This book contains 15 papers: "Introduction" (Madhu Singh); "Adult Learning and the Transformation of Work" (Paul Belanger); "Future of Work and Adult Learning" (Ettore Gelpi); "The Obligation of Education in the Face of Globalisation" (Nicole Arnaud); "Lifelong Learning and Vocational Education and Training: A Teacher's and Trade Union View" (Hilde Borgir, Renate Peltzer); "Trends of Active Populations: Context and Scope" (J.A. Bofill); "Ethical Implications of Contemporary Trends in Work and Adult Vocational Learning" (Richard G. Bagnall); "Work, Technology and Lifelong Education: Training the Trainers" (Rafael E. Ferreyra); "Technical and Vocational Education, Lifelong Learning and the Future of Work in Zimbabwe" (Charles M. Nherera); "New Competence--A Reform in Norway" (Hilde Borgir); "Traditional Non-formal Vocational Education: The Indian Experience" (C.J. Daswani); "The Potential, Actual and Social Demand for Adult Learning in Argentina: The Situation of Educational Risk and Cumulative Advantage" (Maria Teresa Sirvent); "Social and Cultural Contexts of Vocational Learning in the Informal Sector: Implications for Vocational Education and Training Systems" (Madhu Singh); "Competencies for Innovative Entrepreneurship" (Gunter Faltin); and "UNIFEM [United Nations Development Fund for Women] Programme in Entrepreneurship Development for Women: An Experience from Lebanon" (Randa el Husseini). Concluding the book is the document "Proposals for Discussion on the Future of Work and Adult Learning," which was contributed to the Second International Congress on Technical and Vocational Education by the 15-member informal working group on the future of work and adult learning. Several papers include substantial bibliographies. (MN)
Adult Learning and the future of work

Edited by Madhu Singh
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UNESCO Institute for Education, Hamburg
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ISBN 92 820 1090 - 1

Published in 1999 by
Robert Seeman, Hamburg
Preface

The UNESCO Institute for Education presents this publication as a contribution to the debate on vocational and technical education in the context of lifelong learning. The social demand for adult education, in relation to the rapid changes in the field of work, is growing and diversifying. This UIE publication will help us grasp the new trends in the different regions of the world, and to raise critical issues.

At the time of writing this book, the UNESCO Institute for Education was preparing to take part in the UNESCO's Second International Congress on Technical and Vocational Education, Seoul, Korea, 26-30 April 1999. To prepare for this event, a meeting was held at UIE in February 1999, bringing together 12 experts on adult learning and the area of work to discuss and debate issues on work, education and the future, and come to proposals. The present volume of papers is an outcome of this international meeting.

The book closes on a joint statement made by a group that was convened by the UNESCO Institute for Education - a statement distributed to all participants of the Second Congress on Technical and Vocational Education, Seoul. This text presents an agenda to renew vocational education in order to meet the aspirations of adults and confront the new issues created by the transformations in the field of work.

The UNESCO Institute for Education expresses its appreciation to all the chapter authors for their contributions, and to Ms Madhu Singh who succeeded in a short period of time to plan and edit this publication, and to do so with quality. Other contributors also helped to make the present book a reality. Many thanks to Peter Sutton and Collin Hawkins for their editorial assistance, and to Norbert Appenrodt for the design of the layout.

Paul Bélanger
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Contents

Introduction, *Madhu Singh* 9

**Part One**

*Global issues and contexts*

Adult learning and the transformation of work 19
*Paul Bélanger*

Future of work and adult learning 29
*Ettore Gelpi*

The obligation of education in the face of globalisation 37
*Nicole Arnaud*

Lifelong learning and vocational education and training: a teacher's and trade union view 51
*Hilde Borgir and Renate Peltzer*

Trends of active populations: context and scope 63
*J.A. Bofill*

Ethical implications of contemporary trends in work and adult learning 69
*Richard G Bagnall*

**Part Two**

Reforming education systems from the perspective of lifelong learning: linking research to societal issues and policy-making in adult learning 87

Work, technology and lifelong education: training the trainers 87
*Rafael E. Ferreyra*
Technical and vocational education, lifelong learning and the future of work in Zimbabwe, Charles M. Nherera

New competence – a reform in Norway
Hilde Borgir

Traditional non-formal vocational education: the Indian experience
C.J. Daswani

The potential, actual and social demand for adult learning in Argentina: the situation of educational risk and cumulative advantage
Maria Teresa Sirvent

Social and cultural contexts of vocational learning in the informal sector: implications for vocational education and training systems
Madhu Singh

Competencies for innovative entrepreneurship
Günter Faltin

UNIFEM programme in entrepreneurship development for women: an experience from Lebanon
Randa el Husseini

Part Three
Proposals and challenges

Proposals for discussion on the future of work and adult learning

Contributors
Introduction

Madhu Singh

The papers in this volume examine the theme of adult learning in the context of the changing world of work. The first part deals with global issues and contexts which create a social demand for adult learning, and the role of different social partners in meeting this demand from the perspective of lifelong learning. The second part presents concrete case studies of research, reforms, projects and proposals for improved policy-making and practice in adult and continuing vocational education from countries in Africa, Asia and the Pacific, Latin America and the Caribbean, in Europe and the Arab states. The papers raise important theoretical, ideological and pedagogical issues dealing with the relationship between work and adult learning. Part three deals with proposals and challenges in the future of work-related adult learning.

Global issues and contexts

Fundamental changes in the notion of work are taking place in the context of globalisation. Work today includes activities inside and outside the formal labour market, and citizens' initiatives for improving and organising their environments and communities. These transformations have led to considerable growth in the social demand for adult and continuing education. Against this background of the increasing demand for adult learning, which is also a result of the general rise in initial education, Paul Bélanger raises four critical issues in his paper: the tendency towards the reproduction of lifelong inequalities, finding new ways to monitor the scattered provision of adult learning, developing productive and creative skills in the non-wage economy, and the impact of learning environments on participation and achievement in education.

The papers in this section also provide scenarios in the international dynamics of work. According to Ettore Gelpi, while some sections of the population in industrialised countries are becoming marginalised, in the more economically backward regions of the world, entire populations are...
likely to suffer. Gelpi also points out the implications for individuals and societies of rapid financial transfers and exchange of technologies and information, and examines people's experiences, expectations and dissatisfactions concerning work. He alerts educational policy-makers to the fact that with adult learning becoming increasingly integrated into the productive process, public and private institutions may alter its nature in response to the profit motive.

Globalisation may lead to a "heartless economic process", but globalisation need not be a new form of imperialism. In the context of globalisation, where new kinds of work organisations are developing, and where individual and collective needs are becoming ever more fluid, Nicole Arnaud, in her paper, argues that the health and continuation of society rely more and more on flexibility, knowledge dissemination and human creativity than merely on individuals’ capacity to adapt to work. Adult education which has as its goal the understanding of globalisation must reaffirm this collective ownership. This, she believes, is the sole condition for the survival of the "supra-community".

Hilde Borgir and Renate Peltzer look in their joint paper at the implications of the world labour market situation on employers, the workers and the declining role of state. While employers are under pressure from strong competition, workers are faced with increasing insecurity of employment. J.A. Bofill also examines the role of education in the context of the dynamic world of the enterprise. He pleads for new paradigms of knowledge, new relationships and positive attitudes in companies.

With political, social and cultural changes taking place at a rapid pace, there is a growing demand for adult learning. At the same time, however, there is growing awareness that adult education and training can no longer be seen as the sole responsibility of national states and governments, even though this responsibility does lie primarily with them. The involvement of broader circles of interested actors in civil society and international community must be encouraged. It is from this perspective that Hilde Borgir and Renate Peltzer present the role of teachers' unions in lifelong learning and vocational education as well as the views of other trade unions. The authors contend that for lifelong learning to become a reality it must be a common responsibility for the social partners and non-governmental organisations in general, and for teachers’ unions in particular. There should be a legal framework for the state and the employers. These frameworks are developed further in their paper. Tripartite consultations are
necessary for an equitable social framework that provides for the security of workers and assists the state in its role of setting rules and standards. Equally important are industrial relations based on negotiations between employers’ organisations and trade unions, which presuppose fundamental rights of work and education. The right to education for all has to be guaranteed by the state. It is necessary for governments to promote communication and dialogue between business and the public sector.

As the education of adults becomes more institutionalised, it will no doubt generate an increasing number of new forms of educational provision. Richard Bagnall’s contribution to this volume takes up the ethical dimension of trends in adult vocational education that arise from the broader context of cultural change, including changes in the world of work. These trends are described as the tendency within adult vocational education towards turning knowledge into a commodity, marketing the provision of education, focusing on student learning, enhancing educational accountability, efficiency, effectiveness, privatisation and modularisation as well as the increased status differences among educational providers and qualifications etc. These, Bagnall points out, are embodied within institutional discourse, curricula and organisational structures and cultural contexts of educational provision. More fundamentally Bagnall’s paper raises important issues that alert educational planners, policy makers, managers, and teachers to the need and opportunities for minimising the impact of the above-mentioned trends, which at face value may seem to be broadly ethical, but on closer analysis reveal a number of counter-ethical effects. Ethical action, according to Bagnall, is action that takes into account the knowledge of the particular cultural contexts.

**Reforming education systems from the perspective of lifelong learning**

What comes out clearly from many papers in the second part of the book, is that, for lifelong learning to become a reality, a fundamental revision is required at all levels of education. The papers assign high priority to adult education systems that emphasise the development of flexible learning systems adapted to the needs, language and culture of the learner. They stress the need for competency-based education, the development of a symbiotic relationship between schools and local communities, and the acquisition of vocational skills for active daily life and employment. Another
condition for lifelong learning is the participation of interested stakeholders and social partners at local, national and international levels. The education system must be opened up to offer lifelong learning opportunities. It must offer chances for adult women, the excluded and marginalised as well as those who have left early or dropped out to return to education and training. It must also establish good relationships with the world of work. The role of teachers is crucial in this process, especially in the renewal of skills and attitudes. Teachers should be at the forefront of competence development, and their skills should be available to society as a whole.

Cases of adult education have been described within a number of reforms taking place in educational systems. These have been presented from Argentina, Zimbabwe and Norway. These reforms are affecting all educational levels and imply major changes in values, educational goals and curriculum contents. The major educational reform in Argentina, prompted by the Federal Education Law passed in 1993, and the Higher Education Law approved in 1995, is taken up in the paper by Ferreyra, who examines the effect of this reform on teacher training programmes. Teachers have a critical role to play in providing the main link between schools and the world of work, and in the development of job-related competencies. According to Ferreyra, governments have an obligation to contribute to the development of the fair "market of training services", in terms of assuring transparency and the development of a set of rules to ensure consumer protection.

In many developing countries, governments have been largely successful in democratising the provision of education. Policies have also been in place which stress vocational education and the teaching of practical subjects in general schools. However, as Charles Nherere states, describing the situation in Zimbabwe, the paradoxical situation exists in which unemployment among high-school-leavers exists side by side with skilled manpower shortages. While programmes launched by the Zimbabwean Government, since the attainment of political independence in 1980, have attempted to redress the situation and to provide adult and non-formal education for that part of the population denied access to formal education, these activities have been mainly limited to adult literacy and numeracy, and have tended to be restricted to the few.

In view of the prevailing harsh economic climate in Zimbabwe, the future of work in Zimbabwe lies in the capability of learners to create their own employment. This means that schooling should be structured with a view towards lifelong learning, taking into account the needs for economic
survival of the learners. He contends that while schooling does not create employment in the formal sector, it can be used effectively to improve the life-chances of learners. For this to take place he proposes the creation of flexible learning systems, competency-based education, promotion of entrepreneurial skills, relevance to local community, the linking of schools with local communities, using schools as community resource centres, and the need to redress the imbalance in those school curricula that emphasise academic subjects.

Against the background of reforms in the Norwegian educational system, the paper by Hilde Borgir describes proposals made by a public Committee comprising representatives from the state, educational institutions and trade unions, to help increase the participation of adults in education and raise their level of competencies in the world of work. An important aspect of the Committee's work was that it involved both private and public educational institutions in providing a general framework within which adults could participate in education with a lifelong perspective. The so-called "competence reform", as it has come to be known in Norway, is based on some important principles: meeting the competency requirements of the workplace, society and individuals; taking account of prior competencies of the individual, acquired not only in the formal system, but also through non-formal learning; promoting better interaction between providers of education and the workplace. Hilde Borgir focuses her paper on some central government proposals to meet some challenges in basic and continuing education for adults.

The reforms in educational systems and adult learning in many developing countries must of necessity be linked to the future of the traditionally trained illiterate and semi-literate worker. In his paper C. J. Daswani describes that this would require recognising traditional vocational training modes as valid and efficient, the professional recognition of local master technicians and craftsmen from local communities, the design of technical and vocational courses for their benefit, and the need for legal literacy. Unless, in the long and medium term, universal literacy and basic education are not met, these workers will not be able to participate in future economic and social development. This, of course, is not to deny the learning needs of the already trained workers. What emerges clearly is that while technological development does require a sophisticated workforce, it must also be recognised that traditional technologies will continue to exist.
along side new technologies, and thus adult education for traditionally trained workers also has a significant part to play.

**Linking research to societal issues and policy-making in adult education**

There is an increased awareness of the need to develop an understanding of local situations and cultural contexts. The analysis of the Argentinean situation described by Maria Theresa Sirvent illustrates the importance of ethnography and anthropology in revealing the potential demand for adult learning and the need for a strong focusing on cultural analysis and on the adoption of qualitative research methods, such as oral history and participatory research. Action-oriented development projects by international agencies are taking this aspect of culture more and more into account (UNIFEM). The biographical research by Sirvent shows how new knowledge constitutes the basis in generating a demand for adult education. Through participatory research people generate new knowledge which forms the basis of changed practices and strategies for adult education programmes. It increases the cultural relevance of adult education programmes to the individuals and communities She identifies new knowledge areas which are often not taken into account in formulating policies in adult education. It is therefore important for externally funded programmes as well as for future stakeholders to ensure local participation in research. Only this can ensure the incorporation of culturally relevant knowledge in adult education programmes.

Cultural sensitivity in adult education research is revealed in other papers as well. The author's analysis of the situation in informal economies in developing countries shows that it is necessary to learn from the periphery in order to be aware of foreign cultural influences that have had a negative impact on the development of vocational education and training in the past. With the rapid growth of the so-called informal economy, it is being increasingly recognised by international agencies, international non-government organisations and some national governments that a bridge has to be built between formal education and vocational training and skills development. Educational systems need to be opened to the informal sector, so as to release the economic potential in the informal sector. But before adult education strategies are developed, the author suggests that an increased understanding must be developed of the competencies required
and utilised in the many trades and small businesses of the informal sector. Such an analysis must be set within the context of the institutional and economic influences of that society. The author points to the need to develop system-wide educational strategies for the informal sector which combine specialised technical competencies with generalised competencies (i.e. cognitive, social and organisational competencies). She underlines the importance of focusing vocational education and training on sustainable livelihoods, recognition of formal, non-formal and informal learning as equally valuable aspects of the overall adult learning process, ensuring equitable access to adult continuing education, and a greater involvement of enterprises in both pre-employment and continuing training.

From the foregoing account it becomes clear that vocational education and training which adopts a human capital approach to training should draw its attention to the kinds of context and culture that promote communication and mutual learning, where learning is a part of the fabric of everyday life. Equally important is the development of informal institutions and organisations, as they focus attention on people's empowerment and the active participation of individuals in their communities. It is necessary for economists and manpower development planners to see the relevance of wider social relations to productivity.

Improved quality of technology education and the development of the capacity to apply technology knowledge can promote the prospects for economic, political and social development. Since technological literacy is closely linked to the ability to hold a job and prosper, Ferreyra says, it can safely be said that it is a right of all people to become literate in science and technology. This has been especially endorsed by the World Conference on Education for All (Jomtien, Thailand, 1990,) and later reinforced by the World Conference on Project 2000: Scientific and Technological Literacy for All by the year 2000 and beyond, Paris, 1993. Consequently, it should be used as a means of alleviating the continued global inequalities between industrialised and development countries.

Central to the development education for adults who are able to understand technological issues, is the development of training programmes for adult educators. If this happens, then there will be a growth in the body of theoretical knowledge about the education of adults, since this means that those involved in the training of trainers/teachers will be developing curricula to train future adult trainers. In his discussion on work, technology and lifelong education, Ferrerya puts emphasis on seeing technology as part
of culture linked to every human activity. The practice of technology is a combination of cultural, organisational and technical components. However, these technologies, which have become appropriated by only a few, have neglected the cultural components. In his view, there is a lot of work to be done in the near future if adult education is to correct or improve the social status of technology education, and this is a major task for the whole of society.

In a similar vein, Günter Faltin argues that innovative entrepreneurship should be linked to societal issues and extended to groups in society that are not traditionally linked with business. Even environmental concerns, social welfare and public service projects, and programmes dealing with disabled persons or delinquent youths - which are usually regarded as non-profit and non-business areas - offer a fertile breeding ground for combining entrepreneurial spirit with the spirit of social commitment.

Developing competencies for creative and innovative entrepreneurship means applying a division of labour to entrepreneurial abilities, focusing on the development of ideas, de-mystifying creativity, refining the ideas, and taking into account values embedded within a society’s culture. Faltin proposes that the educational system should facilitate an adequate approach in dealing with real-life situations in general. A strong pedagogical emphasis should be placed upon problem-solving, development of leadership skills, and other life skills, that need not be only business-related.

Such skills are especially important for improving and expanding work opportunities for women. However, as amply illustrated by Randa el Husseini, reporting on an UNIFEM/UNDP/EU entrepreneurship development project in Lebanon, the acquisition of general and vocational skills needs to be coupled with a package of activities stretching from influencing the macro-economic conditions, lobbying, making the market women-friendly, linking human rights to their economic rights to own assets, manage business, and enter into contracts etc. In addition, skills development and enterprise training for women need to be linked with vocational and technical training and educational institutions, where they could be further developed and made available to a larger group women.
Proposals and challenges

What can be learned from these case studies? What new proposals have been put forward? The papers provide important insight into the design and direction of future programmes of adult learning both at the national and local levels.

A major proposal is the necessity for a critical dialogue between all social partners, in particular between decision-makers, trade unions employers and international financial institutions. Policy-makers must specify the function of education when reorganising the economy. This also calls for new approaches by international organisations.

Adult learning must emphasise diversity and diversifying education systems. Policy must take into account cultural differences in knowledge production and creation.

Adult learning policy must take into account the critical role of the adult educator in the design and implementation of adult educational policies.

New labour policies should ensure access to adult learning for all workers, including those in the informal economies, and consider more efficiently the issue of gender equality.

Finally, the curricula of work-related adult learning should be enlarged to help people, at all stages of life to participate actively in the development and well-being of their societies.

Adult education in the changing context of work is a complex phenomenon since it is so widely spread throughout the whole of society and has several providers, and it has not been institutionalised in the same way as initial education. Yet, as amply illustrated by the papers in this volume, important features have emerged, which have implications not only for informing policy-making, but for providing a base upon which it is possible to undertake research in future on the conceptual basis of different aspects of work-related adult learning. The papers in the book do not aim at an international comparison, but at highlighting specific elements which would need to be taken up in comparative studies in the coming years. Important theoretical issues have been raised in this book dealing with the complex field of the education of adults – on lifelong learning for adults, on reforming education systems from a lifelong perspective, on the relationship between work and general education, on the nature of continuing vocational
education for survival and development, and on the concept of retraining for all active-working and non-working-populations.
Part One

Global issues and contexts
Adult learning and the transformation of work\textsuperscript{1}

\textit{Paul Bélanger}

A quiet revolution in education is now in the making. In the community, at work and in private affairs, a growing demand is placed on individuals and communities to make decisions and take initiatives in a world of uncertainties. Self-reliant participation, autonomy and continual learning are required as never before, in all areas of life.

A revealing sign of this pervading silent transformation is the outdated notion of the active population, which has been used until now to distinguish between wage earners and others. This exclusive definition of the "active population" shuts out all other adults, negating their activities outside the formal labour market. It ignores the active people "at work" in civil society, as if this so-called "non active" population were not also producing goods and services in the informal and social economies, as if the initiatives of citizens for improving their living environments and organising the community life were not productive, and as if parents are not actively reproductive.

Moreover, if former passive work policies are being questioned and gradually replaced by more active policies, the same is true of former passive and dependent health and environment policies.

Through these transformations, individual aspirations and the social demand for adult and continuing education have grown to a point where they are suddenly substantially transforming the educational scene. When monitored directly through national household surveys with instruments that overcome the semantic exclusion, participation in adult and continuing education is seen to be a societal phenomenon. In advanced industrialised and post-traditional countries, at least half of the adult population are

\textsuperscript{1} This paper is partially based on a contribution made by the author to a UNEVOC seminar organised in Berlin in 1996 to prepare the Fifth International Conference on Adult Education.
involved in some form of adult education every year (Bélanger and Valdivielso 1997). Active learning societies are emerging.

**New economic trends and the transformation of the workplace**

The rise in demand for adult learning is related to a second well-known phenomenon: the transformation of the modes and processes of production. Under the pressure to find new opportunities, national economies are becoming more and more integrated in larger economic markets: the Pacific Rim, the European Union, the North America Free Trade Act (NAFTA). The pressure for greater competitiveness at the world level and in the regions is accelerating industrial restructuring and commanding dramatic changes in modes of production, including the rapid introduction of new technologies.

Many national policy papers and reports have been published during the last ten years dealing with these economic questions. They relate the economic crisis to the limited national capacity to compete, and all agree on the necessity to meet the pressing demand thus created for further education and continuing human resource development. These policy statements argue that the future of national economies will only be secured by an increase in productivity and more intensive investment in human resource development; that is, in adult learning.

The transformation of industrial structures and of the organisation of work calls into question the present types and methods of training, not only with respect to their redundancy and level of competence, but also in relation to increasing occupational mobility. It tends to induce a tremendous demand for retraining, for upgrading and broadening of skills, and for improving basic communication and organisational skills.

However, such a trend also leads to major changes in the international division of labour. Indeed, the specialisation of post-industrial countries in knowledge-intensive production is shifting the more labour-intensive parts of production to other regions, where employees’ wages and benefits are cheaper. In reaction, some developing countries, and in particular the fast developing countries, while joining in this new division of labour and welcoming foreign investments, are seeking to augment their production of higher value-added goods in order to modify the terms of exchange and foster national economic development. Both phenomena are
increasing the demand for adult learning, especially, of course, when countries insist on a bigger share of knowledge-intensive production, on the development of the potential of the adult population, and on a more acceptable balance between export production and the domestic economy.

It is obvious that this changing organisation of work, the introduction of new technologies, and the process of national and international industrial restructuring are generating, and will generate, a growing demand for new skills, for continual human resource development and, hence, for adult learning in the industrialised areas of both developed and developing countries.

However, while the social demand for adult learning is increasing, the difference between the social strata in opportunities to participate remains uneven. The boom in adult learning demand at the workplace is evidently far from being consistent across sectors and regions. It is more strongly supported in some areas than in others, in larger firms than in the small enterprises, and in the formal than in the non-formal economy. The general demand for further learning is indeed thwarted by the division of labour markets into two sectors. A growing segmentation has been observed between the well-organised formal economy and the informal economy, between the primary labour market, which offers regular full-time paid jobs, and the marginal labour market, which relies mainly on contractual and insecure employment.

Learning in itself has no limits (Club of Rome 1979), and this discovery is one of the more promising breakthroughs in confronting the challenges of today. But there are still severe practical limits for many women and men who wish to participate in, and benefit from, learning opportunities. The very knowledge-intensive economy that is emerging, and the learning organisations which more and more large national and multinational corporations are striving to cultivate, are often built on a drastic reduction in personnel. Though positive for those who remain inside and for the competitiveness of the firm, the prevailing policy of selective development of human resources raises the social issue of denying to others the same right to participate, to work, to earn and to learn. Such policies raise the huge economic issue of the necessity to improve the productive and creative forces outside the wage economy.
The general rise of the initial education level of the adult population and the emergence of information-intensive societies

A major factor behind the silent explosion in adult learning demand is the universalisation of primary education and the incentive created by the increasing uses of literacy in today's societies. A basic truth behind lifelong learning is that educational development is a lifelong endeavour and tends to be a cumulative process: the more people go to school in the first phase of their lives, the more they tend to participate in learning activities during adulthood. Consequently, the steady rise in initial education, which is a generalised phenomenon, is projecting for the future a substantial increase in the participation of adults in learning activities. The evidence for such a trend has been shown through many surveys in industrialised (Tuijnman 1991; Bélanger and Tuijnman 1997) and developing countries (Sirvent 1994; Psacharopoulos and Velez 1992).

This silent, cumulative transformation of education over recent decades is reinforced by the similar quiet revolution in information technology and by the emergence of information-intensive life and work contexts. It certainly constitutes one of the main drives behind the surprising surge in learning demand among the adult population and behind the transition of education systems towards various patterns of lifelong learning.

Educational demand, already sustained by the general increase in initial education, is further stirred up by a ceaseless expansion of the use of written communication in daily life, in the community and at the workplace. The exponential growth of information technology, and of the mass of information that is made available, can be experienced every day.

Some critical issues raised by the transformation of learning demand

The tendency towards the reproduction of lifelong inequalities

The virtuous circle mentioned earlier, that is, the positive impact of initial schooling on continuing education, is also a vicious one. This is so because of the accumulation of both advantages and disadvantages from school age and throughout life. The issue of lifelong learning carries with it the other
side of the coin. Unless some break is made with current policies, unless some second chances are provided, and unless the main socio-cultural obstacles or barriers to participation in education are lifted, lifelong learning will still mean, for too many people, a continuous frustration of their aspirations and repeated deprivation throughout their lives.

