curricula.

The role of educational technology in improving the efficiency of higher education was emphasized.

13. The symposium also examined the problems raised by the training of educators adapted to the new tasks imposed by life-long education. It was recognized essential to call upon people from outside the university, coming from all types of background, so that students may benefit from different kinds of experience.

It was recommended that research and experimentation in the educational sciences would be encouraged involving the participation of educators and all groups concerned with the practical application of the concept of life-long education.

14. The symposium called for the new efforts to reinforce the international cooperation in education from the point of view of life-long education, in particular in such areas as curriculum development, recognition of studies and diplomas, research and innovative experiments.

15. The various implications of life-long education for the post-secondary education institutions have further been analyzed by Professor G. Williams of the University of Lancaster in his book "Towards Life-long Education: a New Role for Higher Education Institution" published by Unesco in 1977. The author provides arguments in favour of life long education not only in application to the industrialized societies but also for those at the earlier stages of economic development. Several ways in which life-long education can now and in the future benefit the developing countries are indicated: through preparing the young people at the stage of their initial education for further learning upon completion of formal studies; through selecting suitable people from amongst those already in the labour force and retraining them and upgrading their skills as the quickest and least socially divisible way of acquiring the qualified manpower; through setting up the non-traditional types of higher education which could be better geared to the socio-economic needs, educational and cultural traditions of these societies, etc.

16. The author examines the various ways of interaction between higher education and life-long education and points out the three main types of contribution to the development of life-long education which can be made by the institutions of higher education. First, they should

aim to widen, as far as possible, the range of students for whom they cater. Secondly, they should relate their programmes of study and their research efforts to the social needs of the community as a whole. Third, they should act as resource centres for the rest of the educational system providing learning materials geared to the needs of life-long education and carrying out the necessary research.

Higher education, in its turn, has much to gain from the life-long education approach. The provision of educational opportunities for adults is a new market with almost limitless potential. Teaching the adult students with greater maturity offers considerable opportunities and new challenges to teachers and administrators in higher education, stimulates the extended use of new media and individualized learning programmes, facilitates the closer links between institutions of higher learning and the production sector, etc. The author's conclusion is that the development of life-long education and the close involvement of institutions of higher education with this development can, if properly planned, be a mutually beneficial partnership.

The book also examines several practical aspects of the performance of higher education institutions resulting from the life-long education approach: economics, finance, planning. Special attention is given to the adult learning and methods of training.

17. Another publication entitled "Lifelong Education and University Resources" came out in 1978. It was prepared jointly by Unesco and the International Association of Universities, and is a collection of contributions on the above theme, by authors from Sweden, Canada, Switzerland, the Sudan, Poland, Ghana and France. Given the fact that the universities are getting all the more profoundly involved in adult learning, the book stresses the necessity for them to reexamine the way in which their intellectual and financial resources are being used and to devise ways of making a reality of life-long education. The redeployment of resources as a first step towards bringing about the changes desired and, specifically, the administration and manpower aspect of the continuing education practice are considered.

18. A Committee of experts convened in 1977 examined the ways of making lifelong education a normal part of university life. It considered the progress made in the application of the concept of lifelong education at the post-secondary level since the Moscow Symposium in 1974.

The Committee came to the conclusion that a new conception of the university was needed: the university had to be closely associated in the development of society as a whole and it had to provide individual training that was related to the affairs of the nation and working life. The experts considered that lifelong education should make it possible to reshape the entire educational process and do away with the traditional distinction between formal and non-formal education and between general and specialized education.

19. Having considered the procedures of admission and of evaluation of experience, the Committee recommended that admission procedures should be adapted to the programmes since the requirements or criteria associated with those programmes affected the nature of the courses as well as teaching methods and student flows. It was generally agreed that the evaluation of purely intellectual knowledge should be abandoned in favour of a genuine evaluation of the individual's aptitudes and attitudes, taking account of theoretical knowledge, working experience and practical skills alike.

20. The new roles of the university teaching staff within the framework of lifelong education took much of the discussion. The committee felt that it should be statutorily possible to combine teaching with the actual exercise of a specialized professional activity, the latter either alternating with or being supplementary to the former. The responsibility of the State in providing the higher education authorities with means of meeting the real needs of society was pinpointed. In order for this to be possible, a policy of pre- and in-service teacher training must be adopted such as to equip teachers to provide lifelong education.