There is also a general trend to reproduce gender discrimination. All surveys show an over-representation of women in general adult education and an under-representation in continuing vocational education programmes, except in the traditional occupational ghettos. Remedial strategies to deal with these inequalities need to be related to the huge literature on institutional, cultural and financial barriers to participation.

*The reconstruction of scattered adult learning*

The general organisation of adult and continuing learning is complex and diversified, in strong contrast with initial formal education. The diversity of learning aims, of profiles of the public, of educational agencies, of locations, of methods and of financial support calls for new ways to monitor this new and specific domain of organised learning. The more adult learning evolves and becomes central to the solution of the problems of the world of today, the more it becomes a matter of discussion and sectoral policy-making in all areas of activities: it involves most ministries, the various enterprises, and a multitude of associations and local communities.

This diversified learning demand among the adult population demands provision which is often developed outside the already divided territories of non-formal, formal and vocational adult education, both in institutions and in industry. As learning demand grows, it often leads to responses organised around concepts and terms of reference unknown to existing institutionalised provision.

*The increasing demand for the development of productive and creative skills outside the wage economy*

What is true in the economic domain is also true in the other areas: without increased competencies among the population and without people's participation, the societies of today will not be able to confront contemporary problems: there is no solution to the rising costs of health care without health prevention, no solution to rising criminality and costly imprisonment without crime prevention and human resource development in
the poor communities, and no chance of dealing with global ecological dangers without an increasingly informed and empowered citizenry.

Neither economically nor socially can we wait for the next generation to come in order to renew and improve the competencies of the adult population. The inter-generational process requires thirty years. The demand is too pressing; and already 90% of the adult population of the year 2000 have left initial schooling. The development of adult learning is unavoidable and pressing.

To improve the capacity of societies to tackle the present ecological, health and inter-racial global dangers, and to create the cultural conditions for a better quality of life, new kinds of adult learning policies are emerging inside and more often outside, the traditional territory of adult education. Most recent policies on health, agriculture, population, and the environment now include adult learning components and so-called Information-Education-Communication (IEC) strategies. This policy trend of employing adult and non-formal education in the various sectoral interventions can also be observed at the international level in the plans of the International Labour Office (ILO), in the rural development schemes of the Food and Agriculture Organisation (FAO), in the recommendation of the Rio Conference on sustainable development through environment education, as well as in the initiatives of most social organisations and social movements. We are entering into reflexive societies (Beck et al.1994).

In this new economy of organised adult learning, the distinction between vocational and general education is becoming complex and, at times, less valid, both from the point of view of the demand - be it from employers or learners - and of the educational agents. More and more firms and labour market agencies, for example, are investing in basic education programs for employees and require general qualifications. This general/vocational divide needs also to be revised from a gender perspective.

Educational motivations and learning aims are also complex: people attend second-language courses for professional reasons but also to have access to other cultures. There is an increasing overlap in content. Reciprocal transfers of learning and of competencies are occurring between vocational and general education. We are seeing a cumulative process of aspiration and educational participation. At the centre is the learner who, given the opportunity, will seek to achieve synergy in his or her diversified educational biography, to construct her or his identity.
The "human capital" discourse on "return on investment", which compares in the short term the effects on earnings at different levels of qualification, underestimates the long-term advantages of investing in an increase in the competency of all strata of the population, ignores the costs of not increasing the productivity of all its citizens, both in developed countries (Benton and Noyelle, 1991) and in developing countries (see Jomtien Declaration: UNICEF 1990), and fails to enlarge the notion of benefits to the social and cultural domains.

The economic gain should, of course, be analysed in reference to employment and wages, but cannot stop there. The benefits of educational investments in today's societies cannot be assessed without including the opportunity costs. What will be the remedial costs if we do not invest now in the prolonged basic education of all citizens and their empowerment in areas such as the environment? How will societies be able to bear the increasing curative and custodial costs if they do not invest in the long term in preventive health education? What will be the economic price in the future if we do not invest, as Habermas would say, in the development of communication skills to ensure that social problems are solved by negotiation?

Learning environments

Throughout life, informal learning events and processes take place. People live in different cultural contexts unevenly conducive to active learning. Throughout lifespan, there are learning environments which have a relatively autonomous influence on participation in educational activities and on the achievement of significant learning.

The notion of a learning society closely associated to lifelong learning refers also to the diffuse impact of the cultural contexts in which the different social categories of learners find themselves in the different phases of their lives (Bélanger, 1995). However, the impact of varied and uneven learning environments is still a poorly researched area.

Organised learning processes, during the initial phase and throughout life, take place in surroundings which may influence learners' educational aspirations, stimulate or blunt their curiosity, inhibit or help them to be more cognisant and reflective. It is this informal dimension of education, the learning contexts, to which we are referring, be it the everyday environment of pre-school children, or the norms and cultural orientations embedded in the different initial and further education settings.
The attitude towards education and the predisposition for specific types of learning in the family or in the immediate surroundings, the mere availability of books and the prevailing attitudes to written communication, and the presence of local cultural infrastructures (libraries, newspapers and books, non-elitist museums, etc.) are all crucial factors in educational aspirations and learning achievement, both in initial and adult education. Literacy education is not everything in literacy; there is also the "literate environment" throughout the length and breadth of life, which needs to be taken into account.

Learning environments refer also to the organisational cultures in which the various initial and adult education programmes operate. Their embedded silent orientations may contradict, in an implicit but efficient manner, official objectives and discourse. They contain hidden curricula. The "male" image of many vocational continuing education programmes (in the curriculum, in the illustrations used, in the ergonomic organisation) may have a strong selecting effect. Educational research tends unfortunately to limit its object to overt educational transactions and to ignore the "institutional pedagogies" at work in the family, the community and the different educational settings: real chances to explore, opportunities to exert freedom of expression, real participation in problem-finding and problem-solving, and cultural space for idiosyncrasy.

The current transformation of the world of work raises the question of the influence of working environments, or work settings, on the stimulation and articulation of the learning demand of workers. Some management literature on lifelong education is introducing the idea of the "learning enterprise", which may in turn raise the issue of industrial democracy and enlarge and deepen the definition and expression of learning demand. The purpose is not to repudiate the new thinking on learning organisations, but to extrapolate it to the whole of societies and of societal issues.

**Conclusion**

In all countries of the world, education is in transition, expanding in space and in time, and becoming "lifewide" and lifelong. Beyond this well-known development, profound transformations are taking place, producing new dangers and leading to new debates.
The transition to lifelong learning opens up fantastic new possibilities, but remains ambiguous and can take many different forms and directions in the various countries. At the heart of this societal debate is the profound aspiration and the growing need for an active and innovative citizenry. A fundamental choice needs to be made in every society regarding the different possible directions for lifelong learning. The choice is between, on the one side, lifelong education as a never-ending process of teaching people, of matching them repeatedly to new technologies, new jobs and other requirements or, on the other side, an active learning society strongly embedded in an active civil society, focusing on the actors and their individual and collective creativity. We cannot escape this choice between a cognitive, passive society creating dependency on recurrent lineal adjustment to new knowledge throughout adult life, and a society which gives all men and women the opportunity to take the initiative, and to become creative and active citizens. Such a critical choice will have to be made in all societies.

Changing demand, the transformation of work, the synergy between educational agencies, the cumulative nature of adult learning across all fields of activities, the search for better quality and real accessibility, and the need for co-operation, are all issues that were debated at the Fifth International Conference on Adult Education in 1997 and led to the new vision expressed in the *Hamburg Declaration*.

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Future of work and adult learning

Ettore Gelpi

We are experiencing significant changes in the area of work and witnessing major shifts from the industrial age to the world of new technologies, including information and communication technologies and biotechnology. At the same time, conventional technologies continue to be used alongside the new. The internationalisation of work is leading to the greater integration of labour markets across national boundaries, and this has strong implications for economic, social and cultural identities. In this period of change and transition, work-related adult learning needs to respect the unity of humans as citizens, individuals and workers. People’s competencies include vocational skills, but go far beyond to include social relations, personal development, and cultural and human values.

Changing patterns and meanings of work

The variety in the conditions of the active and working populations in the productive system is becoming greater, with career paths leading from unemployment to employment and vice versa, as well as from household work to work in the formal and informal economies. Over time, there will be a growing convergence between the different actors in the system. Women’s participation in the formal labour market will increase, while more men will be active in household work. The future scenario suggests that hundreds of millions of people will be moving from one part of the globe to another, from one continent to another, and within countries, to find food and work opportunities.

The logic of the market will divide workers in relation to their immediate contribution to production, but ultimately, this division will be negative even for the market. Consumers of goods and services are increasing their role in production. Their demands and needs will be significant in deciding the future of active and working populations. There
will be areas of greater communication between workers in the formal and the so-called informal sector of the economy. Unions will be more concerned with workers with no jobs or in precarious circumstances.

The rising demand for services - educational, social and cultural - will be met by the institutions of the civil society. There will be considerable non-remunerated work in these areas.

Employment patterns are changing throughout the world, along with their official definitions. Some countries consider a person with fewer than 20 hours of work a week employed, others only if he or she has a full-time job in the conventional sense. A substantial proportion of the world's labour force will continue to work in the informal sector without having a job in the contractual or regular sense of the term. Statistics of employment and unemployment are becoming a very important political issue.

**Possible scenarios:**
**International dynamics of work**

The future scenarios of work will reflect the impact of new information and communication technologies on production, the evolving relations between social groups and the new division of work caused by the globalisation of economies. While some sections of the population in developing countries are starting to share in modern production, parts of the population in industrialised countries are becoming marginalised within their own national labour markets. In the more economically depressed regions of the world, entire populations are likely to suffer because of the decreased value of their raw materials and agricultural goods. This may mean, in many cases, the costly importing of food from outside.

Currencies, technologies and information will be exchanged from one end of the world to another. The implication of these transfers will be enormous. At the same time, the regulation of financial exchanges and common labour market policies are being discussed since international markets no longer appear to be self-regulating.

The increasing urbanisation of the world will change the patterns of life for better and for worse. Although new jobs are being created, there are also concerns regarding the environment. It is no longer possible to forecast linear scenarios.
People's experiences, expectations and dissatisfactions concerning work

While global competition, communication networks, rapid investment flows and technological innovations have brought success to some individuals and firms, inequalities have widened and poverty persists in vast segments of society. Competition around the world is intensifying, bringing a new level of insecurity. Already in many countries active populations are expressing their dissatisfaction because of lack of jobs, poor salaries, growing disparities and increasing costs of basic social services. Non-waged populations are increasingly demanding a greater share in the world of wealth than in the past.

The introduction of new technologies will have strong implications for the organisation of work, giving rise to new dissatisfactions, expectations and new dynamics within social groups and social classes, and the creation of new cultural identities. The growing numbers of formally educated people will mean new expectations as far as job opportunities are concerned, while television and other media will show more sections of working populations voicing their dissatisfaction.

The increasing contradiction between initial training, formal diplomas and the limited opportunities in the formal labour market is likely to lead to disorientation and discontent among many young adults, both in the North and the South. A solution to this situation can only be found if there is very strong creation of new opportunities in educational, cultural and social sectors, and of new goals and models of production encouraging the full participation of the people.

The collective dimension of work, in both the formal and the informal sector, will face significant changes. While remaining an integral part of working life, it will involve greater numbers of partnerships with the outside world.

The increasing division between workers will mean that, while some workers will have more autonomy and independence in their working activities, others will be more dependent. Many individuals will have to find new answers to the alienation of work and the basic requirements for survival. In their non-working time many people will be engaged in new leisure activities involving the creation of new identities for their self-fulfilment and recuperation.
The growing diversity of work and its cultural dimension

The ageing populations in the North and the South will influence the culture of work and leisure as their numbers rapidly increase. The culture of work will also be strongly influenced by the integration of new information, communication and scientific technologies into work and education. But at the same time, work will be related to traditional culture, values, practices, codes of conduct and behaviours, especially in agriculture and craftwork. For many societies, culture including the preservation of natural environments will continue to remain an essential part of their economic survival in the future. Cultural diversity and natural diversity are related and may be a very important reservoir of future economic activities.

Traditional forms of work co-operation through guilds, corporate bodies and social groups are changing. New local organisations are arising, expressing a specific culture of work.

Since it is expected that within 20 years, 20 per cent of the population will be producing the same goods and services that are produced by the whole working population today, it is very difficult to anticipate the culture, quality and contents of future products and services.

Organisation of work

The organisation of work is rapidly changing. New information technology has created methods of communication which ignore traditional boundaries between people, countries and regions, and which are influencing the rate and quality of production and the delivery of goods and services. The home is becoming an important place of work, in addition to more traditional worksites. The place and hours of work are spread across space and time. While new technologies are contributing to more autonomy and initiative for some workers, they are also causing others to lose independence and autonomy. Managers will be obliged to take into consideration the internal and external reality of work. Organisations within the formal sectors of production can no longer ignore outside productive activities.

With inexperienced young people and adults finding it difficult to find jobs and qualified retired people being retained in active production, the organisation of work is likely to be less homogeneous than before.
Adult learning for all active populations

Adult learning is becoming a continuous process, but not for all and not in all areas of interest. The competencies of a worker depend not just on technical knowledge and basic skills, but on attitudes, values, and behavioural patterns as well as on personality traits such as initiative, creativity, adaptability, responsiveness and innovativeness. Basic skills, such as literacy, numeracy and cognitive and problem-solving abilities, show the relationship between general education and work-related adult learning. Adult learning is beginning to have a very important self-learning dimension. Many people are involved in the production of educational services. Educational jobs are becoming increasingly relevant. There is a whole new sector of educational provision.

In the globalised economy the competitive advantages of each country consequently depend on the availability and maintenance of a labour force with the necessary knowledge, practical skills and ability to innovate. Leading employers and enterprises have shown that investing in the adult learning of their workers is essential for competitiveness and growth. Training, and the establishment of a culture of learning within an enterprise and in the community, enhance job security and innovation. Learning organisations thus become a link by which employers' interest in improving performance converges with a long-term commitment to the well-being of workers, so that workers are given the chance to express their creativity and identify with a product or piece of work.

Knowledge-based investment is indeed to be given equal priority to that of capital. However, the impact of this new attitude is twofold: it values competent workers, but at the same time, excludes others by drawing a distinction between those who have 'learned how to learn' and those who have not. Workers will have the additional responsibility for acquiring skills and pursuing their personal growth in order to remain in employment. While some workers will be privileged to have a general education upon which to build vocational skills, others will have to rely on narrow vocational skills. For the latter group, work-related adult learning will become a necessity if they are to remain in employment. Furthermore, access to adult education will still depend on gender, ethnicity, geographical origin, age and previous educational background.

Consequently, there needs to be a radical change in the adult education and vocational training systems, if adult learning for all working
populations is to be more than a demagogic declaration. Many issues are involved in this, namely: devising flexible and continuous adult learning and training to meet the learning requirements of the entire labour market, including the informal sector and all active populations; building partnerships; and ensuring equitable access. A good part of future work-related training will have to be designed to prepare people for this uncertainty. The other part will have to be designed to create new forms of solidarity in order to protect stability and cohesion in society.

**New players in the field of designing and implementing adult learning policies**

If adult learning is going to respond to the changes in the world of work, then new, complementary roles for the state and the private sector need to be defined. The goal is to bring about a culture of learning, involving government, enterprises, individuals, and other stakeholders. Learners, educators - both formal and non-formal - the media, and the various producers and consumers of goods and services will all be players in, and originators of, education related to the future of work. The organisation and implementation of adult learning policies will be the result of the combined efforts of the above designers and implementors of policies.

With adult learning becoming increasingly integrated into the productive process, public and private institutions may alter the nature of adult learning in response to the profit motive. Educational policy-makers will therefore have a very important function in keeping at least some of the adult education activities for the personal and collective development of people in general, as these will be an important indicator of the quality of adult education and of democracy.

**People power and participation:**
**New information technologies**

The future of work and adult learning will certainly be influenced by the new information technologies. Will they also increase people power and participation? This is a key question for adult learning.

Adult learning has vocational, cultural, social and political dimensions. Ignoring any of these dimensions means an impoverishment of work and adult learning. Ignoring the new reality of production, or making
adult learning fully dependent on production, are two potentially extreme tendencies in our future societies. To avoid this polarisation we have to relate adult learning to the power and participation of the people. In this respect, new information technologies can contribute immensely.
The obligation of education in the face of globalisation

Quand l'élève est prêt, le maître arrive.

This paper examines the urgent need for adult education to comprehend and explain the significance of globalisation and its consequences. This idea will be developed under three headings: (1) changes in the world of work; (2) the internal dynamics of globalisation; and (3) the duty of education in the face of globalisation.

Changes in the world of work

First, we shall highlight the convergences between continuing vocational training and adult technical and vocational education. These two domains are complementary and occasionally contained within each other. They share the objective of promoting sound and productive societies. However, policies to promote employment and high qualification levels are no longer sufficient to guarantee economic growth and social well-being.

If we observe the various current practices in the training and education field, we are able to locate the convergences and mark out the areas they cover in the world of work. This will be discussed in the first part. We will be taking into account programmes of technical and vocational education that enable adults to learn or improve their occupations: learning languages, following technical developments in computers, having expertise in a new software, using Internet resources, etc. In the third part, we will be discussing the domain of adult education.

Continuing vocational training has well-defined practices, and states regularly pass laws. Such training relies on national or European programmes of funding for strictly targeted populations, for both out-of-work and on-the-job training in companies. Both of these population segments are defined precisely, including the benefits which they receive from legislation. Official programmes are designed to suit their specific needs. The common reference here is the company. This is the primary factor that divides the population affected by vocational training into those who receive vocational training in a company and those who receive it outside.
Although tremendous efforts have already been made in the field of training, there appears to be continuing demand for higher qualifications emerging from rapid changes in work and technology. European Commissioners, Edith Cresson and Pádraig Flynn believe that:

The return of economic growth, while essential, will not in itself resolve this situation. It is clear that if, for example, 10 million jobs were instantly created, employers would have considerable difficulty in finding suitable qualified people to fill them, even though there are 18 million unemployed people in Europe" (Cresson and Flynn, 1996:2).

Though political decision-makers might anticipate future needs in the implementation of their training plans, this effort alone is insufficient. The role of vocational training in the past has been to guarantee better expertise and command of work. However, it is unable to fulfil its purpose any more, particularly with regard to integrating well-trained individuals into their social groups. This is a result of globalisation and the decreasing availability of jobs. Vocational training is no longer sufficient to create a balance between human development and work. In the context of economic development, vocational training, in the past, imparted vocational skills which at the same time also gave individuals a sense of security, even a rewarding and, probably, a quantifiable sense of durability. Today, although it may still meet some demands, it is unable to fully integrate individual workers into their corporate cultures. As a result of this break-up of collective consciousness, individuals feel more and more isolated.

In the past, the person who was most trained, was also the one who was most satisfied and took greatest pride in his or her working life. Individual pride, social recognition, belonging to a reference working group, corporate culture and civic involvement - all these provided the individual with positive feelings of being part of a social group as well as a sense of individual identity. In the past centuries, craftsmen used to take pride in the quality of their work and this was a basic element in their freedom and sense of self-respect. Craftsmen carried with their bag their freedom along with their tools.

Today, however, we need to insist on the individual capacity not only to adapt but also to “go with the flow”. The human capacity to adapt is enormous, particularly in the field of work. But with the increasing division of labour, adaptation not only means that individuals need to act voluntarily
by changing their behaviour, but also to agree to share the values of this change, at the cost of suffering from a lack of pride and citizenship. "Going with the flow" means becoming aware of the social organisation of work. Indeed, this attitude promotes those individual capacities that energise the production process.

We need to take into account what Dejours (1998) calls "suffering at work". Collective suffering results from the individual suffering at work of those with or without jobs. According to her, it is part of a rational global system which functions in the same way as the system under National Socialism, by eliminating the least competitive members. It is a rational work organisation which eliminates and kills.

In the present context, in which globalisation and rapid financial movements place companies in a situation of very high risk, we are less and less able to rely on appropriate vocational training to strengthen our sense of security, not even relatively speaking. This is because the increasing requirement for higher levels of vocational training is linked to companies' survival, and to that of small and medium-sized firms, in particular.

By the same token, the commitment of companies, though indispensable, is in no way sufficient to maintain and develop a reserve of potential employment opportunities. We need to develop human flexibility more effectively, to have the intelligence to improvise, to harmonise with the evolution of the work environment, rather than to hope that the system will adapt itself and thus ensure its own stability. It is no longer sufficient to rely on the traditional synergy between vocational qualification, pride in one's trade and security of employment. This synergy has become highly fragile.

The notions of work are changing with transformations in the world of real work. Notions such as "sharing time" and "pairs counselling", for instance, show that new kinds of work organisation are developing according to needs. In France, the 35 hours' law is changing not only collective life but also private and family life. The boundaries between individual duties and collective needs are constantly changing. Civic roles now include the notions of production/consumption (consumption modes), leisure, culture and social involvement in collective practice. Devoting more time to something beyond one's job or one's paid occupational duty, is giving to "workers" greater global identity. In a sense, it is giving them back a part of themselves - their humanity - which was taken away from them.

Links between work, earnings bracket and freedom are extremely complex. If freedom today is linked to waged or regular work, it was very
different during Antiquity: freedom originated in the notion of "noble" work. This excluded domestic tasks carried out by slaves, who were deprived of the status of workers. Both freedom and work were equated with high social status (Gorz 1989).

Later, in the early part of this century, Max Weber demonstrated the deep links binding asceticism to the capitalistic spirit, giving individual work all its moral meaning (Weber 1930). But what meaning should we assign to the reality of "work" today? In the context of globalisation, work can be defined as an activity that is external to productive work, and has nothing to do with its basic quality: effort and toil. On the other hand, how is the notion of "work" to be defined in the context of financial transactions and economics, in which work generates capital, but need not be productive or unproductive? The reproduction of the money cycle depends on an entirely new logic: it can reproduce on an astronomic scale - in the literal sense - without producing anything: money multiplies money, thanks to its "quality" of being only money.

The logic of globalisation or of the so-called "formal" economy is not new. Is it not everyone's goal - including dissident minorities - to search for growth? Indeed, if we built bridges between the formal economy and the informal economy, their common purpose would be revealed. However, for the moment, even though the interrelationship between the formal and informal economy is vital, there appears to be an interest in concealing the interrelationship, in order to keep a virtual frontier that separates the formal from the informal economy in terms of their unequal development levels, and assigns participants of the two economies to two different social classes.

Just as we should build bridges between the informal and formal economy, in the same way we would benefit from building bridges between formal and non-formal education and training, and from finding out about the learning processes entailed in informal sector work. Building bridges between formal and non-formal education is necessary in order to make formal education and training more attractive for persons and groups involved in non-formal and informal learning.

Traditionally speaking, learning takes place through games, school, and leisure. Learning processes differ according to the various chronological phases of life. Here too, boundaries that we thought were clear need to be reconstructed and rethought. Indeed, we thought that ageing slows down profitability, productivity and the rhythm of knowledge acquisition. Yet, it has been shown that the capacity to learn improves through the ability to
pass down memory, know-how, “knowing-how-to-be”, and wisdom. Experiences, looking back at the past, and the duty of remembering and witnessing are the privileges of time and age. History and consciousness teach us how to act, and learning from acting makes us get closer to real knowledge. Therefore, it is important not only to be able to meet the needs of the ageing population (Ohsako 1998) through appropriate measures, but also to anticipate and adapt educational strategies to demographic ageing. The intergenerational relationship is complex. Cultures, philosophies and religions have always thought about the relationship between man and his time and Time. But the notion of ageing varies greatly according to cultures and patterns of social organisation. Not all cultures attach the same value to “old age” In some cultures, belief systems have an important role in promoting the symbolic worth of the dead. The dead continue to have a strong symbolic role that enables human history to continue. It is only in the context of this global framework of human development that definitions (Giere 1995) of the various fields and practices of adult education (Belanger 1994) can be delineated.

To sum up, it seems that the health and continuation of society rely more on intelligence, flexibility, knowledge dissemination and human creativity than merely on the individual’s capacity to adapt to work.

The internal dynamics of globalisation

A second theme of our paper deals with borders and with forms of solidarity, starting with the origin of collective life and proceeding to the present context of the hegemony of the supranational financial world.

The most perverse and negative effect of globalisation may be attributed to the fact that while globalisation may appear to be abolishing borders, it is creating new ones. It is not our purpose here to define globalisation, but we can note that the world is getting smaller thanks to new technologies that are easy to operate and cheaply accessible for most people. This is leading to the democratisation of information and communications. At the same time, however, complex financial movements are becoming more and more rapid and being controlled by fewer financiers.

An increasing part of the world’s wealth is being drained into international and transnational financial institutions. Yet, this impalpable world is incomprehensible to social groupings. Paradoxically, however, when it comes to international debt, one is faced with concrete national situations
and human lives. The growth of international debt depends on the logic of inflation, and this dramatically aggravates poverty.

In the context of real economic development, more and more countries in the developing world are confronted with conditions of poverty. Yet, poverty is no longer a characteristic of developing countries alone but also of poor areas within rich countries. Indeed, we should consider the notion of poverty not only according to economic aspects but in a broader sense. This will be discussed later.

Although many democratic states have in the last few decades been helping to reduce inequalities, this has been made difficult by the lack of adequate study of the growing gulf between the rich and the poor, resulting from the perverse effects of globalisation causing unusual violence, in Asia in particular. There seems to be a fault underneath that is due to atellurian movement of divergent forces, whose extent is unknown because the fault is still invisible. But the underground machine is irrevocably in motion. The gulf between the rich and the poor, arising from this worrying fault needs to be studied.

There are visible and invisible aspects of the new geopolitical changes as well as the ever-changing economic situation and social evolution. These processes are occurring across well-defined borders (states), across shifting or fluid borders (war), across new borders (peace), across real geographical borders, and finally across invisible borders (economic). These themes bring us back to the analysis of globalisation as something that creates a supra-community, a community above societies. The “us” in this community can no longer reject the “them”. All are fused together in the “global village”, and borders no longer have any meaning, save the ultimate one: that of the planet. The “global village” possesses a common culture. It is part of the family whose members would be unconsciously dominant, as domination would not mean anything any more. This science-

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1 The inventor of chess had offered his newly discovered game to a prince, who asked him what on earth he could offer in return. The inventor replied: “Place one grain of wheat on the first square, two on the second, four on the third, and so on until the last.” The prince was quite angry: “I offer you half of my kingdom, my favourite concubine, and you ask of me but a few grains of wheat. Are you mad or are you making a fool of me?” “No, my Lord, but do give me the grains of wheat I asked for!” Yet, $2^{61}$ is almost the number of positive particles in the universe ($2^{80}$) and is a bigger volume of grains than that of the earth! So, therein lies the logic of economics and the logic behind the national debt!
fiction vision denies concepts such as “other”, “separate”, “local” and “particular”: there would be nothing specific, for there would be a right place for everything and everyone in this new world identity order!

But going back to reality, the current example of the European Union shows that in order to mitigate the existence of real geographic borders, and borders based on a nation’s history, political work is indispensable. The European federation and its new borders were created step by step, and were a result of collective actions and long-term political strategies. The European philosophy took the social aspect into account from the start. The abolition of traditional borders results from the creation of a geopolitical reality, which aims to reduce both social and ethnic disparities. However, in the context of globalisation, financiers and decision-makers hardly entertain social concerns and base their daily decisions on the dynamics of world competitiveness.

At Davos recently, Klaus Schwab, founder and president of the World Economic Forum, explained the reasons why he preferred to speak of “responsible globality” instead of “globalisation”. According to him, this encourages us to look at the world in a multidimensional way, taking into account aspects of the economy, technology, society and culture. The term “globalisation”, on the other hand, has become an ideologically loaded word and a heartless economic process.

After estimating the cost of the mistakes of uncontrolled economic growth, and realising how serious the situation is becoming, financiers are now expecting states to mediate as a protection against liberalism. However, it is not for us to share their distress about our collective destiny or to ask for a social version of globalisation. George Soros compared the current economic situation to the desperate attempt of somebody trying to throw himself off the Empire State Building and who, half way, says: “Nothing disastrous so far.” Wouldn’t the anguish of financiers soften if they could become conscious again of their own “social being”? A few politicians were invited to Davos. Their first concern was to defend their people’s collective destiny. But globalisation generally ignores this political thinking. And that troubles the financiers: they are worrying about the object of their power. Following the thoughts of Davos, is it still possible to appreciate the human values which have led people, full of collective consciousness, to create societies?

Central to Durkheim’s understanding of what binds societies and communities together was the notion of solidarity. In small communities
(Gemeinschaften), this solidarity was of a mechanical nature. People were dependent upon each other. There was very little division of labour so that, within collective life, individuals performed similar functions. On the other hand, in societies that were more developed and had a more advanced division of labour (Gesellschaften), it was organic solidarity that bound people together. Individuals were dependent on each other because they played complementary roles. This form of solidarity was called functionalist. How then can we talk about the “natural cement” that makes us exist, not as a sum of individuals but as a legally and “rationally” organised social group, which has worked quite well so far?

Actions that aim towards adapting education, culture, family, city, local and regional communities, work – in short society – to the demands and constraints of the economy result in effect in a situation in which common social values are devalued and discounted. While technical and technocratic power through the “management of consequences” might slow down this movement, the creed of adapting to economism serves mainly to increase the disparity between social groups. By losing sight of the basic sense that the “economy” embodies an organised realm of communal living - a bed-rock of collective life, and by reducing the economy to “money-making”, economism has developed into an antisocial activity, thus denying “oikos”.

The task of education must be organised before a “world seismic shock” is announced. The “laisser-faire” of globalisation, signifying acting only with individual consciousness, and keeping only short-term goals in view, is bound to lead to the inevitable shock. It will come from the same mathematical logic of exponential growth which leads to mathematical aberration and human catastrophe. Nevertheless, recently the new “Committee to Save the World” has been created! Recently, Time magazine had this as its title: “Economists heroes? It sounds silly unless you understand how close the world came to economic meltdown last year”.

2 J. Habermas discusses in detail the question “what makes a form of life ‘rational’?” (1992: Chap. II) and adds: “Moreover, I would like to note that dissolution of substantial images of the world go hand in hand with universalisation of moral and legal standards, and with the fact that socialised people become more and more individual. But these are precisely the features used by Emile Durkheim and George Herbert Mead to characterise the modernisation of western societies, and also used by Max Weber and Talcott Parsons to determine western rationalism.” (p.44)
At this point there is the need for more information and more knowledge. The discussion here is not about globalisation’s ability to take into account features of human development or not, but about the urgent duty of education in the context of economic globalisation. It is necessary to get to work and study the social and cultural consequences of this trend and understand its outcome. It is necessary to start from the logic of globalisation and describe its sometimes crazy actions. By trying to understand the phenomenon of globalisation, it is possible to anticipate its consequences.

In sum, solidarity is what keeps people together and creates social cohesion. However, uncontrolled globalisation has unfortunately made us lose these values.

The duty of education in the face of globalisation

The third theme deals with the urgency of the mission of education. In the current context of the “knowledge society”, the speed with which things are changing leads us to think that “the more we know, the more we introduce change, and the more we need to reflect on it” (Jarvis 1998:26).

In times of crisis, experts with management expertise are called upon to solve problems. Experts are defined as having managerial qualities. They are considered the new holy decision-makers; However, these so-called decision-makers often lack the capacity to pose problems, to transform a crisis into its constituent problems, or to understand and act jointly to solve problems. We notice that the best decisions are not always the ones that are based on one model of rationality only. It is the paradox of “the risk society”. Do we perhaps need new experts with general skills rather than specialist experts only? In medicine, for example, we often need advice from a “good” general practitioner after having consulted several specialists. It is necessary to link the different approaches that are specialised but sectoral and partial. We need to reintroduce an ethic because the action is collective, and requires justice and accuracy.3

Is the ability to pose problems not as important as the ability to solve them (Jarvis 1998:67)? In other words, is it not more profitable to

3 This text about education and adult education in particular, would be the right place for a discussion on ethics, on action and on universality. I am only sketching it, similarly to what Habermas calls the ethic of discussion: “Anyone who seriously tries to take part in an argument, implicitly enters into universal pragmatic presuppositions containing the ethic” (1992: 18).
learn from solving something difficult and suffering for oneself, for a group, or for a community? Do we not learn only from the problematisation of complex situations? Learning to pose a problem is the basis of the action that motivates us to solve it. Current research shows that intelligence develops according to the different problems that we actually resolve, through games, at work or home, or in collective life (Tennant and Pogson 1995:33).

According to Paul Lengrand (1970), education is the “development of the being through implementation of his capacities in all his various experiences. The development of the being includes any intellectual, sensitive or spiritual food which can be taken in by an individual substance.” Giving value to “the being” means emphasising both its development and its differentiation. Development of “the being” and of its existence is visible from what individuals do and become. It is visible in all their past successes and failures.

Over 30 years ago, some people used to say that notions of happiness and peace were the aims of education throughout life. It was held that while the notion of happiness concerned the individual, the notion of peace concerned collective life. It is necessary to make peace the ultimate purpose of intelligence: the one that prepares men and women, through education and probably prior negotiation, to refuse to make war. Of course this education also makes people happier! In the words of Edgar Faure (1972) from the first UNESCO report on adult education, adult education is “Learning to be”. This statement has continued to retain its philosophical dimension through all these years! The United Nations World Report on Human development (1995), states that the three main priorities for persons, whatever the level of national development, are: (1) having a long and healthy life; (2) acquiring knowledge; and (3) having access to the necessary resources in order to obtain decent living conditions. Other criteria are: political, economic and social liberties, opportunity to express one’s creativity or productivity, and human dignity and respect for human rights (1995: 13-14).

The role of education is all the more vital for the coherence of social organisations, since the future of social groups and respect for personal development depend on it. In adult education, it is through the link between social development and personal development (Tennant and Pogson 1995: 5) that we are able to resist the “prevailing social and economic conditions which potentially lead to alienation and enslavement”. Adult education provides the means for everyone, according to his or her needs, to enrich knowledge of the self, and to grow up as a person. Education fulfils its purpose ac-
According to everyone’s expectations and can develop according to personal aims defined by every person.

Real development is that which aims at reaching an equilibrium between community needs and personal needs. Connecting vocational training and permanent education means reconciling work and culture. This reconciliation can be reached through education i.e. by ensuring both training and human development.

Enhancing one’s knowledge and developing one’s know-how leads to a heightened awareness of what can be changed. One can learn to reflect on social realities. The starting point of the link between knowledge and know-how is, what I call, “learning to reflect”. Learning to reflect already anticipates action and “creates the occasion”. Acting is at the same time projecting oneself into a new cycle of action and reflection. And it is that link between acting, learning to act, and learning from actions, that I call “learning to be more intelligent” in order “to be”.

Only adult education, defined as a lifelong and permanent process of real knowledge acquisition, based on mind-opening and more reflection, can lead to this form of intelligence, which contains the ability for well-being, getting closer to wisdom and developing real political reflection.

Conclusion

In the context of our discussion on globalisation and the duty of education, we have shown that globalisation develops according to a completely different logic to that laid down by the collective life that underlies the economy - the oikos. We have shown that recent financial crises have worried financiers, who now require more regulation, more state intervention and more order. We have shown that the consequences of this disorder mean deep suffering for real persons, and legitimated violence and death. We have demonstrated that the ensuing lack of social cohesion results in, among other things, the loss of a sense of collective life and consequently, of individual life.

We should not forget that “natural” social cement or solidarity binds people together as a group and not just as a sum of individuals. Education should be responsible4 for this consciousness. Sentiments, such as “benevolence” for Confucius, “reciprocal love” for Mo-Tseu, “compassion” for

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4 Max Weber develops the ethic of responsibility that is consequence-oriented.
Buddha, “community of believers” and “solidarity of the community” for Islam, or “solicitude”, “generosity” or even “palaver” or “unanimity”, meaning reaching a consensus, bring everyone together, and transcend the individual. Altruism in the modern age, and humanitarian action in the post-modern era, also carry within themselves this inherent need.

Building solidarity between players and spectators of globalisation is the sole condition for the survival of the “supra-community”. The objective of education should be to take into account social and cultural changes, which are linked with the shrinking of the planet.

Globalisation should no longer be a new imperialism. Thinking and acting in this way would also be reductionism. Political reflection on globalisation should aim at universalism. This new world order should be built on cultural specificities and should aim at knowledge and awareness that lead towards a happier future.

In conclusion, the objective of education - “implementation of means to ensure training and development of a human being” - takes these changes into account, and appropriates them. We should not forget that education is learning on a national scale, contrary to science, for example, which tends towards universal scientific knowledge.

We cannot reduce globalisation to the image of a wave breaking over the planet. Globalisation is multi-polar. As centres, one can cite: China, the Far East, the Indian sub-continent, Russia, the Arabic world, greater Europe, the United States, Latin America and Africa. All these centres play a role in globalisation. The predictions on the development of their strategies are complex. Nor can they be reduced to a functionalist vision. To begin to understand, one must develop comparative studies, starting, for example, with China and Europe. Adult education which has as its goal the understanding of globalisation, must reaffirm the dominance of collective belonging. This is an urgent moral duty. People's survival relies on their actions. And that is politics.

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5 Not “abstract universalism of based moral judgements” criticised by Habermas, which brings us to “negotiation of compromise and not to consensus discursively acquired” (1992: 26).
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Lifelong learning and vocational education and training: a teachers’ and trade union view

Hilde Borgir and Renate Peltzer

Society and the labour market are undergoing extremely rapid change. The European Commission White Paper on Education and Training cites three “factors of upheaval” as driving forces behind this:

- The impact of the information society
- The impact of globalisation/internationalisation
- The impact of scientific and technical development

More than ever before these factors mean that vocational education and training must be designed as a lifelong learning process. Learning new skills and adapting to changing needs will be essential for the ability to make a living.

The world labour market situation

The “factors of upheaval” are affecting the structure of our societies, and the roles of the state, of industry and labour. The integration of the world economy has weakened the link between economic and social progress and has often undermined the respect for human and trade union rights. Above all, according to the ILO World Employment Report 1998-99, “the number of unemployed and underemployed workers around the world has never been higher - some one billion workers or one third of the world’s labour force - and will grow by millions more ...”. The world financial crisis has destroyed earlier hopes for a global economic revival that would cut unemployment and underemployment.
Employers are under pressure from strong competition and, viewing their work force simply as a cost factor,

- reduce permanent personnel to the minimum,
- increase precarious employment (by “out-sourcing”, etc.)
- reject apprenticeships and in-house training, and
- resort to minimum on-the-job training.

As a result workers are faced with high unemployment, underemployment or insecure employment such as temporary work, fixed-term employment or contract labour, or are driven towards self-employment which often is merely a disguised form of unemployment without social security. This can aggravate and help to globalise forms of exploitation such as child labour and segments of informal sector or black labour market.

Workers in developing countries and countries in transition are more heavily affected than those in the industrialised countries. World-wide the workers that are hit hardest are women, young people, older people, migrants, the long-term unemployed, workers with disabilities, and the least educated and trained.

"Employment problems can be solved only through the combined action of governments, trade unions and employer organisations,” the ILO Director-General said when launching the World Employment Report, and he added that “among the measures to increase competitiveness, growth and employment in a globalising world economy, the critical role of a high-quality, educated and skilled workforce must gain more prominence.” The report itself states: “The choice between taking the ‘low road’ in terms of competing through lowering wages and social benefits and the preferable alternative of taking the ‘high road’ of raising labour productivity and incomes will require flexible and responsive training systems and greater investment in skill development.”

The role of the state has been declining under globalisation, while social and educational demands are increasing. Many states are experiencing great losses in income from taxation as well as contributions to social security from employers and employees. The budgets which are generally suffering from the tightest scrutiny are those for social security and welfare, and for education. The loss to society and the economy in terms of medium and long-term development is evident and policies to reverse the trend must be sought.
The recent financial crisis which started in south-east Asia has proved that exclusively market-driven economic and financial policies do not provide the sound basis needed for a democratic state to protect its people in times of crisis. Tripartite consultations are necessary for an equitable social framework that provides for the security needed for development. They assist the state in its role of setting balanced rules and minimum standards (as opposed to "deregulation"). An equally important means to balance the interests of business and workers and their families is industrial relations based on free negotiations between employers' organisations and trade unions. This presupposes fundamental rights: freedom of association and the right to collective bargaining. Minimum labour standards - as internationally agreed by governments, employers and workers at the ILO - have to be globally applied to contain the social damage that can be provoked by unrestrained global trade and competition.

With regard to the present labour market situation, the state and the trade unions are generally pursuing a common goal: the creation of permanent employment. The role of the state is important in setting the legal framework as well as giving incentives for job creation and counteracting the trend towards building a throw-away workforce. The government could provide the platform for employers organisations' and trade unions to negotiate employment pacts, for example, or a levy to be paid by employers who do not employ apprentices or trainees.

While high unemployment persists and workers are driven into "self-employment" or the informal sector, it is more than ever important that curricula of vocational education include civic and labour rights, economics and managerial skills. A comprehensive effort to create and sustain jobs is, however, paramount. Without such an effort the impact of education, training and retraining will be lost.

**Lifelong learning**

Lifelong learning and vocational education are very difficult subjects to discuss. As an all embracing and comprehensive concept, they can mean very different things to different people, depending not least on the economic and social situation of a country. Yet, despite great varieties, countries around the world have some important issues in common which need to be addressed. The social partners, authorities, teachers and teachers' unions, can and should play a vital role at the national level and on the global
This paper will concentrate on some main aspects which are relevant to vocational education and adult learning from the perspective of lifelong learning. Some statements are quite realistic, others rather express visions.

**The aims of lifelong learning**

"The key to the next century", "the treasure within", "the necessary Utopia" - all three expressions from the Report *Learning: The Treasure Within* by the UNESCO Commission on Education for the Twenty-first Century - reflect the importance and the challenges of lifelong learning, which holds the potential to change society's entire understanding of education. It will provide an awareness of education and training as continuing processes without diverting attention from the special needs of children and young people. Education is a developing process throughout the life of the individual. Lifelong learning can bring together all aspects of educational thinking and policy-making; it comprises basic education, adult education, in-service training, formal and informal education and labour market training.

To make lifelong learning a reality, many older indicators for learning and schooling must change and new ones need to be developed. There are many aspects of which we do not know enough. There has been very little research in the field of lifelong learning. Some areas where knowledge is poor are early childhood education, vocational education, the motivation to learn, informal learning and learning at an older age.

To many people lifelong learning is a goal in itself, a crucial basis for the personal fulfilment of the individual. Lifelong learning is essential to get a job, to keep a job, and to develop in a job. It must also contribute to enabling working people to cope with periods of unemployment, and early retirement and to access and re-access work opportunities. Lifelong learning is at the same time fundamental for society as a means to promote democracy and human rights, to prevent social exclusion, and to foster solidarity and international awareness.

There is a major risk that a rift can develop between a minority of individuals who are able to function efficiently in a changing society, and a majority who become marginalised, accept developments passively and have no say in shaping the collective future. Such a trend also implies the risk of a regression of democracy. The development of information and communication technologies can provide new means to achieve lifelong learning. On the other hand, new technology can widen existing gaps or
even produce new ones.

The educational system has a vital role in counteracting tendencies towards greater inequalities. But the responsibility cannot be left to the teachers alone. The authorities, employers' organisations and trade unions must work together as a well-established network. Lifelong learning is very much an all-embracing task, and a common responsibility for the authorities, the social partners in general, and teachers' unions in particular, as well as for specialised non-governmental organisations. Local agreements based on national frameworks could provide for a continued dialogue.

Many claim that the 21st century will be a learning century. Making progress towards a learning society is a challenge to be met by the education system and to teachers, provided that they play - and are allowed to play - their part. The development of lifelong learning policies and strategies requires a fundamental revision of all phases of education and must consider ambitious expectations of society as a whole regarding the education process.

The key role of teachers

The OECD also calls for schools and the education system to play a role in helping countries to adapt to social and economic challenges. The OECD says that they will not be able to meet such challenges unless teachers are the centre of the process. Both younger and older teachers need to be involved in a renewal of skills and attitudes to create schools which can meet the challenges ahead.

The education system must be opened up to offer lifelong learning. This openness has many different meanings. The foundation for lifelong learning is the opportunity of basic education for all children and young people - regardless of gender, economic and ethnic background, or functioning abilities. Equal access to education and training is a fundamental right. Adults must also have the same opportunity for basic education and training.

What adults have gained in schools must be maintained and renewed. Special attention must be paid to the diverse needs of adult women to receive and to return to education and training. It must be possible to return repeatedly and at any time to the education system for re-education without formal barriers. The school gate must be kept open to drop-outs, early leavers and excluded or marginalised groups so that they are given
several chances of re-entry. Adults with special needs for individually adapted training should naturally be entitled to such training. Educational institutions must be open to the society at large. Education and training systems must develop a wide range of partnerships with other players in society. Vocational education and training will not develop in a satisfactory way without a good relationship with the world of work outside the education system. The same is true for social cohesion, which can be achieved through partnerships with local authorities, parents and the voluntary sector. This move to more openness should involve the social partners, who need to be able to participate actively in creating the learning society.

Lifelong learning needs teachers of quality, in full command of subjects as well as pedagogical skills. A main part of the work of a teacher is to convey knowledge, to initiate education and to give guidance to children, young people and adults in their development. For that reason it is important that teachers themselves are in the forefront of competence development.

Teachers themselves have to face up to new challenges caused by changing social and economic conditions. It is clear that they should benefit from high quality pre-service teacher education, supported by induction processes during their initial teaching period, and to be repeated throughout their career. During their career they should receive various forms of in-service training and professional development. In-service training provisions cover a wide range of aspects of the teaching profession, such as updating subject-specific knowledge, acquiring new methodological skills and tools, pedagogical competencies for teaching adult learners and knowledge of the world of work. Training initial teachers must form the basis for continuing training.

It is important to identify the needs of lifelong learning and to equip educational institutions and schools as well as possible for the benefit of the learners. Through education and practice, a teacher acquires special competencies to motivate, analyse, plan, implement, evaluate and develop learning. These pedagogical skills must be available for the whole society, and it is the responsibility of the teaching professions to open the institutions and to use their competencies wherever they are needed.

For example, in Norway local "resource centres" have been established for continuing education and training at the upper secondary level, and they are being increasingly used. The resource centres provide a link between upper secondary schools and the labour market. 90% of Norwegian
upper secondary schools offer both vocational and academic studies.

One of their aims is to discover ways of cooperation which can contribute to a better use of resources and the enhancement of skills in the school and the local society. They are located close to small and medium-sized enterprises and local public institutions. The centres therefore have the opportunity to specialise in the supply of training to the local labour market in close cooperation with the institutions.

Examples of such training are courses in foreign languages, updating in health or nursery care, training in arts and crafts for the local community, and updating workers in the industrial sector (e.g. the oil sector in Norway). The centres can also place teachers in enterprises.

Many of the centres also carry out tasks for the labour market authorities. Among these are retraining and giving qualifications to unemployed people to make them employable or to encourage them to consider continuing education.

Several Nordic countries are planning major national programmes for adults who have not completed lower secondary school and for those who have not had the opportunity to access upper secondary or further education.

In this context, adults need to be given the legal right to basic adult education at primary, lower secondary and further educational levels. The state must have the duty to ensure that this education is available to all who want it - and make funding for this education available. It is important to focus on the labour market and the needs of the social partners. Such a programme has been developed in Norway under the title "New competence - The basis for a comprehensive policy for continuing education and training for adults". (See Hilde Borgir in this book.)

**The state’s responsibility for the organising and funding of vocational education in cooperation with the social partners**

First of all we have to struggle for the right to education for all. It goes without saying this right has to be guaranteed by the state.

It should also be recognised that public and private spending on general and vocational education is an investment. States should ratify and see to it that the ILO Convention on paid educational leave is implemented.

A basic requirement, and the greatest challenge in the vocational
education sector all over the world, is communication and dialogue. It is necessary for the governments to promote the building of a strong and healthy bridge between business and the public sector; therefore, the role of the public and private sector in vocational education and training and lifelong learning must be redefined.

Vocational education and training opportunities are very scarce in 60% of the countries around the world. There is a gap between the opportunities to enter vocational education and the opportunities to enter academic studies. There is a lack of training institutes for vocational teachers. There is also a considerable gap between the remuneration of academic teachers and vocational teachers. Teachers in vocational education need a mixture of general and vocational qualifications, pedagogical theory and training, and technical or practical experience. Their status, salaries and conditions should be equivalent to those of teachers in general education, and they should have the possibility and right to upgrade themselves at a university level.

The state, through the vocational education system, has to take on the responsibility for preparing people for the world of work and for regular updating of skills to meet structural changes. People also have to be prepared to consider themselves part of a more international society, and to handle greater communication and mobility across the borders.

The vocational education curriculum

It is increasingly accepted that vocational education and training are best when it is based on a good general education starting with primary schooling, because many traditional school subjects are vocational, such as languages and mathematics. But how learners learn depends on teachers’ methodological skills and their knowledge about the world of work.

It is also important to render vocational curricula more flexible. Some countries have good experience of using a modular system, in which each module accords with the needs of the learner or a group of learners. Such a subdivision of the curriculum is useful for learners who cannot attend courses regularly over a long period of time. A modular structure for vocational courses gives adults the chance to re-enter an education they once started, and to go on with their further education without wasting the time it would take up to start all over again.

It is important that employers and workers and the educational pro-
fessions are involved in the process. It is important that everybody is familiar with the contents of the whole programme, whether it is school-based or based on a combination of schooling and apprenticeship or in-service training. As vocational education and training are closely related to the interests of the labour market and the economy, a careful balance must be ensured between personal educational needs, and economic objectives, such as the supply of skilled labour.

In summary: the need for a legal framework

Whatever the education system - and notwithstanding the scarce financial resources of both governments and employers - there has to be a legal framework for:

- the state to provide compulsory and free basic education and free initial vocational education between 2 and 4 years;
- the state to set the quality standards for education and training and for the recognition of qualifications;
- the employer to provide paid educational leave;
- commercial providers of education and training;
- private or voluntary institutions.

Furthermore, the state's responsibility has to be:

1. To take the initiative in developing curricula together with the employers, the trade unions and vocational teachers.
2. To offer free training to teachers in the vocational sector which is equal to that given to academically educated personnel.
3. To take the initiative in concluding agreements with the social partners for apprenticeships and/or in-service training.
4. To offer further education and training to all workers financed according to tripartite agreements.
5. To ensure access to training, especially for those who are not employed and belong to vulnerable groups.

The employers' responsibilities have to be:

1. To take on the full cost of education and training which are needed for an employee to do the required job.
2. To identify the needs of the labour market together with the authorities and the institutions that offer education as well as with the trade unions.