Parallel to the investigation of major principles and ways of higher education institutions performed within the framework of lifelong education, some practical aspects, in particular the setting up and development of non-formal institutions and programmes are studied by UNESCO.



### III. ALTERNATIVE UNIVERSITY STRUCTURES AND NON-TRADITIONAL FORMS OF HIGHER EDUCATION

21. In 1972-1975, Unesco undertook a number of studies on current experiments seeking to establish or develop alternatives to traditional university structures. These studies, which covered individual countries or groups of countries, such as USA, UK, Canada, USSR, East-European countries, have been distributed to all Member States and to interested institutions and individuals, and have served as background documentation for several Unesco meetings. At the same time, another series of studies describing the experience of eight institutions in various regions of the world in the utilization of the modern institutional techniques at the post-secondary level were undertaken.

22. A Symposium on new forms of higher education in Europe, organized by the European Centre for Higher Education in 1976, attempted to define "the new forms" of higher education. Although no conclusion was adopted, the three criteria were accepted as being relevant to developments in European higher education, as follows:

- (a) to enable new student population to benefit from higher education;
- (b) to enable students to use study periods in other than traditional ways;
- (c) the use of teaching staff from outside the university.

Relationship between new and conventional forms of higher education was examined within binary systems, in which new forms are developed in separate institutions and unitary or integrated systems, in which new and traditional forms are used in the same institution. It was pointed out that the solution of the major problems faced by higher education does not necessarily lie in totally new forms of higher education. The development and improvement of traditional forms should also be considered important.

The symposium also examined the impact of new forms of higher education on social mobility.

23. A Seminar on the problems involved in setting up new types of higher education institutions and programmes in developing countries was held in 1976 to examine some specific aspects of the innovations at the post-secondary level faced by the third world countries.

The participants stressed the importance of the innovations to be related to the socio-economic and socio-cultural challenge faced by the developing countries and to serve as a means of transformation of their systems of higher education inherited from the colonial past. utions to the problems resulting from democratization and "massification" of higher education should have to be the foremost objectives in innovative programmes. These programmes should provide education and training of high quality and be related to the manpower needs. Careful planning and preparation must precede the setting up of new types of institutions in order that they could not become a burden on the limited resources and counter-productive.

The seminar warned against an unimaginative limitation of a successful western experiment. In particular, the use of the advanced methods and techniques developed in other countries should be carefully studied and appropriately adapted.

Although it was recognized that innovative programmes should generally be less expensive than traditional ones, a temptation must be overcome to organize these programmes cheaply. Expectations regarding the innovative programmes can only be fulfilled if quality is high and sufficient funds are earmarked.

24. A series of studies reflecting the innovative trends and experiences of individual countries or groups of countries in post-secondary education has continued. Case studies covering some countries of the Arab region; Australia, New Zealand, Papua New Guinea and Indonesia; India and Venezuela have recently been prepared and widely distributed among those interested and concerned with the matter.

A world-wide inventory of non-traditional post-secondary educational institutions is being prepared and will be published next year.

#### IV. POST-SECONDARY EDUCATION FOR PERSONS GAINFULLY EMPLOYED

25. In accordance with a recommendation of the above-mentioned Moscow Symposium on the role of higher education in life-long education, a Meeting of Experts of Post-Secondary Education for Persons Gainfully Employed was convened in London in July 1976. The experts were asked, among other things, to advise the Organization on its programme in this field. The phrase "post-secondary education for the gainfully employed" was defined as referring to people who had completed their secondary education or had acquired equivalent qualifications and who were in paid employment.

26. The Committee unanimously adopted a number of recommendations on the subject, the first of which requests Unesco to "draw the attention of Member States to the importance of post-secondary education for the gainfully employed as an indispensable factor contributing both to economic and social development and to the well-being of the individuals concerned." Another recommendation states "The timing of post-secondary education during a person's career should be a function of his occupational objectives, his interests, needs and personal abilities in the area of general, social and civic education, and should not generally be limited to any specific time frame. There are, however, critical times for education associated with retraining through a person's lifetime"/ Other recommendations deal with specific aspects of the subject, such as, the wide availability at relatively low cost of modern recording and communication media and their usefulness in this context, the need for close collaboration between education and industry, the concern of the gainfully employed for the creditation of their education as a reflection of their achievement, the need to widen the "basis for entry to post-secondary education for persons gainfully employed, particularly for those with minimal formal education qualifications, but with work and life experience", and the problems of organizing short, mid-career, non-formal courses. Finally, Unesco is asked to encourage support for the terms of the Convention and Recommendation on Paid Educational Leave, adopted by the International Labour Conference in 1974.