3. To organise working time in such a way that it is possible for all workers to have access to learning at their work place, and to participate as individuals in adult education in their private time.

4. To give priority to education and skills in discussions between labour and management.

5. To be prepared to provide apprenticeships and internships to young students and adult students who need vocational practice.

New approaches are needed in the field of lifelong learning. But a prerequisite is that the working people and their organisations are involved at local, national, regional and global level. Unless this is fulfilled, lifelong learning for all can never be successful. It is good dialogue which brings good results.

Vocational education must be placed in the wider context of the general objective "to enable people to take control of their destiny and society in order to face the challenges ahead" (UNESCO, The Hamburg Declaration 1997).

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1997 *The Hamburg Declaration*, UNESCO’s Fifth International Conference on Adult Education (CONFINTEA), UNESCO Institute for Education, Hamburg
Education today is taking place in a world with a globalised economy and unregulated competition. It is embedded in actions dominated by economics and markets. New modes of communication and changes in the organisational structures are becoming points of reference, which increasingly tend to overlook autonomous cultural traditions.

Technologies, new levels of productivity, increasing financial resources, new information technologies with a wide scope of dissemination of new images (mythological images), are all having a strong influence on paradigms in the political field as well. The past educational points of reference have practically all gone. However, new points of reference have yet to evolve which an serve in these changing contexts. Ethics often becomes diluted in the links given by the concept of legality, together with a certain concept of political adequacy given by political opportunity.

Within these formulations, it becomes difficult to define education outside the instrumental context. But I still wish to maintain my belief in the right of equal opportunities for every human being, and in the rights for individuals and collectives, nature and cultures not to be degraded. Consequently, it is only in the domains of knowledge, and its implementation, restoration and improvement that a certain hope for a well-balanced society can be found.

In the dynamic world of the enterprise, where the feeling of destruction and depredation caused by complementary mechanisms arising from political or social or cultural side systems do not have such a great effect, the borderline is now the new paradigm of knowledge. It has to be said that knowledge has been here for ever as an untouchable reference. But then one has to add that it is not only this possibility of knowledge, but the conversion of this individual and often confusing knowledge, into a continuous, explicit and contrasted knowledge, grown in a process of solidarity. Obligations and individual freedom contrast with the quality of results measured in global benefits, but not in elusive and striking goals.
Concepts as a rolling stone

Education needs to be viewed as a process of discovering and creating our own selves. Education means perfecting and improving ourselves. We have completed a long journey from nature and self-consciousness to rationality, from science and culture to psychology and organisation, thermodynamics and molecular approach, and to biology, communication and space technologies. All this capital and power is integrated today into a society which is dominated by economic globalisation and financial speculation, and the needs of individuals and collectives merely surviving through history. Society today is characterised by unregulated competition where the individual must prove his capacity to adapt himself to difficult changes in terms of understanding the world, maintaining relations and acquiring skills for the world of work and the professions. In such contexts, most people tend to take on an attitude of resignation. The majority have no other option but to accept and resign themselves to the new relations imposed upon them.

In order to meet the challenges of this situation, education should set new goals and standards and adopt new approaches and patterns, without building castles in the air. This can be done, not by starting with a clean slate, but by taking whatever already exists – knowledge, relationships and positive attitudes. In this way it is possible to create spaces of happiness in workplaces with a long-term perspective and at all levels - the individual, collective and generational.

New methodologies

Existing approaches to education need to be rethought and reconstructed and refurbished by groups who have a direct concern for their constituents, rather than by mediators. Goals need to be decided in the context of social groups. Such goals must be introduced into the system to deal with the complex situations confronting different groups. In such situations, for example a group of technicians or a group with hands-on experience could help out. Problems relating to personal development need to be detected as these are an important factor in group development. Though information is widely available, it is necessary to take into account the different cultural contexts of personal and group development in this evolution process. The aims and motives of people also differ according to context and culture.
Borderlines for methodologies

Borderlines for methodologies can be defined as those that are decided in laboratories, which one group thinks might be usefully imposed on other groups and which continue to be applied to groups, although they consistently fail. Such methodologies are inadequate for the analysis of complex situations because they project the ideologies of particular groups onto society.

Past methodologies were specially supported by the scientific method, rules of logic and good pedagogy. At the centre of that system, there was either the human being, nature and experience, or social structures and religious systems. Today structures are changing. They are being determined by the economic system, the communication system or corporate production and distribution systems, media and various revolutionary technological systems. This is having far-reaching consequences for society as well as offering new possibilities for organising education.

A pragmatic approach

Adult education was defined 30 years ago as continuing education. But this continuing education mostly confers advantages upon those who have access to self-education through computerised systems and media broadcasts. Institutional labels and accreditation serve to keep competitiveness alive.

In the past female, workers were used to keep labour costs as low as possible; today, however, the enhanced skill levels of the professions, as well as the flexibility in work organisation is lowering the use of female labour as a cost regulator.

The situation of migrants with few legal rights and who live under poor economic and social conditions can be altered and living standards improved, by assigning contracts through new information systems. Unemployment can be easily mitigated through the use of information systems. The organisation of secondary and subsidiary employment can be easily rewarded by funds with no utility for the community.

The biggest impact of new information and communication technology on society today is the ease of availability, low cost and immediate access to information. In this respect, critical social change can take place over only a couple of generations. Of course, this change will depend on the extent of political decision-making, the economic rights and the cultural respect of human beings.
Managerial practices and attitudes to success

There are vast differences between managers from different countries regarding attitudes to success. Whereas Latin American managers tend to identify success with self-fulfilment and as a step on the way to a better future, Anglo-Saxon managers are more likely to be concerned with money, dominance and influence. In Latin American countries, most managers want to associate success with a mission in life, while in Anglo-Saxon countries being part of a team appears to play a stronger role in the determination of managerial practices and attitudes to success. Unemployment in Latin-American countries is usually regarded as a management problem. In Anglo-Saxon countries it is seen as waiting period.

Paths to education

The welfare state is of European making. Welfare has become an important point of reference for social and political organisations. People are not ready to accept less, and probably their search for the future will not be possible with less.

The critical point, however, is to know who decides on educational aims and who is responsible for educational matters. I believe that most relevant decisions are in the hands of large corporations, the media and state institutions. On the other hand, the influence of human groups, the recognition of individual needs and social aims, and the need for international stability is less significant. In terms of priority, the prime needs are the need for a home, food, security and dignity.

Often the worst enemies are traitors from one's own group. Worse still is the difficulty of eliminating the abuse of power among human beings. Very often this abuse has to do with general rules and regulations laid down by religion and even international organisations. Education therefore needs to become an open space, a private right, an individual and community effort, a place for solidarity and a space for denouncing fraud and manipulation.

Experience from companies

Experience in companies has shown that the need for good attitudes and a certain degree of intelligence is central to the functioning of companies. We
need good feelings, a sense of solidarity and team work. While this is relatively easy to attain, bringing companies as a whole to the same sense of responsibility, in the face of competitiveness, success and survival conditions, is a difficult task.

Individual executives apparently distance themselves from the same companies in which coercive measures are used and rigid goals followed. Yet, companies, and the economic system in which they operate, have always been inherently organised to aim for a certain equilibrium so as to compensate for internal contradictions, and thus restore a broader understanding of the universe, society and human beings.
Ethical implications of contemporary trends in work and adult vocational learning

Richard G. Bagnall

Introduction

Contemporary cultural change, including that in the nature of work, is transforming the nature of educational systems throughout the world: no less in adult education than in other educational sectors. The social justice, or more broadly the ethical impact of such transformation is a matter of paramount concern to non-government organisations such as the Asian-South Pacific Bureau of Adult Education (1996). It is on this concern that the present paper focuses attention, with particular reference to the ethical impact of the changing nature of adult vocational learning. This is done, by firstly and briefly outlining the cultural context to which educational systems are responding and the sorts of changes that are evidenced in response to that context. A construction of ethics congruent with the context, is then introduced and used to shed some light on the ethical impact of the changes noted. The work reported here is essentially analytical, critical and speculative, in the tradition of contemporary social philosophy. It is grounded in scholarship of a like kind, particularly that which focuses on the ethics and epistemology of contemporary cultural change and its impact on and implications for the nature of post-compulsory education. The educational sector upon which attention is focused, is broadly conceptualised as that of 'adult' or 'non-formal' education (Bagnall 1999:4; UNESCO 1976). More particularly, the concern here is with the contribution of that sector to vocational learning, by which is meant, learning that enhances the economic potential of individual learners, through enhancing their employment potential, including their potential to engage successfully in self-employment: the production and marketing of commodities (goods or services) from which economic return is produced.
The Cultural Context

The changes in the contemporary cultural context to which education is responding have been variously characterised as, for example, 'post modern' (Bauman 1992), 'late modern' (Giddens 1990), 'new modern' (Docherty 1990) and 'reflexive modern' (Beck, Giddens & Lash 1994). However, across those designations and their accompanying theorisations, there is a high degree of agreement on the nature of the changes, if not on their ideological grounding. The changes may be seen as partly driven by the transformation of communications and information technology that is occurring with the development of electronic networks and mass broadcasting (Lash 1990; Vattimo 1992). They are also, though, driven by the loss of epistemic and ideological certainty that underpinned the cultural colonialism and progressivism of more recent modern times (Hutcheon 1988; Lyotard 1984; Ward 1996). They include: the development of powerful cultural currents of diversity, democracy and freedom at all levels of social organisation; the privatisation of responsibility, value and exchange; the concomitant erosion of state power to act in the public good; the pluralisation and the fragmentation of social structures and cultural formations, including those of educational provision and engagement; erosion of the authority of the academic disciplines and professions as the legitimators of knowledge on behalf of the state; the exponential growth of publicly available knowledge and information; the commodification and privatisation of valued knowledge; the centralisation of economic development and well-being as the core cultural value; the globalisation and virtualisation of culture and value; the discounting of both past and future, with the compression of both time and space; and the corresponding fragmentation and contextualisation of knowledge generation and application (Connor 1989; Giddens 1990; Handy 1990; Harvey 1989; Kanter 1989; Rorty 1989; Rosenau 1992).

In such a context, all educational systems are subject to powerful pressures for change (Hinkson 1991; Peters & Marshall 1996; Usher & Edwards 1994), but this is particularly so for adult education systems - given their traditional responsiveness, adaptability and ephemerality (Bagnall 1999; Briton 1996; Usher, Bryant & Johnston 1997). Indeed, a central trend in contemporary educational change, is for all sectors to become more responsive to the interests of those whom they serve, more responsive to their respective markets, more contingent upon the cultural milieu in which they are situated: a tendency which greatly advantages the adult education sector.
A parallel trend which may be seen as strongly advantaging adult vocational education is that towards the vocationalisation of general education curricula, wherein there is pressure through funding mechanisms, performance criteria and market demand for all education to be assessed in terms of its contribution to vocational learning. Those trends, though, are associated with a number of others, the benefit of which is, perhaps, less clear-cut. Twelve of these trends are here examined, as follows: the instrumental commodification of knowledge and curricula; the competitive marketisation of adult education; a greater focus on student learning; the enhancing of educational accountability, efficiency and effectiveness, through a focus on educational outcomes; the specification of educational accountabilities; the privatisation of educational responsibility and benefit; the fragmentation and modularisation of curricula, and the construction of awards as aggregations of credits; the fragmentation, outsourcing and contracting of educational work; the creation of more flexible arrangements for student engagement; the internationalisation of educational provision; the corporatisation of educational provision; and the increased status differences among educational providers and qualifications.

Ethics in adult vocational education

Moving, now, to consider the ethical implications of those trends, it should first be noted that the notion of ethics adopted in this critique is that of the extent to which an action is taken on the basis of, and is true to, an informed concern for its impact on the welfare of those others who are, or may be, affected by it. An action is seen as being ethical, in other words, in the extent to which it is sympathetically informed by an understanding of its impact on the welfare and interests of those others who are likely to be affected by it. Ethical knowledge, through understanding, is thus seen as informing action. It is seen as a cultural construct that may be learned: a constructivist conception of ethical knowledge is assumed. Its focus on sensitivity and responsiveness to the welfare and interests of others means that it is, in an important sense, contingent upon those interests. It is not, or not necessarily, self-regarding, except insofar as self-interest impacts ethically on others. It importantly suggests that self-interest may, ab initio, be seen as non-ethical (or amoral), if not unethical or counter-ethical (immoral). However, the latter is assumed in this analysis: strongly self-regarding or egocentric discourse being taken, indeed, as serving to diminish the likelihood
of ethical understanding and action being generated through or undertaken within it. Such discourse, then, is taken as being counter-ethical, although a defence of this assumption is beyond the scope of the present analysis.

This conception of ethics is broadly captured by what may be identified as a ‘situational ethic’ - one which is sensitive and responsive to the particularities of each lived event (Bagnall 1998; Bauman 1993; Benhabib 1992; Dreyfus & Dreyfus 1990; Flyvbjerg 1991). Ethical action so understood is characterised by: a reflexive awareness of one’s cultural being, location and impact; a humility with respect to the importance of one’s own framework of beliefs; a tolerance of and respect for otherness; an empathic understanding of and responsiveness to the particularities of others’ lived realities; the capabilities, understanding and dispositions involved in successfully negotiating understandings with others; and the acceptance of responsibility for one’s beliefs, actions and their consequences (Bagnall 1998, 1995).

Such sensitivity and responsiveness to the welfare and interests of others, means that ethical action is irremediably embedded in particular cultural contexts. It can therefore be judged as ethical only in a knowledge of the context in which it is taken. However, this in no way denies the possible generality, even the universality, of moral precepts that may be used in making a judgement, particularly at higher levels of generality (what may be termed ethical principles). Here, though, the concern is with applied ethics, or what may be termed ‘morality’ in a general sense.

That impact may usefully be envisaged in three broad areas. Firstly, in the impact of the trends on the educational discourse - the beliefs, commitments, understandings, values, expectations and language characterising human engagement in education (adult education in our case): following here, Gee’s (1990) notion of ‘Discourse’, with a capital ‘D’. The educational discourse, then, may be seen as restraining and constraining the form, including the ethical quality, of all human action that is influenced by it. Action that is so influenced will be, particularly and most directly, that of the staff, and the students. The extent of the influence in any given case will vary according to the extent to which an individual identifies with the educational rather than with other discourses. The second of those important influences, and that which may be of greater impact on students, is that directly on the nature of the educational curriculum or programme content. The influence here may be either transparent or hidden. It affects student learning and, thence, the ethics of those subsequent activities undertaken by
learners, and which are informed to some extent by their learning. Thirdly and finally, the trend may be seen as importantly influencing the ethics of understanding and action through its impact on the justice of the structural equities and inequities that are created through it. Such structural consequences may be either supported and endorsed by the educational discourse, or marginal to it, even marginalised by it, but arising nevertheless as a consequence of the trends. These areas, then, constitute the sorts of ways in which the trends here examined may impact on the ethics of understanding and action in adult vocational education and, through it, on the wider community.

### The ethical impact of these trends

What, then, is the ethical impact of the foregoing trends? The trends are centrally constituted in the creation of institutional discourse, curriculum and organisational structures that are more sensitive and responsive to the cultural contexts with which the educational provision and engagement is involved. They may be seen as calling upon adult education providers to act in ways that are sensitive to, informed about, accepting of and responsive to the realities of others and the particular cultural contexts of human action to which the providers' programmes are being directed. Such responses may well be developed collaboratively between providers and client groups. Through the overt development of measures and procedures to ensure accountability, they may be seen as encouraging the acceptance of organisational and individual responsibility. They are directed to the creation of programs and curricula reflecting that responsiveness. And they require the development of organisational structures facilitating it. In these ways the trends may be seen as broadly ethical in their impact. Such an assessment, though, is a bit too glib and hasty. Beneath the surface gloss, there emerge some important counter-ethical effects. Let us now examine some of these, through focusing attention on each of the identified trends in turn.

The instrumental commodification of knowledge and curricula, presupposes the construction of education as a private, rather than a public good. Education becomes, to that extent, something from which the individual alone has the right to benefit, and as something for which others must pay if they are to benefit. Other individuals, and society as a whole, are therein constructed to the same extent as others, as outsiders, for whom the individual has no (moral) responsibility. Those others are restrained, to the
same extent, from making (moral) claims over the individual with respect to
the way in which he or she uses his or her education. Constructing education
as a commodity also presupposes that knowledge - as the substantive matter
of education - is an objectively discernible, describable, and quantifiable
entity, which may be transferred from learning resources into learners. Such
is the nature of commodities. Ethical discourse, however, requires
a strongly constructivist view of knowledge. In such a view, knowledge is seen as situ-
ated, fluid and inter-subjective: as not only open, but also dependent upon
its particular construction and application in lived events. It is in the par-
ticularities of those constructions and applications that there is hope of ethi-
cally informed action and organisational structures, not in the objective realities of knowledge as a commodity.

The marketisation of educational provision may be seen as more
conducive of counter-ethical, than of ethical discourse in a number of ways. It may be noted, firstly, that marketised systems are based on a presumption of enlightened self-interest through individual choice, as the best means to a collective good: collective rather than common, because the public good is taken as being the aggregate of a plurality of individual interests, rather than a shared view of what the public good amounts to. They therefore presuppose, and encourage, self-regarding, rather than ethical action: action that is seen by the individual as being in his or her own best interests, rather than that of others, either in particular or in general. Secondly, within marketised public organisations, the necessarily detailed specification of those target groups who are to benefit from state support for recognised disadvantage, and the ways in which they are to do so, encourages a similar avoidance of ethical action, but here through excessive codification or specification. It may also be argued that highly competitive, unregulated, marketised systems do not, in fact, encourage educational (or any other ‘product’) diversity, at least beyond a particular minimal level. They may tend, indeed, to encourage the convergence of provider product and image, with competing institutions largely trying to mirror their more successful competitors.

The development of a greater focus on learning may be evidenced in
two broad dimensions. One dimension sees educational attention focused on
facilitating student learning, as distinct from teaching. Insofar as this dimen-
sion has any ethical impact, it is not seen here as being contentious. The other dimension of learner-centredness, however, is of much greater con-
cern. It is that which sees the learner, rather than the educator, as the voli-
tional centre of what is to be learned, how it is to be so, and how the learn-
ing is to be assessed. On the face of it, this dimension would seem to be ethically well grounded. Through it, educationists are constrained to act in the interests of their students by ensuring that the latter's interests are predominantly determinative of the nature of their educational engagement: encouraging an acceptance of and empathy with the realities of those students. Students are encouraged and expected to take responsibility for their own actions and the consequences of those actions. It may, though, be seen as counter-ethical on a number of scores. Firstly, it may be interpreted as an abrogation of the educator's responsibilities (and hence also those of the educational organisation that the educator represents) to give their 'client' students good educational advice. Secondly, the moral discourse that is generated by this trend may be construed as one of egocentric self-interest: discourse that is antithetical to ethical action. Learner-centredness, as it emerges here, encourages learners to make decisions on behalf of themselves and only on behalf of themselves. To consider the welfare of others in such a discursive context would be perverse. Thirdly, this dimension may be seen as counter-ethical in its denial of access to the sort of education that is most likely to lead learners to an understanding of the ethical dimensions of their existence. The approach is inherently conservative in its constraining of educational vision to that which is apprehended sufficiently to be an effective object of desire. Access to other fields of knowledge, may therein be denied or limited.

The enhancing of educational accountability, efficiency and effectiveness, through focusing on educational outcomes, rather than educational processes, also reveals important counter-ethical effects. Important among them must be the tendency to encourage the development of a strongly egocentric discourse. For both student and educator, reward comes only with the successful achievement of the outcome. Autotelic achievements, such as learning to satisfy an urge to know, or teaching to the end of helping others learn, have no place. Yet it is just such achievements which contribute to the creation of an ethically informed discourse (Bauman 1995; Levinas 1991). The systemic preoccupation with efficiency and productivity that is integral to outcomes-driven systems demands of educators that they commit resources only to the specified ends. These values may become a deadening force against any consideration of alternative ends or engagements, against any consideration of the welfare or interests of others, of matters ethical. From the students' perspective, such systems similarly tend to suffer from a discourse of encouragement only to attain the required competency assess-
ments. The narrow programmatic focus that is engendered, encourages nothing else, even if it does leave space for alternatives. For students, outcomes-driven systems may thus serve to deny educational opportunity, rather than create it: equipping students with a minimal selection of skills that are based on past realities, as the only tools with which to engage a future of thoroughly situated and unpredictably changing and diverse realities.

The specification of accountabilities adult education, in essence, is the pre-specification of educational actions and standards. As such, it is contrary to the creation of a situationally sensitive and responsive, uncodified ethic. It is, effectively, an a priori codification of all valued educational action. It therefore, by exclusion, marginalises and diminishes the uncodified as not valuable. Insofar as ethical action is necessarily not taken in conformity to a rule, a specification, a pre-mediated reason - insofar, in other words, as it is situational - it will be outside the realm of education that is encompassed by this trend. To the extent, then, that educational activity is constrained by educational accountabilities, it is effectively drained of ethical value.

Relatedly, the individualisation, the privatisation, of responsibility and benefit is increasingly being facilitated in adult education through the withdrawal of state funding and the increasing reliance on the private payment of fees - within the broader context of educational and knowledge commodification. Educational providers are increasingly rewarded - through promotion, contract renewal, and such like - for undertaking and completing the educational work that was traditionally seen and experienced as their moral duty to perform. Indeed, within that traditional framework of commitment by educationists and educational institutions to public service, the offer or acceptance of such rewards was seen as being unethical in itself. Although that inherent immorality is denied within contemporary managerialist frameworks of belief, it nevertheless is strongly conducive of egocentric action and discourse, which is seen here as being counter-ethical. The privatisation of choice and responsibility may also impact more directly and counter-ethically on student learning, especially through its tendency to reduce program richness in humanities subjects. Learner choice, in the context of the instrumentalisation and vocationalisation of knowledge and curriculum, tends to be accompanied by reduced learner selection of more humanising educational engagements - and, ultimately also then, the very availability of such subjects. It is particularly humanities courses which have been recognised as defining the most valuable disciplinary component.
for the development of ethical consciousness through formal (and informal) learning (Nussbaum 1990; Polack 1993). Another important aspect of the privatisation of publicly-supported adult education, is the significant shifting of costs from the state to the student: a shift which parallels that in perceived benefit, from the public to the private. It is argued to be notoriously unjust: increasing the inequity of access to adult education on the basis of its affordability, or the ability and propensity of students to mortgage future earning capacity in covering the educational costs.

The fragmentation and modularisation of curriculum and the construction of awards as aggregations of credits, tend to be associated with a greater formalisation of learning requirements within individual units and modules - a narrowing of options to enhance the comparability of student outputs. Such a constraining of learning may be seen as broadly counter-ethical in its impact on student learning. Conversely, the fragmentation, outsourcing and contracting of educational work may be seen as impacting most strongly on the educational discourse, eroding its integrity and coherence. Contractualism is essentially a specification - a codification - of all that is seen as being important in the educational encounter. It is thus an essentially counter-ethical trend, encouraging action that conforms to those specifications, rather than to considerations of an ethical nature. The codifications effectively close off the opportunity to seek alternative or modified educational outcomes, and they close off the opportunity to be creative, innovative, and experimental in the means by which the outcomes are achieved. They therein tend to isolate the contracted engagement from other activities, denying the value of collaborative action, and thereby diminishing the likelihood of it occurring.

Counter-ethical effects may be seen also as arising from the development of more flexible arrangements for student engagement. These arrangements free students from constraints to participate in collective, face-to-face educational events. Learners are thereby isolated from the sort of interpersonal exchanges that occur in such events. Those exchanges have traditionally be seen as a central part of good quality education. It is through them that understanding is developed in the exploration and negotiation of new meanings, and that learners become a part of the discourse in which they studying - a community of scholars or practitioners whose view of the world is influenced by that discourse, and whose construction of it is itself a determinant of it. The flexibly isolated learners are effectively more distant from the discourse of their study. Their engagement with it is largely vicari-
ous, rather than direct; it is a reading, a viewing, a picturing of the discourse, rather than an immersion in it; it allows observation and interpretation, but only imaginative engagement. Experiential learning, an important feature of a situational ethic, is thus largely denied. Vicarious engagement, its substitute, is educationally limited to the extent that such distance allows, and students cannot therein become an integral part of the discourse or contribute to its construction. On the other hand, it should be observed here that many discourses are now being generated and maintained very largely through the Internet. Such discourses are, therefore, characterised by the sort of participant distancing noted here for educational engagement through resource-based systems. Learning about and in such discourses can hardly, then, be said to be impoverished to any extent if it is undertaken through the media of their formation. Relatedly, vicarious engagement through literature, story, film, and other portrayals may well be used to engage learners in a wide diversity of discourses, not readily available in situated interpersonal interaction, and to be conducive to the formation of ethically informed discourse to that extent (Kekes 1993; Thompson 1990).

Another, and well known limitation of this trend from the learner’s perspective, is the tendency to the standardisation of educational resources, both over time and across contemporaneous situations. Such standardisation arises from the coastlines of producing high quality learning resources, and the consequential tendency both to retain resources in use over time and to market or purchase resources across situations. It reduces, therein, the contextualisation of curriculum and to that extent, the potential curricular responsiveness to the situation, including the learning interests of students. It is, then, potentially counter-ethical to that same extent. Flexible delivery must be seen, also, as creating potentially unjust inequities through the cost of accessing modes of delivery and interaction: the Internet, CD ROM, or whatever. Students are generally required to shoulder the greater part of such costs - of hardware, software and the connections to engage in flexible learning. In many parts of the world, not only is the cost prohibitive to many persons who might otherwise engage, but the communications networks are inadequate to the task.

The internationalisation or globalisation of adult vocational education may also be seen as counter-ethical to the extent that it is irremediably culturally hegemonic or imperialistic, regardless of the efforts that are made to be sensitive and responsive to the cultures into which it is marketed (Davison 1997). Modifying the content of a course and the educational ap-
approaches adopted in it, in order to make the course more compatible with the culture of the international target groups can do no more than provide a superficial gloss of compatibility. Likewise, developing a course for another culture cannot avoid the impact of the cultural base from which the course is being developed, even though the influence of that base may be concealed from immediate comprehension. In the best of internationalised educational programs, then, there remains the overwhelming constraint of the providing culture: a constraint which is essentially expressive of the interests of that culture. Ethical discourse may be encouraged through genuinely collaborative and pluralistic endeavours, but it will always be grounded in discourse that is, in that way, self-interested.

Community-based adult vocational education providers, as part of their strategy for coping with the contemporary pressures for change, are commonly moving to more corporatised management structures and managerialist forms of governance, away from the collegial and collaborative. Managerialism is characterised by such features as governance through status hierarchies, restricted staff and student involvement in educational management, the vocationalisation of educational management itself, the objectification (the dehumanisation) of staff and students, management through frameworks of reward and punishment, and a consequential culture of obeisance to rules and seniority. In all such respects, managerialism runs counter to all the qualities noted above as characterising a situational ethic. It is, accordingly, strongly counter-ethical in its impact on educational discourse and, through that discourse, on student learning.

Associated with the foregoing trends is that toward increased status differences among providers and programs of adult vocational education. The enhanced provision of and access to education that accompanies these trends is strongly associated with an increased differentiation among providers and programs on the basis of their perceived quality or standing as educational institutions. The resulting status differences impact not only on consequential employment prospects, but also on learner preferences. Competition for access to the more elite providers and programs is heightened, encouraging the institution of higher fees for and by the higher status programs and providers. Ability to afford the inflated fees for the more profitable courses thus becomes an important criterion of educational access: increasing educational inequity and injustice.

Paradoxically, the vocationalisation of educational curricula and programs itself emerges as contradictory in its ethical impact. Counter-
ethically, it would seem to be directed at developing individual work skills to the end of obtaining competitive advantage over others. The emphasis on individual achievement in the gaining of vocational skills and on the application of those skills in competitively gaining employment or economic advantage over others are not likely to be conducive of ethical conduct. Likewise, the individual development of the sort of qualities that characterise ethical action would seem to require experience in educational engagements of a much wider and less vocationally specific nature than is implied in this trend. The latter point may also, of course, be made against the more general contextualisation of curricula in particular life tasks and situations that is central to contemporary trends in educational provision and engagement. That contextualisation may be seen as encouraging the immersion of curricula in a singular or limited range of discourses, rather than a wide diversity of different discourses. It is precisely the latter - the plurality of the particular grounding of the substantive learning - which would seem to be required of learning if its contextualisation is to be ethically informing.

**What, Then?**

The foregoing analysis suggests that the contemporary trends in adult vocational education are ethically contradictory in their impact on educational discourse, student learning and the justice of organisational structures. This may come as no great surprise, since such an operatic state is recognised as a feature of contemporary ethics (Bauman 1995). Nevertheless, this feature is an important one to hold in the forefront of one's consciousness when considering the ethical impact of cultural changes such as those considered here. To so consider it, may be a sound precaution against the twin evils of too ready a condemnation of change on the one hand, and too ready an embracing of it on the other: evils which flow naturally from traditional ethical theory, in which unity, generality, universalisability, coherence and non-contradiction were (perhaps still are) taken as qualities of sound ethical practice and theory (Frankena 1973). Aside from that cautionary precept, identifying the possible ethical and counter-ethical effects of particular changes in adult vocational education may be seen as making it possible to focus policy and management attention on enhancing the ethical and minimising the contrary effects.

Importantly, though, critiques of the sort undertaken here should never be seen as providing recipes for practice in particular cases. The situ-
national variability and complexity of each providing agency, each policy or management initiative, and each program that is affected by any such initiative, requires a sensitivity that can never be attained through the determinative application of general findings, conclusions, or rules. The best that can be hoped for in this regard, is that such knowledge will be used to raise our individual and collective awareness of possibilities, to sensitise us to possible differences and alternatives, to heighten our uncertainty and the tentativeness with which we make judgements about what is desirable or not in cultural and organisational change. In that context, the hope may be expressed that this analysis might at least raise our consciousness, as teachers, educational planners, policy makers and managers, of the need to consider the ethical impact of our actions, and to consider them within the particular institutional contexts in which we work.

What sorts of questions, then, does the foregoing analysis raise? The following at least suggest themselves:

1. Given the traditional commitment of adult vocational educational provision in many countries to the foregoing trends, what may be said about the ethics of that provision?
2. To what extent and in what ways are we, as contemporary educators, complicit in the sorts of counter-ethical effects noted above?
3. To what extent do the ethical consequences of these trends off-set the counter-ethical?
4. Can that off-setting be used to defend our complicity in the changes that produce the counter-ethical effects?
5. What sorts of actions may be taken to alleviate or off-set the counter-ethical effects?
6. Is the proper, the ethical, course of action to oppose the changes in contemporary culture that underpin these trends and to oppose educational change that is in conformity with them?
7. Does it matter? Can we do without ethics (as here understood) in adult vocational education - relying entirely on enlightened self-interest?
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Part Two

Reforming education systems in the perspective of lifelong learning: linking research to societal issues and policy-making in adult learning
Work, technology and lifelong education: Training the trainers

Rafael E. Ferreyra

Some observable trends

Presently, humankind is confronting some huge problems - such as working and living in environments increasingly affected by technological change - which are widespread and complex. They affect the lives of billions of people and no single group or government can solve them alone. Solutions will have to be interdisciplinary and negotiated with different sectors of society. Education, education systems and educators are expected to make important and urgent contributions to developing solutions or compensatory actions for the following problems:

- Instability in wages and employment due to stock market upheavals, currency devaluations, regional imbalances, dumping, etc., are here to stay for a while. Families, companies and governments alike have to revise their future plans frequently, and use resources previously assigned for growth and security to compensate the effects of a globalised economy in constant change.

- Overburdened social security systems cannot provide the social networks required to cope with unemployment. As the survival rates for different diseases go up, infant mortality rates go down and life expectancy and unemployment increase, social security systems seem less able to satisfy social expectations. Hospitals and schools in “problem zones” close down and the poor, the sick, the illiterate and the handicapped find themselves increasingly at risk.

- The amount of training and intellectual competencies required for employment continues to grow. Sudden technological and/or economic changes may make worker’s qualifications and skills obsolete in a very short time. Those people who are unemployed or at risk of losing their jobs or have precarious conditions of work are the ones who would be in most need of training but they are also the ones who are the least likely
to be given such opportunities unless governments develop, and provide adequate funding for, special training programmes for them.

- The relative number of permanent full-time jobs continues to decrease, as fixed-term and temporary jobs increase. Other forms of work (voluntary/non-waged, shared, part-time, at-home, micro-enterprises) seem to be steadily increasing for those who have the necessary qualifications and the motivation to face more unstable conditions.

- Companies and governments alike, can no longer guarantee employment for life. All they can do is guarantee employability by providing training opportunities for development of a "stock of competencies" which will enable the worker to maintain his/her value in the labour market. According to Peter Drucker (1990), in time this "stock of competencies" will become the "new format" for social security.

- People will change jobs and/or careers several times. Opportunity and resource availability will be at least as important as vocation in career development. An increasingly general lifelong education that allows a wider range of options will be valued more highly than a narrow education that provides early occupational specialisation.

- Insecurity due to unstable economic and social conditions increases the amount of emotional decision-making. Perceptions are treated as facts, and minorities and other socially disadvantaged groups are treated as scapegoats. The more situations are increasingly perceived as unstable, ambiguous and/or menacing, the greater are the social unrest and aggression. Objective facts presented in an easy-to-understand format can frequently put situations in a different perspective and contribute to reducing tension. The ability to process different types of information will be extremely important for employment and for the development of society.

- Migrations of large masses of people looking for better conditions contribute to imbalances in health and education systems all over the world. Governments many times seem more intent on stalling movement across borders and regions, than on acting on the causes (famine, unemployment, war, poverty, disease, pollution and soil erosion). Those who move frequently experience hostility, poor living conditions, and a lack of opportunity to improve their quality of life. They cannot be stopped. Can they be helped?

- Uncertainty and ambiguity will continue to affect decision-making since they are linked to the interdependency and complexity of the problems to be addressed in a global economy.
- Community participation in problem-solving will increase, as will the number of stakeholders and the need for interpersonal skills for negotiating, solving conflicts and working with people of different backgrounds and cultures.
- Value creation by information processing (gathering, selection, organisation, synthesis and distribution of information) will become increasingly important, particularly because of rapid change in the creation and obsolescence of knowledge.
- Technology, and more specifically science-based technologies, will continue to be a powerful cultural force growing at an accelerated rate, generating changes in work, trades and lifestyles. Understanding this force and its effects on society is becoming a requirement for responsible citizenship and participation in democratic decision-making as well as an important goal for educational institutions.
- Mastery of some basic technological competencies (operating a computer, etc.) is increasingly becoming a precondition for entering the world of work. The quest for quality in the production of goods and services will continue to be a trend in modern sectors of society. Unfortunately, it is accompanied by insufficient concern about equity and solidarity in the distribution of resources and benefits, so that quality of life can become a reality for all.
- Emphasis on lifelong education for work will predominate over training for specific jobs. In that context, technical and vocational education programmes will tend to prepare people for more flexible and open-ended occupations.
- Technical and vocational education will increasingly draw closer to general education as the latter incorporates technology as an important subject. It will increasingly assume its basic role of preparing people for entry into the world of work and for lifelong education, in which further training will be assisted by several groups and institutions in non-formal and informal settings.

Technology education:
A bridge between education and work

Several countries are currently reforming their education systems to meet the challenge of preparing people to live and work effectively in an increasingly interdependent and complex world. One reasonable strategy is to make sure
that technology education is given enough weight and attention in school curricula, in order to produce technologically literate graduates who are able to continue learning to solve technological issues throughout their adult lives.

Being competitive in an interdependent world - an objective that most nations are willing to seek - depends to a great extent on the scientific and technological abilities of a country to face its own problems and to make intelligent decisions about them. Economic and social development in recent times has come as the result of investing for many years in the development of scientific and technological capabilities.

This means that countries which want to foster economic and social development must possess adequate quantities of human resources and infrastructure for knowledge production, and an educated general public that understands technological issues and the decisions that need to be taken, and is able to provide support for them. And this fact poses a challenge to universities, governments and private companies, which need to co-operate in order to achieve scientific and technological development, obviously in those aspects which are particularly relevant for each country.

Since technological literacy is closely linked to economic and social development and the ability to hold a job and prosper, it can safely be said that it is a right of all people to become literate in science and technology. The need to achieve this goal by the year 2000 was agreed upon at the World Conference on Education For All (Jomtien, Thailand 1990), and later reinforced by the World Conference on Project 2000: Scientific and Technological Literacy For All by the year 2000 and beyond (Paris 1993).

**Issues in technology education**

The issue of educating people to become responsible citizens who are able to live in an interdependent world and continue learning throughout their lifetimes requires a holistic approach to education which enables students to establish links among learning structures.

In technology education, this holistic view has been facilitated by consideration of technology as part of culture, linked to every human activity. The simplest activity has an associated "know-how" which is the result of experimentation and critical reflection. Sometimes, this comes from the identification of a need which induces creative thinking and problem-solving, and may lead to the development and optimisation of procedures and/or products.
Technology is inherent in every human activity. Its relationships with culture and with nature must be understood. The power of technology to modify environments of any type — and particularly to affect nature — is so great, that to use it and control it safely requires a technologically literate population. Otherwise, our planet may be irreversibly destroyed. This is already happening, as a result of the widespread use of technologies whose negative consequences were not anticipated.

Technology is also a danger, if not properly managed and controlled, and a great opportunity for humanity to solve its problems and to continue growing as a civilisation. In his book *The Culture of Technology* (1983), Pacey describes the practice of technology as a combination of three different types of component: cultural, organisational and technical. The technical components include materials, equipment, procedures, techniques, etc. This is the “hard” dimension of technology, which corresponds to its traditional conception and may be associated with repetitive production practices. The cultural components take into account the process of identifying needs, creativity in finding solutions, experimentation, optimisation, construction, the consideration of social and environmental impacts, ethics in decision-making, etc. They represent the contribution of human intelligence towards a better quality of life. The organisational components refer basically to human collective behaviour and how to organise in order to attain better results. A very large proportion of the increases in productivity in recent decades has been made possible by the incorporation of new organisational behaviour into the world of work. These three types of component, which are an essential part of technological literacy, offer opportunities for conceptual links with other components of knowledge and human activity. It may even be a high-value curricular experience to produce as many links as possible with other school subjects.

The technical components of technological practice are well developed and will continue to progress as there are many people working on them. The cultural components (which are related to wisdom in decision-making) and the organisational components (which are related to technologies for addressing broad concerns), are lagging behind. Economic models are in fact translated into organisational technologies, supported by technical means, designed to produce and distribute goods, services and benefits in certain ways. However, these technologies have become appropriate for only the few and inappropriate for the many. Obviously there is much work to be done in the near future to correct and improve the current social status.
of technology education. It is a major task for the whole of society, and nowadays it may be considered a crucial challenge.

Approaches to technology education

De Vries (1994) has identified approaches to technology education which are being used in Western European countries. The author explains that these approaches are always mixed in accordance with local needs, conditions, teacher training, etc.:

- The craft-oriented approach is one of the most traditional approaches to technology education. It represents a way of learning how to make things and it appeals mainly to boys.
- A basic idea in the industrial production-oriented approach is to approximate schools to the world of work and to update curricular contents and learning contexts to reflect current production patterns. The introduction of new technologies in industry has changed the production patterns, environments and skills required by workers. Many traditional occupations are no longer needed, and broader and more comprehensive competencies of varied nature with a higher proportion of intellectual and interpersonal abilities are being demanded.
- The “high-tech” approach is similar to the industrial production-oriented approach in the high status that it gives to technology. It emphasises the use of computers in automation and control, school activities using models and advanced equipment in laboratories and workshops, etc.
- In the design approach, students have to solve a problem using design and eventually construct a prototype which can be tested. It may include establishing relations with users/consumers in order to learn about products.
- The general technological competency approach is linked to engineering. It emphasises cognitive aspects and practical assignments, which may deal with similar aspects or systems. It is an academic approach which is oriented more towards developing understanding than towards solving practical problems.
- The key competencies approach emphasises the use of theoretical concepts, creative problem-solving, analytical abilities, co-operation, etc. This approach fosters the development of general skills such as co-operation, creativity and analytical and evaluation skills.
Another well-known approach is to use examples of technological applications in science courses. The applied science approach is a good motivational device but not sufficient to attain technological literacy objectives. Furthermore, it conveys the idea that technology is a by-product of science and not a legitimate activity by itself.

An option that is closer to that goal is the science, technology and society approach, but is an extension of the applied science approach which pays more attention to the human and social aspects of technology.

Today, science and technology are more interdependent than ever before. Although both subjects have many elements in common, some methods, contents and instruments differ. The goal of science is to make discoveries, to create new knowledge, to establish general laws, to seek for applications of knowledge and its dissemination. The most typical initial question is “why?” On the other hand, the goal of technology is to invent things, to find solutions for practical human problems and to create opportunities for progress and new ways of doing things. It also seeks applications and dissemination. A typical question is “how?” Progress in one discipline induces progress in the other, and the cycle goes on indefinitely, because there is a synergetic relationship between science and technology. The study of science in schools has been established practice for many years, which does not necessarily mean that schools are producing scientifically literate graduates. That is something to be improved because scientific and technological literacy is more important than it seems at first glance.

The developing world, where new and traditional technologies co-exist, may still need other options in order to offer its students experiences which are better suited to local conditions and needs. For example, present trends suggest that an entrepreneurial competency approach which fosters the development of the entrepreneurial skills needed in a globalised economy, and at the same time provides the opportunity to study technologies which are economically and socially relevant at the local/regional level, should be promoted.

Another approach which may deserve attention in countries where traditional technologies are widely used is that based on the reformulation of, and experimentation with, appropriate technologies in order to improve productivity by developing and incorporating local elements of up-to-date technologies, without losing their basic simplicity, human participation and their relevance to community needs and possibilities.
It may be called the updated appropriate technology approach (Ferreyra 1997).

To select one of these approaches or a combination is a decision which now has to be made at different levels, in view of recent decentralisation efforts which are taking place in many countries. It poses a real problem for technology teachers and educational managers who are not trained to deal with these issues, which are extremely important for the goals of producing a literate population for lifelong learning and for the orientation, detection and promotion of those students who may later on become the qualified human resources that countries really need.

Challenges for education systems

As time goes by and change becomes a constant, increasing numbers of people will need help to adapt and fit in. And this has to be provided with scarce - and decreasing - resources. Those who adapt will grow and prosper. Those who do not will have to devote all their energy to survival. Education helps members of any society to adapt to its conditions and culture. Now it has to help the citizens of this world to adapt to a globalised economy, which has new values and rules which are yet evolving, and which we are still trying to understand. Never before has education played such an important part in history. Never before has it had to be so effective, efficient and timely. It will have to use every resource at its disposal in the most efficient way. It will have to start as early as possible (be lifelong), reach everyone (be equitable) and give each person what he or she needs (deliver quality). This is a great challenge for all education systems. Can they live up to it? To start dealing with that challenge in the near future, education systems will have to address a number of problems, such as the following:

- Education systems have been organised mainly to provide education for children, who are more homogeneous as a group than adults. Will education systems be able to manage this diversity with equity?
- As people grow older, the environment provides opportunities for learning outside school but which may be of great importance for employability, further learning and the acquisition of new competencies. Will education systems be able to provide standardised systems for assessment and certification of non-formal and informal learning which
can guarantee quality and equity for both the assessed and the rest of society?

- Education systems have schools and classrooms. As schools, higher education institutions and companies become partners in apprenticeships and on-the-job training programmes, and computers provide virtual classrooms, the limits of the education system will be increasingly unclear. Will education systems have the capacity to integrate all these settings? Will they be able to guarantee information flow and common standards?

- Education will be a lifelong effort which will start early and will go on throughout life. It will combine formal education with non-formal education and training. Who will co-ordinate both in order to obtain the most effective use of resources?

- Since people will move around, and the opportunity of becoming adapted members of any society is linked to education, how will education systems guarantee continuing education to people who are mobile? How will they facilitate recognition of studies done in another system or sub-system? How will they make the "links"?

**Decision-making involving everyone**

All decision-making processes should involve a range of actors and risk takers, so that they can present their needs, expectations and contributions, and participate in the negotiation of adequate solutions. Decisions about lifelong learning which are taken only by the authorities or by small power groups are bound to fail. The following seem to be the most important participants in the process of looking for solutions in the realm of "work" and "education and work."

- Young students in formal education systems - at primary, secondary and tertiary levels - have special needs for entry into the world of work and for further learning. They need to acquire basic competencies, to communicate effectively through speaking, reading and writing, to operate with numbers, to understand social trends, to develop options for occupations and further studies, and to become scientifically and technologically literate in order to continue learning effectively on their own throughout their lives and to contribute to the progress of society.

- There is a vast range of actors in the world of work: employers, employees, workers, contractors or volunteers in government agencies, companies, transnational corporations, small enterprises and microenterprises,
consultants, professional offices and associations, IGOs, NGOs, private training organisations and companies, schools, universities and higher education institutions.

Those people who play the role of educators and trainers are a very special group. Education and educational management should help students in school acquire the skills to become trainers for their colleagues in the workplace, and to join in lifelong training. Trainers who operate in non-formal settings should be knowledgeable, understanding and co-operative with adults in order to take into account their special needs and to help them integrate those who are excluded, and they should be involved in the world of work. Both teachers and trainers should be competent in their enabling and empowering roles.

The people excluded are the unemployed - who cannot sustain their families alone - and the illegal workers, usually immigrants, children, unregistered workers or otherwise exploited persons. They should be recognised as legitimate actors, but they are denied the right to earn their living decently and to participate in decisions concerning them. These are groups with reduced, and easily eroded, “stocks of competencies”. They are in urgent need of building their stocks, but they lack the “building blocks” (training, work experience in suitable environments, legal protection, social security benefits, etc.) and the opportunity to obtain them.

The existence of illegal work and workers is frequently denied. Once some of these situations are brought into view, government officials usually act to “brush them away” (deporting immigrants, sending children to welfare institutions, closing down workplaces), instead of acting upon the causes. The people involved continue to be as defenceless as ever and the risks of abuse persist and, frequently, even increase. If education systems want to develop satisfactory solutions to the challenges facing them, they should invite all actors to participate in decision-making.

Educating adults for work

Almost all efforts to meet the above-mentioned challenges will increasingly take place in the realm of adult education. Education systems are designed mainly to teach children and teenagers, and higher education institutions are prepared to teach “capable” adults. But, are we ready to teach less gifted adults or adults who have to cope with strong drawbacks such as insufficient
language or cognitive development, malnutrition, sensory deficiencies, etc? This task will require creative exploitation of adults comparative advantages, and careful consideration and compensation of disadvantages.

Adults potentially have more abilities (than children) which can be used in facilitating learning, such as formal thinking and a higher degree of moral development. On the other hand, adults take higher risks than children when they register in a course: their opportunity costs are higher, and their self-esteem is more affected by results.

Most adult education and training efforts are linked to jobs and career development. But the people who would seem to need them the most sometimes lack information about courses and programmes. They frequently do have knowledge about educational opportunities which could be of help but they do not take them. Much of this behaviour can be explained by self-esteem which has been damaged by unemployment, poverty, previous educational failures, and many other factors. People do not want to risk adverse results, so they let opportunities pass by. In order to reach and help these persons, course designers, teachers and trainers must plan adult education efforts so that courses and programmes are appealing, timely, pertinent, and useful; cater to specific group needs; and facilitate development of required work competencies. Students and trainees should be reasonably sure of success upon registration. The diversity in adults' backgrounds, qualifications and previous experience should be taken into account and, if necessary, individualised training methods should be designed. Rapid obsolescence of knowledge, skills and teacher/trainer's qualifications in highly technical work environments should be regularly revised and training provision redesigned.

Training of teacher/trainers

*Developing a basic teacher/trainer profile in education for work*¹

The competencies that currently seem necessary for teachers and trainers in order to empower them to be of help in developing solutions to the above mentioned problems and in meeting the educational challenges we have just

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¹ This has been developed on the basis of the author's previous experience since the 1960s in the field of training teachers, as well as on the basis of the review of bibliography in this paper.
reviewed.

Teachers and trainers should be able to:
- act as gatekeepers (collect, select and distribute relevant technical information);
- process information (collect, select, organise, synthesise, distribute) in different formats (concept maps, diagrams, forms, equations, drawings, analogies, prototypes, plans, budgets, software, etc.) supported by different media (printed, oral/audio, video, objects, CDs, diskettes, etc);
- tolerate uncertainty and ambiguity, such as open-ended activities and programmes;
- diagnose and evaluate students;
- provide feedback;
- design courses and programmes, taking into account design specifications and constraints;
- identify and negotiate design specifications and constraints;
- respect different cultures, individual preferences and ideas;
- work in interdisciplinary groups;
- adapt to individual student differences;
- develop course contents at different levels and in different learning environments;
- use problem-solving skills in teaching practice;
- reflect on their own practice and plan learning situations for themselves;
- work with (and optimise) several factors and variables at the same time in their teaching practice;
- be aware of current issues in teaching practice, and/or related to the subject matter that they teach;
- participate in educational planning at different levels, construct scenarios and elaborate budgets (as a consequence of decentralisation);
- use, develop and evaluate educational technology and resources;
- manage conflict, negotiate and communicate with people with different backgrounds;
- facilitate community involvement in (formal and non-formal) educational activities and programmes;
- be aware of personal strengths and weaknesses and use this knowledge to foster their own professional growth and career development;
- maintain and develop their own knowledge and skills;
- take responsibility for personal growth, motivate themselves, and accept failures and mistakes as learning opportunities;
- engage in educational research as part of "normal" teaching/ training practice;
- participate in the development and implementation of educational standards;

This list does not pretend to be exhaustive. Rather, it is intended to be an aid for educational planning efforts.

**Trainer’s qualifications in non-formal education for adults**

In order to make a preliminary diagnosis of trainers’ qualifications, our group in the department of Extension Services at the Aeronautical University, Córdoba, Argentian, reviewed some recent personal and institutional experience in the field of non-formal education. Course topics dealt with business and project administration, sales and marketing, security, cleaning, forestry, automation, care of the elderly, bakery and bread production, computer operation, rail maintenance (trains), co-operative management and operation, and quality control. The Prescribed course length was 120 hours (normal 60-minute hours) which should include classroom teaching and on-the-job practice. Courses were designed privately and bid for government financing, which was granted by the National Ministry of Work and Production. The supervisors were university graduates with several years’ experience in teaching and working in one or two broad areas of expertise. They received training in programme objectives, clerical work related to the programme and technical supervision (diagnosis, indicators, evaluation and feedback). The trainers’ backgrounds were quite diverse: business consultants, managers of small firms, university professors, self-employed university graduates, foremen and hired workers.