27. In conjunction with the above-mentioned meeting of experts, three case studies dealing with post-secondary education for employed persons in several East-European countries, Australia and France were prepared and issued in 1976-1977.

Another area of Unesco interest relates to the community service of institutions of higher education.

#### V. COMMUNITY SERVICE OF INSTITUTIONS OF HIGHER EDUCATION

28. The necessity to strengthen the links between higher education institutions and the community at large is evident. The community service as one of the major functions of these institutions has been dwelled on in many Unesco studies and examined at various expert meetings. In particular, members of the Committee of Experts convened in 1977 to examine the ways of making lifelong education a normal part of university life were unanimous in that the university resources should be available to the community as a whole and that its community service function should be seen as being of equal importance to the functions of teaching and research.

29. Among recent Unesco undertakings in the area under consideration, an analysis of Member States' experience in the field of study service in higher education is noteworthy. This experience has in particular proved useful in some developing countries. It has been described in a Unesco document "Study service: a tool for change in higher education" and discussed in the Seminar on Problems Involved in Setting up New Types of Higher Education Institutions and Programmes in Developing Countries (1976).

The General Conference at its 19th session adopted a resolution which invited the Director General to collect and disseminate information on the experience of Member States in the field of study service and facilitate exchange of this experience. An analytical report based on the information received from 27 Member States in reply to a Unesco enquiry was prepared for the Executive Board and to the General Conference in 1978, including recommendations for Unesco's future role in this field.

30. Study-service is defined by the Secretariat as follows: "A programme incorporating a period of civic or development service as an optional or compulsory part of, and at any point prior to, during and/or following the course of study of students enrolled in an education institution" (at the third level).

31. No matter, what are the objectives of various national schemes (emphasis on the educational value, on fostering among students a sense of social responsibility or on meeting the needs of the community including educational needs) or how widely these schemes vary in terms of duration, continuity, organization and administration, it can be safely said that the concept of study-service is now in existence in a number of countries and based on two major principles: first, the role of experience in education and second, the need for higher education to reconnect students to, and involve them in, what is going on in society, rather than isolating them from it.

Various practical ways in which institutions of higher education can contribute directly to community development, particularly in developing countries, will be examined by a Unesco meeting of experts to be held in December this year.

32. Some other Unesco activities related to various aspects of innovative developments at post-secondary level are worthy to mention: the Round Table on the contribution of higher education in Europe to the development of changing societies (1976), the series of seminars - Helsinki (1972), Paris (1973), Turin (1973), Madison, USA (1975), New Delhi (1976) - devoted to the continuing education of engineers and technicians; the Expert Committee Meeting on the coordination of the content of pre-university education at school with that of post-secondary education in Europe (1978) and so on.

33. Among those activities in sight in the near future the following are worthy of mention: a study on the evaluation of working experience as a substitute for formal academic entrance requirements; a comparative study on systems of admission to higher education in several European Socialist countries; a study on the relations between university on the one hand and the productive sector and the community, on the other hand in Latin American countries, and so on.

34. The activities described in the present paper fall in line with the long-term Unesco commitment to the concept of life-long education and to the encouragement of innovative trends in higher education. This commitment has further been confirmed in the Organization's Medium-Term Plan for 1977-1982; objective 5.7 which stipulates: "The activities as a whole should contribute to making a reality of life-long education; the transformation of higher studies and the changeover from systems which, in many cases, are rigid and elitist to systems which are increasingly diversified and accessible to people who were previously more or less excluded from them must be facilitated in such a way as to reduce the cleavage between urban and rural populations and between intellectual and manual workers.

"The purpose of inter-institutional co-operation, particularly in the developing countries, should no longer be to establish new institutions of traditional kinds or to develop those already existing, but rather to assist in the establishment of new types of institutions suited to the needs of the society or the individuals which they are supposed to serve."

35. In conformity with the Medium-Term Plan, the Organization's activity in the field of higher education in 1979-80 will be focused as it is stipulated in the Draft Programme and Budget for this period, on democratization of higher education in the context of life-long education, contribution of higher education to the endogenous development of the local and national community and the promotion of innovations in higher education.

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