From the data collected it was observed that trainers who were consultants usually did diagnose students at the start of the course. Other trainers did not. While trainers had teaching experience, almost none had formal training in teaching and the use of educational technology. Trainers had no participation in course design and they were not aware of trends and distinctive

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2 This relates to courses for Occupational Training and Training for Jobs programmes in Argentina in the period 1996-1997, in which the author acted as co-ordinator of external supervision.
features in adult education and job training. Only the most experienced trainers could adapt activities and progress to the students’ needs and level, and frequently they were not aware that they were doing so.

It was found that supervisors were expected by trainers and students to act as resource persons. The government, on the other hand, expected them to act only as expert witnesses who recorded “objective facts”. In such conditions, supervision seemed to have affected (positively) teaching practice and increased satisfaction for both trainers and students. University professors with no other work experience initially reacted strongly against supervision, and later on “lived up to the challenge” with the same determination. Integration of theory and practice was very good in some courses and almost non-existent in others.

These data lead to the preliminary conclusion that trainers need more information about context and training in the use of educational technology, and practice in the development of abilities related to motivation, diagnosis and evaluation of learners. Providing experience with supervision would also seem beneficial.

**In-service teacher training for reform of formal education**

Educational reform started in Argentina in 1993, when the Federal Education Law was approved. This law is based on the conclusions of the National Pedagogical Convention, a nation-wide consultation about the aims of education that set out to reach all sectors of society (the neighbourhood, the church/parish, the school, universities, firms, NGOs, labour unions and chambers of trade).

In the context of the National Network for Continuous Teacher Training (mathematics, sciences and technology) courses were designed for reform of formal education³. In-service courses were also designed⁴, which included management of change, and planning for quality and equity in education at different levels and in a variety of circumstances.

My observation of the background of serving teachers showed the following: There was a diversity of participants relating to academic backgrounds and work experience, in all courses, especially in technology education and retraining courses. Only some had an academic background in

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³ The author was trainer and coordinator of courses. These were designed by him in the period 1994-1996, and financed by the government

⁴ In author’s capacity as professor of educational planning
education, and training in the use of educational technology. The amount of information about educational reform varied greatly within a group. The teachers did not seem to be sure about the reliability of their information sources. Access to technical information sources is restricted by lack of financial resources and also by insufficient information processing skills. Many teachers had Internet available at their schools but most did not know how to use it. That situation changed as a result of training. Teachers had different degrees of expertise and mastery of the course contents that they were supposed to teach.

While teachers as a group seem to have more knowledge of learners and more mastery of educational technology, trainers as a group have more mastery of course contents and more updated context information. Trainers seem also to be more confident in their own abilities to face unexpected situations and seem more inclined and motivated to experiment with new methods. This may be a reflection of the fact that teachers are under great pressure at present. They are overworked, under-informed and expected to conform to partially known standards which are constantly changing. This situation makes them less inclined to "open new fronts" and accept new challenges.

Proposal for action at national level

Governments have both the right and the obligation to contribute to the development of the "market" of training services. Their efforts should be directed towards assuring transparency and the development of a set of "market rules" which foster development of this sector and at the same time provide consumer protection. The list is not exhaustive and should be considered as a starting point. Government organisations should provide and disseminate low cost information about trends in education and work, basic conditions that should be taken into account in "buying” or “registering” for a lifelong education course or programme. They should establish consultation procedures to set minimum requirements or standards for lifelong education and “education for work” courses and programmes (informal and non-formal education), as well as establish a set of basic “consumer rules” for lifelong education programmes and courses (such as basic rights and obligations of consumers and providers).

Governments should also have the responsibility to promote the development, production and distribution of low-cost instructional materials for trainers and educators to help them develop skills in information processing,
diagnosis and evaluation of students’ levels, in interpersonal skills (conflict management and negotiation), and in the identification of personal strengths and weaknesses, career development and personal marketing.

Providing career opportunities in technology education

At the Extension Department of the University of Aeronautics, Córdoba, Argentina three career courses have been developed and are currently in the process of implementation. They are:

<table>
<thead>
<tr>
<th>Career</th>
<th>Duration</th>
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<tbody>
<tr>
<td>Training Analyst</td>
<td>6 semesters</td>
</tr>
<tr>
<td>Design and Technology Education Professor</td>
<td>8 semesters + Final Professional Work</td>
</tr>
<tr>
<td>First degree in Technology Education and Training</td>
<td>10 semesters + Thesis</td>
</tr>
</tbody>
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These new career courses are designed on the basis of, the basic teacher/trainer profile mentioned above; the National education laws and agreements; the Delors Commission Report; taking into account the trends in lifelong education, job training and technology education; and the World Conference on University Education (1998, Paris).

The new courses have some distinctive features: The contents are arranged in concept networks using the systems approach; Information processing and communication skills are considered the basis of learning; A distributed system is used. Learning takes place on and off campus, in physical and virtual environments; A mass individualised approach is adopted; Subjects can be taken as part of a career course or as extension courses. Both types of students take the courses together and have to meet the same requirements for an approval certificate. Should a person who takes extension courses register later for one of the career courses, the university will grant recognition of the subjects; Teaching practice starts in the first semester and takes place both in formal and non-formal settings. The assessment and recognition of learning takes place in non-formal and informal settings and evaluation takes place continuously. Student involvement in community activities and university extension subjects is part of curriculum. Graduates and in-service teachers and trainers are able to register for subject updates. The University Extension department is to set up chat rooms and message boards to aid in the development of networks of teachers and trainers with shared interests and concerns. This is possible because all schools and educational institutions are being connected to the Internet.
Some cities in this area are also starting to offer low-cost web use for their inhabitants, and our university has made the Internet available to its students from 8:00 a.m. to 8:00 p.m.

A final comment

Argentina is presently undergoing major educational reform, prompted by the Federal Education Law passed in 1993, and the Higher Education Law approved in 1995. The reform is reaching all educational levels and implies changes in values, educational goals, curriculum contents, teaching methodology, educational management and supervision practices, evaluation, use of educational technology and the establishment of new relationships between schools and different sectors of the community and the world of work. This effort has been so inclusive and extensive that the country has become a huge research and development laboratory for educational reform.

Teacher training programmes initiated in 1994 represent an effort to meet the needs of a majority of teachers. Technology Education (TE) has been mandatory only since 1993 at the national level for grades K-12, and the inclusion of the subject in the curriculum is so recent that there are not enough training opportunities for in-service teachers to meet the demand. Technology education teachers are people who were all trained to teach other subjects and were “transferred” to TE as a result of the curriculum changes. They have to teach new contents, use new methodology and equipment, contribute to curriculum design and, above all, are supposed to provide the main link between schools and the world of work and make a major contribution to the development of job-related competencies. Up till now one of the main obstacles to the development of technology education in Argentina is the lack of qualified human resources.

Also, career opportunities for technology education have up till now been ill adapted to the new conditions existing after the reform. The three career courses mentioned above represent one of the first efforts to address part of the complex problems associated with work, technology and lifelong learning. They are among the first career courses to be approved which meet the new requirements, and their curricula are intended to be pertinent in Argentina in the framework of current educational reform. They are expected to provide a starting point for the exchange of ideas about fostering the progress of technology education and the training of technology teachers.
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Technical and vocational education, lifelong learning and the future of work in Zimbabwe

Charles M. Nherera

Perceptions of TVE and lifelong learning

Technical and Vocational Education (TVE)

Technical and vocational education has been perceived differently since the introduction of formal systems of education. This can be traced from early Greek philosophers whose conceptions of 'valid knowledge' separated 'mental' from 'manual' activities. Terms such as 'practice versus theory', 'training versus education', 'hand versus head', 'skills versus knowledge', 'applied versus pure', 'knowing how versus knowing that', have remained in common use in educational discourse, reflecting the unwarranted academic/vocational dichotomy. John Dewey (1920) suggested broader conceptions of vocational education. He criticised the provision of such education for purposes only limited to the immediate requirements of industry, pointing out that:

... there is danger that vocational education would be interpreted in theory and practice as trade education... Education would then become an instrument of perpetuating unchanged the existing industrial order of society; instead of operating as a means of transformation. (p. 372)

Critics of this view question whether education that is not oriented to the direct needs of employment is indeed 'vocational' at all. Silberman (1989) hints:

In our effort to improve the ability of vocational education to reinforce academic skills, we must be careful not to take the heart out of vocational programs by removing their work-related components. (p. 102)
In this paper, the term TVE is used to refer to both school-based and post-school vocational education and training. This is done particularly in the context of trying to bridge the gap between schooling and post-school life.

Lifelong learning

Lifelong learning is a notion that is gaining increasing appeal in the provision of adult education and training. It arises from a realisation that schooling cannot equip learners adequately for the unpredictable world of work. According to Bélanger (1998) lifelong education covers a whole range of learning activities in each society and encompasses three main elements, which are: initial training, adult education or continuing training, and learning environments. Adult education, in turn, tends to be perceived differently in both developed and developing countries. It means many things in different contexts and different periods in time. In general, terms such as continuing education, recurrent education, non-formal education and lifelong education are sometimes used interchangeably with adult education. Rogers (1992) defines adult education as the provision of educational opportunities for adults. It covers different forms of planned and systematic learning experienced by adults in their day-to-day lives. In developing countries, adult education is growing in importance because it is regarded as a tool for economic and social development. Adult learners see it as means of attaining higher qualifications to improve their chances for employment opportunities, higher incomes, social status and better livelihoods. Governments have used it as an affordable means of providing educational chances to those outside formal systems of education and training.

The context

Education and training in Zimbabwe

The long history of restricted access to education throughout the colonial period meant that a large proportion of Zimbabwe's majority black population could not acquire formal education. Soon after the attainment of political independence in 1980, the newly elected government declared education a basic human right and a key to economic growth and development. It embarked on vigorous efforts to
democratise access to education and training at all levels. The massive expansion of the education system that followed the attainment of political independence has been one of the highest in the world. Enrolment figures at both primary and secondary school levels increased phenomenally.

Also, since school curricula had remained largely academic throughout the colonial period, post-independence education policies gave new impetus to making school learning more vocationally oriented. In practice, however, school curricula continue to have a stronger academic bias, more suited to the needs of the minute proportion of pupils who proceed to higher and further education. In spite of official pronouncements, theoretical knowledge continues to be regarded as distinct and superior to practical activities.

The labour market situation

Although Zimbabwe has been largely successful in democratising the provision of education, the problem of general and youth unemployment has persisted. Yet, a paradoxical situation exists in which there are acute shortages of personnel in skilled areas, while unemployment continues to escalate amongst the population in general and school leavers in particular. Reasons for unemployment have been ascribed to job-seekers lacking the requisite employment skills, an accusation which many writers have termed "blaming the victim". School curricula have come under increasing attack for their failure in preparing young people to the satisfaction of employers. There seems to be a strong belief that school curricula can be manipulated to provide solutions to economic problems. However, it is the contention of this paper that while schooling does not create employment in the formal sector, it can be used effectively to improve the life-chances of learners.

An increasing number of school leavers and adults are seeking opportunities to further their education with the hope of becoming more competitive on the job market. This has brought about the need for a new thrust in the provision of education and training for the adult population. Recent demographic and educational data show that approximately 49 percent of Zimbabwe's population is aged between 15 and 64 years of age and most of them live in rural areas. In 1998, as many as 17% of the population aged 5 years and above had never been to school while 49% had left school (Figure 1).
Since the introduction of the Economic Structural Adjustment Programme (ESAP) at the beginning of the 1990's, unemployment figures have actually gone up. During a five-year period of economic reforms starting from 1991, approximately 50,000 retrenchments were recorded. In 1982, approximately 268,000 potential workers were unemployed in the formal sector, increasing to 764,000 in 1992 and by 1995 the figure had soared to 1.2 million people. The rate of unemployment in 1982 was 10.8 percent, 22 percent in 1992 and 30 percent by 1995. The general unemployment rate is expected to rise to an average of between 50 and 60 percent during the period 1999 to 2000. So many people in Zimbabwe have been without work for so long now that unemployment has become a way of life for them. Of all the unemployed, 62 percent are within the 15-24 age group. There is also a growing number of casual employees. Their proportion as a percentage of the total formal sector employees
rose from 3 percent in 1995 to 10 percent in 1997 while that of full-timers fell to 88 percent from 96 percent over the same period. Part-time employees rose to 3 percent from 1 percent in the same period (The Sunday Mail, February 14, 1999).

In addition, over 90% of Zimbabwe's estimated 300,000 school leavers fail to secure employment every year. Even university graduates and those leaving colleges with various vocational qualifications cannot secure employment. Only 30,000 new jobs are created in the formal sector of the economy each year. It means therefore that an increasing proportion of the unemployed have attained at least four years of secondary education. Qualifications are no longer a guarantee for employment as an increasing number of school leavers and those graduating from tertiary institutions are facing indefinite periods of unemployment.

Job prospects for the majority of the population remain bleak as the economy has been declining throughout the 1990s and continues to do so. Since January 1998, the Zimbabwe dollar has lost over 60 per cent of its value against major currencies. The rate of inflation was pegged at 46.6 percent in December 1998 and there are no signs that it will go down in the foreseeable future.

The economic structural adjustment programmes (ESAP), which have been instituted in countries such as Zimbabwe, have not yet yielded the 'promised' and anticipated positive results. Free market strategies that are being advocated have resulted in the weakening and closing down of small-scale businesses as well as widespread retrenchments. Fierce competition from multi-national companies has resulted in small-scale, mainly indigenous companies closing down, thereby further exacerbating the unemployment situation. The social safety nets that were supposed to cushion the 'temporary' negative effects of ESAP, such as the Social Dimension Fund have been largely unsuccessful in alleviating poverty and the suffering of families. Formal sector employment has clearly become a myth for the majority of the population, while opportunities in the informal sector are under threat through the effects of globalisation and both micro- and macro-economic policies, which have largely focused on profitability without taking due consideration of the human element in economic development.

The unpredictability of the labour market situation in a rapidly changing socio-economic environment has become a permanent feature of both developed
and developing countries. As we approach the new millennium, economies in most developing countries continue to decline and the future seems to be bleak. While the world is shrinking into a 'Global Village', so too is the labour market.

**Adult and non-formal education**

Realising that a large proportion of the adult population had been denied access to formal education throughout the colonial period, the Government launched a programme to redress this situation soon after the attainment of political independence in 1980. It immediately established the Division of Adult and Non-Formal Education within the Ministry of Education and Culture, to ensure that this sector of educational provision would receive adequate attention. The Division runs programmes for the out-of-school learning needs of adults in the 15-plus age group. The Government of Zimbabwe has set itself the goal of increasing the proportion of people in this age group who are able to read and write from 62.5 percent in 1990 to 80 percent by the year 2000. Its main goal is not only to reduce illiteracy, but also to offer support to other forms of post-literacy education. Available statistics show that this target has already been achieved (Figure 1).

Other agencies such as churches, schools, NGOs (e.g. the Adult Literacy Organisation of Zimbabwe, and the Christian Council of Zimbabwe), correspondence colleges, employers, trade unions, private institutions, business and welfare organisations, have all contributed to the provision of adult and non-formal education. The Adult Literacy Section in the Division of Adult and Non-Formal Education encourages men and women around the country to enrol in adult literacy classes. Although no current data on participation levels is available, women seem to be more active in these programmes than men, especially in rural areas.

The Distance Education section runs study groups which are supervised by mentors. It also writes, produces and disseminates study materials that match the level of formal school curricula. Study groups are found throughout the country. In 1988, the Division of Adult and Non-Formal Education inherited the national adult literacy campaign, launched shortly after independence by the former Ministry of Community Development and Women's Affairs. The Division also provides a three-year primary school equivalent course for adults (the Zimbabwe Basic Education Course - ZABEC). It writes, produces and distrib-
utes the necessary learning and teaching materials. A radio station (Radio Four) is another very important medium that is being used to teach adult literacy lessons and publicise the importance of adult literacy.

Achievements in Adult and Non-Formal Education

Although the prevailing harsh economic conditions have had a negative effect on the availability of resources and eroded the belief in education as an investment for both individuals and society, several achievements may be regarded as having been made in the provision of Adult and Non-formal Education:

1. Teacher-writers have been recruited to produce teaching and learning materials. Many materials with a functional / vocational bias have been produced for adult learners. The materials have immediate relevance to the day-to-day livelihoods of the learners and cover such fields as Agriculture, Home Economics, Building, Carpentry, and Woodwork. Some of the materials have a political bias and deal with topics such as the liberation struggle and how Government works in Zimbabwe, while other materials, such as Basic English for Communication (BECO), have a bias towards the acquisition of communication skills;

2. The teacher-writers have also reviewed and revised previously published teaching and learning materials in order to make them more relevant and functional;

3. Specialist teachers have been recruited in each of Zimbabwe's nine administrative provinces, to promote functional literacy among adult learners throughout the country;

4. A three-year primary school equivalent course for adults, referred to as the Zimbabwe Basic Education Course (ZBEC) has been intensified, and relevant teaching and learning materials have been produced and distributed throughout the country;

5. A campaign to encourage employers to open functional literacy classes at their work places was launched in 1990. The programme was intended to link basic education to the acquisition of work-related skills. Many employers have responded to the call favourably and literacy classes have been opened in several workplaces;
6. The Ministry of Education, Sport and Culture uses the mass media, such as radio and television, to urge employers, trade unions, NGOs, Rural and District Councils and other stakeholders to launch miniature campaigns to publicise the importance of adult literacy. The Ministry also publishes a bi-monthly newsletter called "In Touch" to inform and educate adult learners and the public on the developments and progress made in the provision of adult and non-formal education and to improve and sustain post-literacy skills.

**Challenges for TVE and lifelong learning**

The activities outlined above indicate that there has been a narrow perception of adult education, mainly limited to adult literacy and numeracy. It has been primarily based on centrally identified rather than the individual needs of people in various different circumstances. Even where attempts have been made to provide adult education on a broader basis, programmes are still determined in government ministries or other such organisations, without direct involvement of the clientele. As a result, people who have participated in such programmes do not immediately find opportunities for applying their newly acquired knowledge and skills. The programmes are divorced from the day-to-day life experience and needs of the learners. Furthermore, the provision of adult education has also tended to be restricted to the few individuals who come forward voluntarily, and not the masses.

As already indicated over 75 percent of Zimbabwe's population lives in rural areas, where their livelihoods are mainly based on agricultural produce. Arts and crafts, music and dance and many other activities are practised in traditional settings, yet these are rarely tapped in adult education programmes. The fact that adults learn continuously throughout their lives and have a wealth of experience that could form the basis of lifelong learning is rarely reflected in the programmes. Where programmes go beyond literacy and post-literacy campaigns to include arts and crafts, the range of activities remains limited, to the extent that the areas of expertise are soon over-subscribed. It means therefore that individuals cannot utilise their knowledge and skills profitably, due to fierce competition from their colleagues who have also gone through similar programmes. Adult education should instead provide learners with a variety of
knowledge and skills that will enable them to complement each other when they engage in productive activities. While some of the adult learners might need to concentrate on literacy and numeracy, others may need to focus their attention on refining their skills in various other areas of their trades.

The prevailing harsh economic climate in Zimbabwe entails that lifelong learning should be structured in line with the needs for economic survival of the learners. For instance, a growing number of adults are engaged in buying and selling of commodities, both within the country and outside. Courses related to basic marketing and business management would therefore find immediate use and relevance to the learners. Lifelong learning should take cognisance of the prevailing socio-economic realities if it is to appeal to and be relevant to adult learners.

Some suggestions for the improvement of TVE and Lifelong learning

Creating flexible learning systems

As Hobbart (1998) observes,

If we are to apply credit for prior learning; if we are to allow for open entry and increased access to learning; if we are to encourage life-long learning and recurrent education; if we are to support a career path that is supported by both horizontal and vertical occupational development and change; then the curricula needs to be modular in such a way as to allow recurrent entrance to and exit from the learning process (p.16).

Current educational programmes tend to be rather rigid and respond more to examination demands rather than the everyday needs of individual pupils, the local community, and indeed the nation. Learners are not given the latitude to choose subject areas according to their interests and aptitude. There is a need, therefore, to restructure learning systems and make them more flexible and responsive to the practical realities of individuals and communities at different points in time.
Need for competency-based education

Placing more emphasis on measurable outcomes as a means of assessing school performance can be used to effect the necessary shift from examination-driven curricula. Such a system allows for more flexibility in both the teaching strategies and the methods used to attain and assess the expected outcomes. As Hobbart (1998) observes, competency-based education is coming to the fore globally. It allows for more adaptability to local and prevailing situations and is less teacher-dependent. In this regard, competency-based education encourages the development of self-learning skills, thereby enabling pupils to engage in problem-solving activities.

Self-employment, entrepreneurial skills and relevance to local community

As the economic climate continues to worsen, the expectation that the majority of school leavers will ever find employment in the formal sector has become an illusion. Considerable emphasis should therefore be placed on the inculcation of relevant practical and entrepreneurial skills that will enable young adults to become self-employed upon leaving the education system.

Hitherto, most school leavers see their prospects for economic survival upon leaving school as lying in urban areas, particularly large cities such as Harare and Bulawayo. This is a result of the policies of unequal development that persisted throughout the 90 years of colonial rule, whereby rural areas were largely neglected. Such colonial legacies continue to have a negative impact on post-independence reforms. The disparities between urban and rural areas in economic development are still a cause for concern, as industry and the whole business sector concentrate their investments in urban areas which they regard as more viable. In developing countries like Zimbabwe, where over 75% of the population live in rural areas, development strategies that focus on rural areas should be emphasised. The development of Rural Service Centres / Growth Points and the strengthening of infrastructure at such centres will play a key role in the growth of a mass-based national economy and the improvement of the general welfare of the majority of Zimbabweans.
Developing a symbiotic relationship between schools and local communities

School curricula should increasingly be related to possible economic activities within the local community. In this regard, schools should structure their curricula around activities within the immediate environment. The selection of subjects offered at such schools should take into account the fact that the majority of school leavers will remain within the community; they should thus be equipped with skills that will enable them to engage in productive and profitable activities within the community. Of course, care should be taken to ensure that pupils leaving school are still able to compete for opportunities that arise outside their immediate communities. The current wave of globalisation and economies driven by market forces means that school leavers will need to be innovative and competitive, not only regionally but also nationally and indeed internationally. They should have the capacity to create, identify and take advantage of opportunities requiring the application of their knowledge and skills.

Opportunities within rural communities in Zimbabwe are mainly based on agricultural activities. Production of food crops such as maize, beans, groundnuts, rupoko and wheat as well as cash crops such as paprika should therefore be included in the Agriculture syllabus. The syllabus could also include horticulture, animal husbandry, poultry, pig-breeding and other agricultural activities that have immediate relevance, can generate income and benefit the community. In those parts of the country that are barren of trees, forestry could also be included in the Agriculture syllabus to encourage pupils and the local community to engage in reforestation of the area. The use of renewable and alternative forms of energy such as bio-gas and solar power could also be promoted through courses offered in school.

School curricula should also help in improving the quality of life in local communities. While assisting in the development of human resources for national development, schools should have a symbiotic relationship with their immediate communities. Subjects such as Building should enable learners to build better homes for their families, while Home Economics should enable school leavers to help improve nutritional habits, individual and general family care, and the quality of life in the community. By engaging learners in practical activities that have immediate relevance to the local community, school learning
will not only become an income-generating endeavour, but will also give both youths and adults a 'kick-start' on the path to self-help and employment creation. Such activities can easily be woven into the curriculum so that they are still responsive to the examination requirements. However, there is a need to review the examination systems and make them more flexible to enable learners to engage in a variety of problem-solving activities. School learning could easily be structured around production as advocated in the concept of Education With Production (Lauglo and Lillis 1988) which was practised in selected schools during the first few years after independence. The production of school uniforms, construction of various structures in homesteads, running of food stalls and numerous other income-generating activities make school learning more meaningful and help prepare learners for the 'real world'.

Towards a 'Balanced Curriculum': some suggestions for alternative pathways

School curricula continue to emphasise academic subjects at the expense of technical and vocational education. The following suggestions could help bring about a more balanced 'O' level curriculum. It could offer a core of academic subjects such as those listed below, for all pupils. The 'O' Level Curriculum could offer English Language, Integrated Science, Mathematics, Geography, Shona / Ndebele

These academic subjects could be combined with options made up of a variety of practical subjects. The same options offered at 'O' Level could be made available at 'A' Level, depending on the availability of both human and financial resources. In addition, short courses could be chosen from existing pre-vocational courses such as the National Foundation Certificate (NFC) to give learners the opportunity to try out and experience different options. The curriculum structure should enable students to progress with their chosen options at 'O' and 'A' levels or Higher School Certificate (HSC). All pupils should have the opportunity to do both academic and practical subjects. The combinations available should enable pupils to continue up to 'A' Level or vocational training institutions, depending on their aptitudes and interests.
'A' Level or Higher School Certificate

At 'A' Level or the Higher School Certificate (HSC), pupils should be able to choose from both academic and vocational options. Those pursuing a curriculum with a main focus on practical subjects and who need to be prepared for starting their own businesses upon leaving school could take Managing of Business (MOB) as one of their options to equip them with entrepreneurial skills. Figure 2 gives an overview of the proposed curriculum options that could form the basis of school and post-school learning for Zimbabwean youths and adults:

Figure 2: Academic and Career Pathways for Pupils in Different Streams

This model is derived from proposals made in the 1986 Education Plan. According to the plan, pupils were to be introduced to the use of tools
and machinery at primary school level and to take part in organised industrial visits. This was to be followed by a two-year Pre-Vocational Certificate in industrial arts at Junior Certificate (JC) level. At ‘O’ level those pursuing the vocational option would be offered the National Foundation Certificate (NFC) in technical and vocational subjects. Pupils proceeding to ‘A’ level would be mainly those wishing to pursue academic courses at tertiary level. Even these pupils could diverge to the vocational route, through apprenticeship courses leading to the NC, the ND and the HND, with options to join the labour market at all the various stages or returning for further education and training. Students graduating from the ND or the HND could either join the labour market or enrol for second or third year studies at university. Unlike the current education system, in which all pupils follow the same track leading to ‘O’ Level examinations irrespective of their ability or interests, in this proposed model pupils are divided into three different streams at Form 3 level as illustrated below:

**Figure 3: Curriculum Options for the Academic-Oriented Stream**

<table>
<thead>
<tr>
<th>'O' Level / Equivalent Academic Options</th>
<th>'O' Level Technical Subjects Options</th>
<th>NFC, Pitman, or other Vocational</th>
</tr>
</thead>
<tbody>
<tr>
<td>To choose highlighted subjects and any three others (5 periods / week)</td>
<td>To choose one subject (6 periods per week)</td>
<td>To choose one subject (7 periods per week)</td>
</tr>
</tbody>
</table>

- English Language
- Mathematics
- Comb. Science or Physics or Chemistry
- English Literature
- Shona
- Geography
- History
- Accounts
- Commerce
- Religious Education

- Agriculture
- Metalwork
- Woodwork
- Fashion & Fabrics
- Food & Nutrition
- Computer Studies
- Electronics
- Building
- Technical Graphics
- Art

- Machine Shop Engineering
- Draughtsman & Design
- Computer Operations
- Joinery
- Cabinet Making
- Renewable Energies
- Car Maintenance
- Textile Technology & Design
- Brick & Block Laying
- Marketing
- Photography
- Technology Fundamentals (e.g. electronics, pneumatics)
Pupils are expected to choose their subjects from the given options to make up their eight subjects. Since pupils in this stream would be more academically inclined, they would take six academic subjects at 'O' level. Where possible, the two practical subjects which they choose from the 'O' level and NFC/vocational options should be related. For instance, a pupil who chooses Woodwork at 'O' level would be advised to take either Cabinet Making or Joinery at NFC. The same could also apply to their academic subjects. For instance, a pupil taking any of the construction TVE subjects such as Metalwork, Woodwork, and Building would need Mathematics or Physics, while pupils doing Food and Nutrition/Catering would need to take Chemistry as one of the academic subjects.

**Figure 4: Curriculum Options for the Academic/TVE Stream**

<table>
<thead>
<tr>
<th>'O' Level / Equivalent Academic Options</th>
<th>'O' Level Technical Subjects Options</th>
<th>NFC, Pitman, or other Vocational</th>
</tr>
</thead>
<tbody>
<tr>
<td>To choose highlighted subjects and any two others (5 periods / week)</td>
<td>To choose two / three subjects (6 periods per week)</td>
<td>Machine Shop Engineering</td>
</tr>
<tr>
<td>English Language</td>
<td>Agriculture</td>
<td></td>
</tr>
<tr>
<td>Mathematics</td>
<td>Metalwork</td>
<td></td>
</tr>
<tr>
<td>Comb. Science</td>
<td>Woodwork</td>
<td></td>
</tr>
<tr>
<td>Physics</td>
<td>Fashion &amp; Fabrics</td>
<td></td>
</tr>
<tr>
<td>Chemistry</td>
<td>Food &amp; Nutrition</td>
<td></td>
</tr>
<tr>
<td>English Literature</td>
<td>Computer Studies</td>
<td></td>
</tr>
<tr>
<td>Shona</td>
<td>Building</td>
<td></td>
</tr>
<tr>
<td>Geography</td>
<td>Technical Graphics</td>
<td></td>
</tr>
<tr>
<td>History</td>
<td>Art</td>
<td></td>
</tr>
<tr>
<td>Accounts</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Commerce</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Religious Education</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Pupils are expected to choose their subjects from the given options to make up their eight subjects. This stream includes both those...
pupils who will pursue further and higher education at university level or any of the colleges of further education. Their curricula are therefore balanced between academic and vocational subjects. Even those who might proceed to 'A' level and university have the option of pursuing degree studies in technical fields such as engineering. They could therefore continue with the technical subject studied at 'O' level such as Metalwork or Technical Drawing up to 'A' level. Furthermore, they could join the Polytechnic or any vocational training centre to embark on technical courses leading to direct employment in the formal or informal sector of the economy.

There is a need to introduce more technical subjects at 'A' level so that pupils can pursue the subjects studied at 'O' level to a higher standard. Pupils who want to study engineering courses at university or other tertiary institutions could for instance take Technical Drawing and Design, Metal Technology and Design, or Wood Technology and Design at 'A' Level.

These subjects would be offered from Form 1 up to Form 4. The actual subjects on offer at any given time would depend on the availability of staff, resources and infrastructure. Pupils would sit for their public examinations at the end of Form 2 and Form 4 in their selected subjects. It would be preferable for pupils to keep similar subjects from Form 1 to Form 4 for the sake of continuity. However, it is also possible for them to choose different subject combinations at Form 3 level, taking into account their performance at the Zimbabwe Junior Certificate level, as well as reassessing their interests and career aspirations.

Pupils doing Forms 3 and 4 would also have the option of enrolling for short courses of their choice that would be offered outside the normal school timetable (such as in the evenings, during weekends or school holidays). School leavers and adults from the community could also enrol on such courses, the duration of which could range from just a few days to a few months. Certificates are offered to those who successfully complete such courses. The courses are modularised in such a way that it is possible to accumulate enough points and get a higher level certificate or diploma after completing a given number of modules. Both teachers and other experts from outside the school can teach on such courses. For instance, adults from the local community who may not necessarily possess formal academic qualifications but have skills and knowledge in particular vocations and crafts, such as masonry, pottery, and grass thatching, wood and stone sculpture, could be invited to schools as resource persons for the
short courses. Skilled people in particular trades may also come to the school for these short courses to upgrade their skills and acquire paper qualifications as well, thereby creating a mutual interdependency between the school and the community. Most of the subjects offered as vocational courses at NFC or equivalent level can also be offered as short courses. Again, the specific courses that can be offered at any given time would depend on the availability of staff, resources and infrastructure. However, the following list provides examples of such short courses that a school could offer: basket-making, embroidery, cross-stitch, knitting, crochet, baking, wood carving and sculpture, stone
sculpture, clay sculpture, food processing (e.g. making jam, peanut butter, vegetable preservation, etc.), plastering, flooring, painting, decorative grass thatching, use of traditional herbs and medicines, primary health and family care, first aid, and managing a small business enterprise.

Both adult and younger learners should also take non-examinable courses such as Careers Guidance and Counselling, Life Skills, and Family Care. Other courses that could also be introduced into school curricula might relate to issues pertinent at particular points in time, such as HIV/Aids education, sex education, civic education, human rights and democracy.

**Schools as community resource centres**

The ethos for schools in this proposal would be to create a direct link between what happens in the school with the activities taking place in the community. The school can achieve this by offering short, demand-driven courses to members of the community pursuing lifelong learning. The courses would be of varying duration, lasting from a few days to several weeks. Long courses offered on a part-time basis could also be made available. Certificates of participation, attendance or accreditation would be awarded. Where possible and if needed, formal NFC or other Professional Competence Courses (PCC) could be offered by the schools, subject to the availability of resources. In essence, schools should function as resource centres for teachers, students, and other members of the local community.

**Teaching methodologies**

The proposal to transform Zimbabwean schools into institutions that offer balanced curricula and are responsive to the needs of the pupils and community would require a unique variety of teaching / learning methods. The methods should be mainly based on problem-solving, aimed to link the knowledge and skills of learners to real-life situations. Methods that encourage the active participation and involvement of pupils (i.e. action-oriented learning strategies) are advocated. Such methods engage the minds of learners and make learning more real or authentic. Other examples of such methods include role-playing, debates, educational games, simulations and laboratory work. Opportunities should also be given to learners to identify, explore / investigate and solve problems of the
community in which they live. How they go about solving these problems is equally important. In other words, the process is as important as the end product. Critical thinking, collaboration, practical reasoning and reflection should be encouraged throughout the process. Additional strategies such as independent study, individual and group projects, field trips, and concept analysis make this possible. By employing these suggested strategies, the work which learners do in school will have more meaning or value to them, beyond merely achieving success in examinations. They will also be creating knowledge that could be used for the improvement of their immediate community and society at large. Traditional teaching methods, such as the lecture and demonstration, should also be used wherever they are deemed appropriate. However, teaching should be mainly based on problem-solving.

**Problem-solving approaches**

Problem-solving approaches have been advocated since the time of John Dewey. The concept has been implicit in terms such as: 'discovery', 'inquiry-discovery', 'learner-oriented' and 'child-centred' methods. The essence of these approaches is that a learner is presented tasks rather than specific facts and processes. The learner is then expected to seek relevant solutions to these tasks, in a systematic manner. The teacher therefore needs to structure the tasks carefully to ensure that learning does take place. While learning based on problem-solving should take place in an unrestricted manner, learners should not be left to struggle with problems blindly. Instead, the lessons should be carefully planned with clear objectives that enable proper evaluation of the learning process. In this regard, traditional and other practical subjects only provide a medium for developing problem-solving skills. Learning based on problem-solving stresses fact-finding, generation and analysis of alternative ideas (Nherera 1998).

Vocational subjects should adopt an approach oriented towards community action in dealing with skills development. These subjects should develop skills that solve real, everyday problems that learners can relate to, rather than those far removed from their lives and those of their community. The shortage of firewood, making meals within the limitations of the available implements, processing staple foods in a variety of ways that help to enhance or retain their nutritious value are all examples of activities that provide a basis for problem-
solving. Hence, the local community or environment becomes a laboratory for developing problem-solving skills. Traditionally, academic subjects have been notorious for developing and dealing with non-functional skills. An effort should be made to orient teachers towards linking academic content to real-life situations. For example, writing poetry should not be an exotic or theoretical activity of only reading other people’s poetry, but should also develop into a productive activity, with the school becoming involved in publication or producing material for use in other schools that have problems with literature. In addition, such poetry should focus on the lives and aspirations of the community.

**Implementation strategies**

The current school timetables and exigencies of public examinations may not augur well with the proposal to develop a problem-solving and community-oriented approach. The implementation of the curricula would need to change in order to allow sustained initiation, development and completion of projects that form the basis of school learning. Specific aspects that would need to be reviewed include time-tabling, curriculum content and the use of community resources to implement the curriculum. Teachers would also need to be reoriented to the new ideology of the school. Even the school year would need to be reviewed to allow for a more broad-based curriculum and the participation of the out-of-school adults.

**Conclusion**

The future of work in Zimbabwe lies in the capability of learners to create their own employment. The precariousness of formal sector employment is a reality that calls for new survival strategies, not only for the unemployed and job-seekers, but also for those in employment. Job security has disappeared in the current wave of globalisation and macro-economic policies that seem to largely ignore the human element. The proposal made in this paper to restructure school learning is intended to counter the negative impact of these developments by empowering learners for survival in the harsh economic reality that confronts most developing countries, particularly those in Sub-Saharan Africa as we approach the new millennium.
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New Competence - a reform in Norway

Hilde Borgir

In Scandinavian countries there is a long tradition of collective bargaining and equal dialogue between the state and social partners in both public and private sectors. In the context of the discussion that started some years ago about the changes in society for the next century in Norway, the trade union movement had asked the government to work on a white paper for framing future strategies for building new competencies. The government appointed a public Committee which comprised representatives from the state - both as an employer and as a political body – and from educational institutions. The Committee saw the reform as a development process. Its long-term goal was to develop a broader understanding of good teaching and efficient lifelong learning systems, in which the whole adult population could take part. As a first step towards this goal, the Committee proposed a number of measures which would help increase the possibility of individuals participating in adult education, and raise their level of competencies in working places. It also proposed the importance of involving both public and private sectors of the educational system, and providing them the same framework within which to operate.

Some proposals from the Committee:

- All adults who need basic education must be given an opportunity to obtain this.
- All adults must be given the opportunity to receive upper secondary education.
- Adults must be accepted at the level of upper secondary education on the basis of their qualifications in both formal and non-formal learning.
- The right to study leave must be recognised in law in order to ensure equal treatment.
- The Government must cover the cost of primary and secondary education, both lower and upper, for adults.
Employees and the employers organisations should give priority to schemes that enable all employees to take part in continuing education and training for adults. Funds must be established for continuing education and training through collective agreements.

- Tax rules should be reviewed to ensure that no status distinctions are made between different types of education.
- A special funding scheme should be introduced to stimulate the development of new user-adapted learning opportunities, teaching methods in adult education and motivation activities.
- A comprehensive programme should be established for the use of information technology in teaching and learning.
- An assistance scheme should be established to support systematic programmes for developing researchers in enterprises.

The first step towards a solution can be seen in the Government's green paper to the parliament called *The Competence Reform Report No. 42*, to the Storting (1997-98). The reform is based on the need for developing competencies in the workplace, in society, and according to the needs of the individual. The reform will enlist the participation all adults, both in and outside the labour market, and it will have a broad, long-term perspective. The reform is to be implemented as a process in which employers, employees and the government will have to make an active contribution.

**Important principles in the competence reform**

Below are a list of principles of the competence reform:

- The reform must be based on the competency requirements of the workplace, society and the individual.
- The reform must have a long-term perspective and its implementation must take place gradually, based on a framework of economic and organisational requirements.
- As far as possible, both basic and continuing education for adults should be geared to demand. This education should be flexible, easily available and adapted to the needs of the individual and the enterprise. Education must build on an individual's previous competencies, acquired both through formally certified basic education and through non-formal learning.
- A system should be established to document and assess adults' non-formal learning. This is essential for the further development of competencies. The system should have legitimacy both in the workplace and in the educational system.

- Adults should be given access to upper secondary education and higher education on basis of all their competencies.

- The public education system should place more emphasis to the development of competencies for the workplace, but this must not be done at the expense of general basic education; instead it should help to strengthen basic education.

- There must be greater interaction between providers of education and the workplace, with a view to allowing employees, as far as possible, to develop their competencies in the context of their work itself.

A joint responsibility

The responsibility for meeting the rise in competencies among adults – particularly directed at adults with jobs - must be shared between employee and employer organisations and the government. The Report (1997-1998) does not aim to change the present division of responsibility, whereby competence-building is the joint responsibility of employers, employees and their organisations, while the provision of basic education facilities is the prime responsibility of the government.

The proposals in the Report do not aim to meet all the challenges in basic and continuing education for adults. This will have to be a continuous task in the years to come, based on plans of action in the different sectors and branches of industry. The Report focuses on a few, central issues which can provide a better basis on which to develop and realise these plans.

The government proposals

1. Education at primary and lower secondary and at upper secondary level:

a) The Government will pave the way for adults who have not completed their primary and lower secondary education to be given the opportunity to do so. The Government will identify the need for renewed primary and lower secondary education among people who have formally completed
it, but who may still need this education. County authorities often need some kind of preparatory course before starting upper secondary education.

b) The obligation of the government towards the further education of county authorities will be financed within the framework grants included in the transfers in connection with the reform of upper secondary education (Reform 94).

2. Right to leave of absence

The Government is prepared to pave the way for a legislation that entitles an individual the right to study leave. The objective of this legislation will have to achieve a satisfactory balance between the employee's need for leave of absence and the inconvenience this type of leave can cause for the employer. The Government is prepared to work with representatives of employer and employee organisations and legal experts in drawing up proposals for statutory provisions. These will have to take into account the enterprises' need for new competencies, the need for a stable manpower, and the need for suitable planning of production and use of resources. Against this background, the Government will be submitting a proposal on the right to study leave to the Storting.

The problems which one-man businesses face in the area of educational opportunities are quite different from those which enterprises with several employees face. The right to leave of absence has little relevance for the latter group. However, special arrangements, such as finding a substitute, will have to be made if this group is to have access to further education opportunities and take part in the reform.

3. Funding subsistence and the tax situation

The Government believes that, as a matter of principle, a compensation for the expenses incurred during study leave is a matter to be decided upon between the employer and the employee. The employer's primary responsibility is to meet the enterprise's need to build up new competencies.

The Government emphasises the importance of basing educational funding on equal treatment of the different groups. Public funding of adults' subsistence in the case of university and college education, and in cases of completing primary and secondary education, both lower and upper, should therefore be based on established funding schemes managed by the State.
Educational Loan Fund. Financial assistance is available through these schemes for most educational purposes. However, the general rules for study financing will be reviewed with a view to adapting them more closely to continuing education of adults.

The Government leaves it to employer and employee organisations in case they want to establish special schemes to finance subsistence during continuing education, in addition to public finances.

New guidelines are being considered for the tax treatment of employer-financed education. Here the emphasis will be on ensuring that these are clear, predictable and easy to practise. The Government's assessment will be put before the Storting in connection with the National Budget for 1999. The Government will also look into the employees' right to sick pay during leave of absence to participate in competence-building.

4. Assessment and certification of non-formal learning

It is vital for the further development of competencies to establish a system to assess, certify and recognise adults' non-formal learning. This system must have legitimacy in the workplace and in the educational system. It is therefore important to develop a system of assessment in co-operation with employee and employer organisations, the various providers of education and the public education system.

In this respect, the Government proposes the following measures:

- The external candidate schemes in basic education, from the primary school all the way through to higher education, should be retained and expanded. In all subject areas, in which it is applicable, it should be to sit examinations as an external candidate, and to be recognised for the same qualifications as apprentices, pupils or students. The Government proposes that the assessment scheme used in vocational training (Section 20 of the Act relating to Apprenticeship Training in Working Life) be continued the way it operates today.

- Assessment and certification schemes must be developed to provide a basis for assessment which corresponds to the public system. This applies learning acquired through work in Norway and abroad, through active participation in democratic life and through other voluntary work. This type of non-formal learning should be approved as "equivalent competence", even if it is not identical to what is laid down in syllabi or required for public examinations.
The county authorities will be invited to test schemes to assess non-formal learning in relation to upper secondary education. The Government is considering the appointment of an advisory body to assess non-formal learning in higher education. This body will be able to give advice to the educational institutions.

5. Admission to basic education

Though the rules for admission, as they exist today in upper secondary education and higher education, allow adults to be accepted on the basis of "equivalent competence", very little use is made of this possibility and it seems to be practised only by a few. It is therefore the aim of the Government to make it possible for adults with proven equivalent competence to be accepted in both upper secondary and higher education.

6. Flexible opportunities and the workplace as a place of learning

An important element of the reform is the development of educational opportunities which exploit the huge potential of the workplace as a place of learning. This will involve joint projects between the workplace and the providers of learning in order to plan systematic competence building. This can be done by establishing development programmes and funding schemes in order to encourage the greater use of information and communications technology in teaching and the development of new flexible, user-adapted courses, adult teaching methods and media-based learning, and by encouraging and strengthening competence-building in enterprises through different systems of network-building, especially in small and medium-sized businesses and one-man businesses.

7. Providers of education

Much of the training in the workplace will be provided by the resources available at the workplace. Nonetheless, the Government emphasises that the public education system must play a central role in providing training which meets the need for new competencies in the workplace. This should be achieved, for example,

- through a comprehensive development process throughout the public educational system, in which existing rules, teaching methods, organisation and management are reviewed in order to adapt primary, secondary and
higher education to the competence reform for adults. The Government believes this is a better approach than establishing a separate "open university".

- by allowing state-run institutions of higher education to charge a fee for comprehensive study courses totalling up to 30 credits.
- by relaxing the rules for institutions of higher education, and making it easier for them to offer training geared to the needs of the labour market. The employer and employee organisations will be a natural contact in this work.
- by developing a constructive dialogue between the public education system and other providers of education, such as non-governmental study associations, distance education institutions, folk high schools etc.
- by encouraging co-operation between the business sector and educational institutions in order to meet the market demand for competencies more efficiently.
- by encouraging the use of electronic networks, and by making use of multimedia-based teaching materials, particularly in studies organised as distance education.
- by developing resource centre activities as an integrated part of all upper secondary education, aiming especially at stimulating competence-building in small and medium-sized and one-man businesses.
- by initiating competence-building programmes for teachers and instructors in the development and use of teaching programmes suited to adults' non-formal learning and life situation.

8. Government employment services

The Government is prepared to take a closer look at how the Employment Services' knowledge of the labour market may be used for improving its effort to build up competencies for the world of work.

9. Information

The Government is expected to draw up an information plan for the competence reform as a whole. A central body will be responsible for ensuring that information about available education is easily accessible. A project is expected to be initiated in close co-operation with social partners in order to develop a central database for educational information.
10. Implementation

The implementation of the reform requires efficient monitoring and management. The competence reform is closely linked with the political decision-making system at the national, regional and local levels. The Government therefore believes that the work of planning and implementing the proposals in the Report should be anchored in the public system, and that the main responsibility should be given to the Ministry of Education, Research and Church Affairs. This means that the follow-up work will be carried out in cooperation with other ministries, the employer and employee organisations, and the various providers of education.

The Report to the Storting is the beginning of a process in which employers, employees and public authorities will have to help to build up competencies. As regards the implementation of the various measures, the authorities will have to take into consideration the economic situation.

A final comment

At the time of writing this paper, the parliament was working on framing solutions. In the meantime a new committee has been established to deliberate on a new law concerning the right to educational leave (ILO Convention no. 140/1974 on paid educational leave). On this question a conflict of interests between the employers' and workers' representatives has come to the fore, and has yet to be resolved. Using collective bargaining, the social partners have been discussing the issue of how to finance the reform. The discussion seems to point in the direction of a tripartite funding system. A final solution is expected in autumn 1999.

References

Nou 1997:25
Traditional non-formal vocational education: the Indian experience

C.J. Daswani

Context

India has a wage-earning workforce of about 350 million persons - both adults and children, male and female. But less than one third of these people may have had the benefit of formal vocational or technical education. In fact, a majority of workers may not even have had the opportunity to acquire formal basic education. A large number of active workers in India, therefore, are illiterate or only marginally literate. Yet, all such workers will certainly have undergone on-the-job vocational and technical training through a traditional non-formal vocational training system that has coexisted with the formal education system in India for centuries.

The formal technical and vocational training system is relatively recent in origin. The traditional non-formal vocational training system has been handed down from generation to generation. Workers trained in the formal system work largely in the organised sector, while the traditionally trained workers belong to the unorganised sector. At the systemic level there is little or no cross-fertilisation between the two systems.

The formally trained worker undergoes academic and theoretical training no different from that imparted the world over. The traditionally trained worker, on the other hand, undergoes training under a "master" to whom he/she is an apprentice. The training itself is practical and is acquired on the job.

Traditional non-formal vocational training

The traditional system of vocational training has existed in India for centuries, whereby the occupation of the father is handed down to the children - conventionally, only to the male children, but in some occupations to the female children as well. In fact, where the entire family participates in the
family occupation, the roles of males and females are often rigidly defined. The training begins at an early age and the "trainee" learns by doing.

The process of training is non-formal but not unsystematic. Every master trainer has an unwritten curriculum, and a pedagogy, which differs from learner to learner. Each learner learns at his/her own pace. Each learner, in time, masters the occupation and, in turn, becomes a master trainer.

Unfortunately, this traditional training system became ossified and linked to the caste system, with all its pernicious implications. The caste and social ramifications of traditional vocational training and caste-based vocational options continue to influence the choice of occupations in India even today. This social reality impinges in interesting ways on the formal technical vocational training system, which does not provide training in occupations that are traditionally caste-sensitive. The formal system favours occupations that are either technology-based or are caste-neutral.

The traditional system, by its very nature, does not require formal basic education. The system is grounded in the oral tradition. The master trainer does not deal with theoretical issues, and the assessment of a trainee is ultimately linked to the capacity of the trainee to practice the occupation with success. Traditional vocational training often equips trainees with generic skills, rendering them capable of practising more than one related occupation. However, since choice of occupation is determined by caste, there is a social hierarchy of occupations, and a member of a particular caste may not, and ordinarily will not, practise an occupation that he/she perceives as lower than his/her traditional occupation.

So deeply entrenched is the traditional vocational training system that some non-traditional occupations, often those employing technology, have developed these traditional master-apprentice strategies. For instance, automobile mechanics all over the country are trained largely through such a system.

**Formal technical and vocational education**

Formal school education in India is of twelve years duration. The first ten years of schooling provide general education for all learners. At the end of ten years (secondary stage) learners are given the option of choosing vocational education for two years (senior secondary stage). Learners who opt for vocational education enter technical training institutes where training is provided in numerous trades, often those that are based on technology. All
such courses start from the theoretical base of the ten years of general education. The choices available at these technical training institutes are very large, altogether numbering over 150. Some of the courses are gender-specific. Most of these formal vocational training courses equip the learners to find employment in the corporate sector, or to set up small businesses as entrepreneurs.

It should be remembered that formal technical and vocational training at the senior secondary stage requires formal school education of ten years as a prerequisite, and the courses are highly structured and rigid. They are theory-based and provide limited laboratory practice, without any apprenticeship training.

Professional and management courses, provided at undergraduate and postgraduate levels at colleges and universities, are generally available to only those learners who have opted for the academic (non-vocational) stream at the senior secondary stage. Graduates of the vocational stream at the senior secondary level do not ordinarily fulfil the entry requirements for such courses, since they do not have the prerequisite theoretical background, which is provided in the academic courses in the last two years of formal school.

Ground realities

The majority of the vast workforce in India, then, are illiterate, but have acquired vocational competence through traditional non-formal training, in order to become farmers, potters, weavers, masons, smiths, cobblers, tanners, carvers, craftsmen, singers, jugglers, entertainers, traders and the many other occupations which keep the everyday world moving. The traditional training system has become extended to the more recent and modern trades of motor mechanics, electricians, plumbers, welders, fitters, etc.

A vast number of these illiterate, but trained workers are entrepreneurs who set up their own businesses and become master trainers in their own right, providing training to numerous apprentices who come to them to learn their trade or occupation. Most of them innovate, and learn to use modern tools and techniques on the job. Most such workers are able to use their skills to address the needs of more than one trade or occupation.

As a rule, however, such workers are not acceptable within the organised sector. Their skills are not recognised by industry since they do not have the necessary formal educational qualifications.

The graduates of technical training institutes are acceptable in in-
dustry for shop-floor jobs, seldom for managerial jobs. Many of these formally trained “technicians” join the industrial sector, and many others become entrepreneurs setting up small technical workshops. Curiously, as entrepreneurs they often employ traditionally trained workers. Indeed, they contribute to the continuation of the vigorous traditional non-formal vocational training system, not merely by hiring traditionally trained workers, but by setting themselves up as master trainers for those who have no formal educational background.

The products of the university-level technical and professional training courses are favoured as top managers by industry. It is well known that highly qualified engineers in India prefer management jobs to supervisory jobs. This surely has to do with the social and economic attributes of the various occupations. In India, a traditionally trained worker is generally at the bottom of the social and economic ladder; the worker trained at the school level is in the middle; and the university-trained worker at the top.

With the growing dependence on technology, the training demands on the workforce in India are continually in a state of dynamic shift towards modernisation. In the urban areas particularly, even the traditionally trained workers are being influenced by the demands of modern technology, marketing strategies, and globalisation.

In response to these newer demands, a variety of courses have become available for “hands-on” or “state-of-the-art” training. However, all such courses target only formally educated individuals, who may or may not have received vocational training earlier. In the context of globalisation, such courses are popular with younger people who wish to enhance their marketability on the job market.

However, there are no training courses available for the illiterate worker who wishes to participate in the changing world of work. Such a worker has to rely on innovations within the non-formal training system to keep him or her abreast of the new technologies.

**Adult literacy**

Adult literacy programmes in India have always targeted the illiterate adults who have not had the advantage of formal education. One of the earliest adult literacy programmes in India was aimed at making the illiterate Indian farmer technologically literate in order to use newer farming techniques requiring chemical fertilisers and hybrid seeds. Known as the Farmers'
Functional Literacy Programme, it provided for functional alphabetic literacy. Interestingly, the average Indian farmer learned to use the new farming technology without becoming alphabetically literate. Perhaps the oral traditional training system had something to do with this curious outcome of the literacy programme!

Successive adult literacy programmes in India have included a component of functionality as an important part, often linking literacy with vocational training. Programmes of skills training with provision of financial support have been launched to attract young people in rural areas to learn endangered traditional skills from master craftsmen. Unfortunately, most adult literacy programmes have not yielded the expected results.

More recently, the National Literacy Mission of India has formulated a plan of continuing education for those adults who have first acquired basic literacy skills through literacy campaigns. The continuing education programme is designed to provide skills and vocational training at the grassroots level to newly literate adults, most of who are already working in some traditional occupation.

It should be stressed that all so-called skills and vocational training programmes for illiterate adults assume basic alphabetic literacy as a prerequisite.

**Future of work**

In the short term, the composition of the active workforce in India is not likely to change significantly. The illiterate or semi-literate workers will make up the bulk of the workforce. They will continue to find vocational training within the traditional non-formal system, learning on the job, innovating and modernising as they work.

The formally trained workforce will find newer opportunities for upgrading their technical skills, thereby reaping the fruits of modernisation and globalisation. The formal education system will respond to the newer technological demands and provide for diversification of technical and vocational training courses.

In the medium and long term, traditionally trained workers may find themselves at a disadvantage in the world of new technologies. While there will always be a demand for such workers, the economic returns for them may not be proportionate to their training and skills. Nor will their rights be always protected because of the very nature of their training and occupa-
tions. As pointed out above, most of these workers are in the unorganised sector and have no avenues for collective bargaining.

**Future of adult learning**

The future of adult learning in India must necessarily be linked to the future of the traditionally trained illiterate and semi-literate workers, many of whom are children, illiterate women and school drop-outs. That is not to say that the learning needs of formally trained workers are not important. Adult learning programmes for already trained workers should certainly receive adequate attention. But the learning needs of nearly three hundred million workers in India who have not been formally trained should be of paramount importance.

A necessary first step in planning for the future learning needs of these workers would be to recognise traditional vocational training modes as valid and efficient. It would be necessary to identify types of traditional training which produce skilled workers who are competent, with a view to certifying such workers as duly trained. Such recognition would free traditionally trained workers from the social and economic stigma from which they suffer at present.

It would also help if, within the local communities, already acclaimed master technicians and craftsmen were accorded professional recognition through an apprenticeship programme whereby learners from technical institutes were attached to them for training.

It would then be necessary to plan a series of technical and vocational courses which would benefit illiterate and semi-literate adults. Such courses should not require basic literacy skills as a prerequisite. Multimedia inputs should make it possible to devise courses that approximate to the oral methodology of traditional course.

A strong component of the learning needs of these adult workers would be practical legal literacy, through which they can be made aware of their legal and democratic rights. This would be necessary especially for women and child workers.

In the medium and long term, India will have to achieve universal literacy and basic education, in order that workers are able to participate equally in future economic and social development.


**Future emphasis**

The conditions that prevail in the world of work in India are by no means unique to that country. It may be assumed that similar conditions obtain in a large part of the Third World. Societies in Third World countries exist and function in multiple development dimensions. In all these societies there are large numbers of individuals who are highly technically trained and compare with the best in the developed countries. At the same time, all these societies have millions of workers who have not had the advantage of formal education and training, and who form the backbone of the national economies.

In the face of new technological innovations, the market economy and globalisation, it is these millions of workers who run the risk of becoming marginalised because of new demands in the future world of work. Any agenda for the future of work and adult learning must bring to centre stage the needs of these workers. Without such an emphasis, globalisation can only have a negative impact on the lives of these people.
The potential, actual and social demand for adult learning in Argentina: the situation of educational risk and cumulative advantage

Maria Teresa Sirvent

Introduction

This paper analyses the social demand for adult learning on the basis of empirical data from Argentina. It attempts to address the following questions: (1) What is the potential demand for adult learning? (2) What is the relation between potential demand and actual demand? (3) What factors are related to a community's potential, actual and social demands to engage in adult and lifelong education? (4) What social conditions facilitate or inhibit the emergence of social demand for adult learning and its conversion into an institutional and political issue? (5) How is it possible to intervene in the context of the current dynamics of the world of work and adult education?

The social demand for adult learning is analysed as an individual and social process of learning. It is not something given, but a result of decision-making processes which occur throughout life. Such processes are related to the recognition of individual and collective needs, and their transformation into social demand and institutional or wider issues that are discussed in the political arena. The demand for adult learning is related to the recognition of the need for knowledge and social participation so that individuals and social groups can solve problems in their daily lives. The perspective adopted in investigating educational demand is political and sociological.

The construction and emergence of individual and social demands is not linear. Indeed, it is a dialectical and historical process. It is an interplay between structural factors (political, economic and social factors) and psychosocial factors (such as the social perceptions, everyday knowledge and common sense of a social group, the constitution of individual and collective identities, etc.). Social mechanisms may facilitate or inhibit the emergence of social demands and their collective expression. Cognitive aspects
play a central role in the construction and emergence of social demand for adult learning. Adult education is seen not simply as a place to “receive” demands for adult learning but as an instrument to generate individual and social demand and to increase the capabilities of popular sector organisations to convert a social demand into an institutional issue.

Notions of potential demand, actual demand and social demand will be differentiated. Concepts of “level of educational risk, “cumulative disadvantage”, “multiple poverty” and the “three dimensions of power” will be used to understand and interpret the situation of adult learning demands in Argentina. The social demand for adult learning is inextricably related to social participation and power.

Both quantitative and qualitative data, derived from my present research in Argentina, will be used. Quantitative data includes census data, educational statistics and survey information. Qualitative analysis will include an analysis of the social meaning attributed to adult education and its interpretation in the light of the educational biographies and life strategies of individuals. Considerations of social demand for adult learning are based on previous qualitative and participatory research developed in Buenos Aires urban neighbourhoods.

The paper is divided into the following four parts. In the first section I discuss the concepts of needs, potential demand and “level of educational


2 For more details on these researches see Sirvent and Brusilovsky (1983); Sirvent (1984a, 1994a ). From 1975 to 1978, I conducted a sociocultural study of the Bernal and Don Bosco population in Greater Buenos Aires, 20 kilometres south of the Federal Capital with a total population of approximately 103,000 inhabitants. Participatory research and non-formal adult education have also been conducted in the urban periphery of Sao Paulo and Vitoria-Espiritu Santo in Brazil (1979-1984). I also conducted participatory research on power structures, social participation and popular culture at Mataderos, a suburban ?barrio? in Buenos Aires, from 1985 to 1989, immediately after the last military dictatorship in Argentina. The research attempted to analyse the lack of real social participation in Mataderos, historically one of the most combative districts of the Federal Capital in Argentina.
risk”, presenting data from Argentina. In the second section I focus on quantitative and qualitative data dealing with actual demand and cumulative advantage in Argentina. In the third section, the concepts of social demand, power and multiple poverty are developed. I conclude with a brief discussion on the implications for work and adult education.

**Needs and potential demand: the concept of “level of educational risk”**

Our analysis starts with a differentiation between objective and subjective needs and their social determination. A subjective need is a state of deprivation felt or perceived by individuals or groups of individuals. An objective need is an individual and/or group deficit that is determined externally, independently of the individuals affected. The objective determination of needs - such as the need for adult learning or for lifelong learning processes - is based on the existence of an imbalance that prevents the development of human potential. The imbalance is a breach between what is possible at a certain historical moment and what really exists and affects individuals and groups.

The need people feel - a subjective need - may or may not coincide with needs viewed objectively. Expressions such as “there’s no need for adult learning” or “not interested in adult education”, which commonly describe low educational and social participation levels in the community, do not mean that an individual or social group does not have an objective need or interest.3

The emergence of individual and collective demands for adult learning and social participation presupposes a dialectical process of recognition of objective needs and their conversion into the right to learn. The objective determination of needs is largely derived from economic considerations of what social and human development should be, or from ethical...
value judgements of society and humanity, as well as from the point of view of what role educational and social participation plays in human development and the promotion of social justice. Although a model of a "healthy society" and "healthy human groups" should include social participation, lifelong education, creation, re-creation, and reflective thought as necessary requirements for social and human development and for raising the quality of life of the majority, in the present neo-conservative contexts of policies of adjustment and increasing poverty in many Latin American societies, these fundamental conditions are not considered to be "obvious objective needs".

The conceptual differentiation between subjective and objective needs has important implications for cultural action. Adult education policies based solely on the subjective needs of the population without consideration of objective needs, leads to a maintenance of the status quo rather than to a modification of social, economic and political imbalances.

Empirical evidence from Argentina shows that objective needs for lifelong education and adult learning are related to a range of complex political, economic and social knowledge that is required to understand what is going on in our daily lives. It also indicates that individuals and groups have the need to improve their capacity to participate, create and think reflectively in order to intervene in the decisions affecting their everyday lives. When we speak of developing reflexive thought, we are referring to the process of placing ourselves at a distance, viewing our environment in a questioning manner and making it the object of our own reflexive knowledge and thinking. It refers to a learning and knowledge-building process by means of which everyday reality is transformed into an object of analysis, study and research. Following Ferraroti (1990), we make a distinction be-

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4 The central problem is how can subjective and objective needs be appropriately assessed. One way to do this is to establish explicit assessment concepts. To discuss objective "versus" subjective interests or facilitating "versus" inhibiting factors implies assessment of some sort and adds another normative dimension to the analysis of the educational demands for adult learning.

5 In our participatory research (Sirvent 1984a, 1994a; Sirvent and Brusilovsky 1983) I used the following information and criteria in order to identify objective needs: (a) scientific and value assumptions on human development and social needs; (b) the capacity of social groups to discover their objective needs and interests under conditions leading to the creation and ownership of knowledge with which to analyse reality, and their capacity to make reality an object of collective research.
tween knowledge and information. Knowledge refers to the awareness of concepts, categories and classificatory schemes used to select and interpret information. The term “potential demand” is related to objective needs for knowledge and adult learning. In my research on adult education in Argentina I have measured “potential demand” quantitatively according to the level of initial education achieved by the population aged 15 years and above who have dropped out from school and are unable to gain access to the labour market. In other words, this includes all young people and adults who should be making demands for adult learning on the basis of objective educational need, regardless of whether they actually do so or not.

Recent research in industrialised countries has shown that initial educational attainment is the most robust predictor of participation in adult education (Bélanger and Valdivielso 1997; Bélanger and Tuijnman 1997). At the same time, educational credentials have appeared as the strongest predictor of occupational status (Bélanger and Valdivieso 1997; Bélanger and Tuijnman 1997). In Argentina, labour market studies have shown the strong relationship between level of initial education and employment in the formal labour market (Winar 1998; Moreno 1996; Feldman 1994; Becaria and Lopez 1996), as well as the relationship between level of initial education and competencies required for performing well in the economy and society. They also reveal that partial secondary initial education is, generally speaking, the threshold for entry into the formal labour market. On the other hand, terms such as “vulnerable groups” (Feldman 1994) and “deficit group” (Moreno 1996) are used to designate those young people and adults with a low level of initial education (incomplete secondary or below). Becaria and Lopez (1996) have named “heads of households” between 45 and 50 years with a low level of initial education as a “hard group”, i.e. people who because of their extremely low levels of initial education are characterised by a low probability of converting their skills and abilities into economic benefit or employment.

The concept of “level of educational risk”

I use the concept “level of educational risk” to refer to the population with a low level of formal initial education attainment which is most likely to suf-

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fer social, political and economic marginality throughout life. The concept refers to labour market activities as well as to the entire spectrum of social, political, family, health and leisure activities in daily life. It refers to participation in a creative and autonomous manner in the social, political and economic life of a country.

The concept of "level of educational risk" has both a quantitative and a qualitative dimension. The former is measured in my research in terms of level of educational attainment. A person is located in the area of educational risk if he or she has incomplete primary education, complete primary education or incomplete secondary education. From an analysis of census data (1991) in Argentina, 75% (14,215,591) of drop-outs from the system of initial schooling, aged 15 and over, are included in the educational risk area. These percentages have been processed from the National Institute of Statistics and Census, Argentina Republic, 1991, National Census.

Among the people located in the area of educational risk, 60% only reach a level of incomplete or complete primary education. This population is in a situation of extreme risk. Approximately three quarters of our economically active population does not have the education either to adapt to technological change or to support the processes of democracy. The situation becomes worse if we compare the level of educational risk with the poverty index measured in terms of the UBN (Index of Unsatisfied Basic Needs).

Table 1 shows that the percentage of educational risk is above 90% (with the exception of the Federal Capital and the provinces of Santa Cruz and Tierra del Fuego) for young people and adults who come from poor homes.

In most provinces, the proportion of people (aged 15 and above) from poor homes with only incomplete or complete primary school attainment is higher than the proportion for the general population (40 per cent).

The percentage of the population with only incomplete primary attainment increases with age. This situation becomes worse for persons in the

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7 Working with my concept of level of educational risk I have found some related concepts in educational literature. For instance, Levin (1995) has defined at-risk students as those youngsters who are unlikely to succeed in schools. This study shows that innovative educational changes in schools have led to dramatic success in increasing student achievement and involvement in challenging educational activities and in raising parent participation.

8 The UBN Index combines 5 quantitative indicators that relate to housing and sanitary conditions, educational circumstances of children of formal school age and occupational circumstances of the head of household.
so-called "hard groups" or "vulnerable groups" (45-50 years old). Here, 40 to 65 per cent of people have not attained complete primary education in most of the provinces.

Research (Feldman 1994) has shown the association of factors that produce a "circular effect" of lack of education, unemployment and poverty. Among young people with no education, the need to look for any job, "conspires" against obtaining further education or demanding adult education. Adolescents from poor homes enter into unskilled occupations and work under precarious conditions or in illegal jobs with few opportunities for an occupational career.

Table 1

<table>
<thead>
<tr>
<th>Provinces</th>
<th>Aged 15 and over</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Without UBN</td>
</tr>
<tr>
<td>CAPITAL FEDERAL</td>
<td>50%</td>
</tr>
<tr>
<td>GRAN BUENOS AIRES</td>
<td>75%</td>
</tr>
<tr>
<td>RESTO DE BUENOS AIRES</td>
<td>75%</td>
</tr>
<tr>
<td>CATAMARCA</td>
<td>72%</td>
</tr>
<tr>
<td>CORDOBA</td>
<td>71%</td>
</tr>
<tr>
<td>CORRIENTES</td>
<td>73%</td>
</tr>
<tr>
<td>CHACO</td>
<td>77%</td>
</tr>
<tr>
<td>CHUBUT</td>
<td>74%</td>
</tr>
<tr>
<td>ENTRE RIOS</td>
<td>74%</td>
</tr>
<tr>
<td>FORMOZA</td>
<td>77%</td>
</tr>
<tr>
<td>JUJUY</td>
<td>73%</td>
</tr>
<tr>
<td>LA PAMPA</td>
<td>78%</td>
</tr>
<tr>
<td>LA RIOJA</td>
<td>62%</td>
</tr>
<tr>
<td>MENDOZA</td>
<td>74%</td>
</tr>
<tr>
<td>MISIONES</td>
<td>79%</td>
</tr>
<tr>
<td>NEUQUEN</td>
<td>71%</td>
</tr>
<tr>
<td>RIO NEGRO</td>
<td>73%</td>
</tr>
<tr>
<td>SALTA</td>
<td>72%</td>
</tr>
<tr>
<td>SAN JUAN</td>
<td>76%</td>
</tr>
<tr>
<td>SAN LUIS</td>
<td>72%</td>
</tr>
<tr>
<td>SANTA CRUZ</td>
<td>71%</td>
</tr>
<tr>
<td>SANTA FE</td>
<td>72%</td>
</tr>
<tr>
<td>SANTIAGO DEL ESTER</td>
<td>75%</td>
</tr>
<tr>
<td>TIERRA DEL FUEGO</td>
<td>64%</td>
</tr>
<tr>
<td>TUCUMAN</td>
<td>72%</td>
</tr>
</tbody>
</table>

The qualitative dimension of the level of educational risk encompasses the objective need to handle a complex range of knowledge on political, economic and social affairs in the national and international environ-
ment, as well as the need for improved capacity to think reflectively and creatively. This knowledge is necessary if people are to analyse their daily reality in a critical and autonomous way and to participate in social transformation. To be a "culturally literate" person today requires the ability to think in abstract terms, to construct classificatory schemes, and to systematise and order information hierarchically. To be a literate person today means to be able to question reality, to challenge "determinist" statements such as the following: "...The facts of our life have to be accepted as what must be and they can't be any other way."9

From this perspective, I have assumed that people who do not have access to this range of complex knowledge and reflective thinking are located in the area of educational risk. The level of educational risk does not represent a mechanical relation between initial education and future marginality. Several intermediary factors are involved. For instance, the relation between initial formal education and opportunities to enter the formal labour market often depends on political decisions concerning the labour market and the economy, and educational policies relating to lifelong education for all.

**Needs, actual demand and principle of cumulative advantage in education**

How many people aged 15 and over, located in an area of educational risk, make a decision in their life to demand adult learning? In other words, what percentage of the potential demand becomes an actual demand? How many people have the "courage" to seek second-chance education?

"Actual demand" is demand for educational opportunities over and above conventional school education. It encompasses individual aspirations for adult learning at a particular time. We illustrate the relation between potential and actual demand with some figures from the Federal Capital and Greater Buenos Aires.

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9 This type of sentence illustrates what we call understanding poverty?, i.e. accepting just one interpretation of reality without considering any alternatives. It is the prevalent pattern of the "universal thinking" existing in our neo-liberal society, and is also related to concepts such as "lived culture" and "emergent" curricula?
Table 2

Relation between potential demand and actual demand in federal capital and greater Buenos Aires

<table>
<thead>
<tr>
<th>SELECTED REGIONS</th>
<th>Potential Demand (1)</th>
<th>Actual Demand (2)</th>
<th>Relation (2)/(1) × 100 (%)</th>
<th>GAP %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Federal Capital</td>
<td>140.251</td>
<td>5.681</td>
<td>4.9</td>
<td>96.0</td>
</tr>
<tr>
<td>(1997)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Greater Buenos A</td>
<td>859.578</td>
<td>24.899</td>
<td>2.8</td>
<td>97.2</td>
</tr>
<tr>
<td>ires (1996)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

It was found that in comparison with the high proportion of the population at educational risk, only about 3 to 15 per cent (in the regions concerned) are registered for formal or non-formal educational activities. This fact illustrates a deep gap between potential and actual demand. These data validate the principle of cumulative advantage in education: the more initial education a person has, the more likely is she or he to be able to participate in educational activities beyond school. This result is consistent with my previous research in Argentina where it was shown that non-formal adult education actually intensifies the differentiation and segmentation of the education system. Only 3.6 per cent of those with a low level of education (partial or incomplete primary-level education) have enrolled in any adult education course, compared with 46.8 per cent of the population with complete higher education. This is also in line with the findings regarding the distribution of continuing education that emerge from a comparison of six industrialised countries.

10 These aspects are being researched under the Project, Power Structure, Participation and Popular Culture: A Study of Youth and Adult Education in Argentina under Neo-Liberal Economic Policies (1997-2000).
12 Sirvent 1994c
13 Bélanger and Valdivielso (1997); Bélanger and Tuijnman (1997).
Under what conditions, then, are objective needs for knowledge and adult learning recognised and converted into actual demand? The recognition of objective needs for knowledge and their conversion into actual demand is a learning process and involves processes of knowledge construction. Many structural factors, however - economic, family, educational, migratory, labour, social participation and political experiences - either facilitate or inhibit opportunities to recognise objective needs for knowledge and adult learning. My research in Argentina and Brazil has highlighted the cognitive aspects involved in the recognition of the need for adult learning. These include reflection, participation, appraisal and creativity. We also identified the factors that inhibited families from recognising these needs. A family which attributes school failure to the fact that its children do not have the brains is certainly not the one to demand opportunities for adult learning. If victims are self-accusatory, they are unable to understand their disadvantage and lack of success. They are unable to think objectively about their situation, identify structural factors or take action to overcome them (Sirvent 1994a: 181-192).

The ways in which people perceive, construct and theorise about reality has a complex web of components that inhibit their capacity not only for education but also for perceiving the importance of the need for adult learning. People therefore tend to support or legitimise the established order. In other words, they reproduce in their daily thoughts and in common sense theories, the social conditions that produce social injustice and discrimination. Knowledge implies the capacity to construct classificatory schemes as alternatives to the conservative and hegemonic vision of our reality. Needs can be seen as a deficit, but also as a stimulus to look for new knowledge to solve problematic situations in our daily lives. Awareness of deficits may be a potential force in the emergence of a new social demand for lifelong education.

A preliminary analysis of interviews from my present research shows that decisions to pursue adult learning are related to the process of questioning reality. Only when people start to break away from thought processes such as "things are the way they are and they can’t be any other way", is it possible to become aware of social discrimination and to perceive education as an opportunity for change. As some of the interviewees have said:

We feel we are unable to participate politically. We are manipulated because we do not have enough information to struggle for our rights. We feel excluded and we are excluded. We are aware of the importance of education because of the blow that we have
received, because of the blow which has knocked us down, and because of the door which has been shut on us. We feel like a dog. We feel like garbage. We feel rejected. We feel .... rejected material.

For some people, going to school again has meant a break with a sense of shame at being too old for education, as well as a break from profound fears related to failing again. I have discovered that adult learning experiences have meant a way to raise the self-esteem of adults, to look for reconstituted identity and to feel for the first time that change is possible.

Through a process of collective construction of knowledge as well as through a comparison of different sources of information, including everyday knowledge and scientific knowledge, it is possible to view one’s environment critically. My experience with participatory social research and adult popular education has shown that people who have made their reality a collective research project are able to discover their objective needs and interests. I found that though information is often contradictory and fragmentary, it was possible through participation in research activities for the population to develop a holistic view of their neighbourhood and work. We found that barrio groups became aware that, “in order to understand the story of the neighbourhood associations you have to go through the history of the barrio and of the country, you have to reconstruct collective and fragmentary memory”. People started to recognise that in order to struggle for their rights, they had to know their rights. The information that would make it possible to know them well, reinforcing the content of future claims, became more and more in demand (Sirvent, Clavero and Feldman 1990).

Our research experiences have led us to construct a hypothesis about the relations between “knowledge” and “organisations” as convergent conditions in a group process that recognises needs and “translates” them into individual and social demands. This will be taken up in the next section on the relation between the “social demand” and the phenomena of social participation and social power. It introduces a social and collective dimension into the understanding of the demand for adult learning.

**Social demand, social participation and power**

Social demand is a collective expression of needs and wants advanced by members of a social group, seeking implementation of these through institutional and/or public decisions. It finds its political expression in the proposals made by groups and parties in a representative system. It needs to be under-
stood as the need defined by social classes, fractions of a class, organisations, social movements, groups and individuals who stand in a strategic position vis-à-vis the state. In the present neo-conservative context in Argentina, there are several social factors which hinder the development of the need for adult learning and its conversion into social demand. These factors are related to the phenomena of social participation, to the three dimensions of power and to the so-called phenomenon of multiple poverty.

**Social participation**

My analysis of social participation takes into account a dialectical relationship between power, social classes and popular culture. The emergence of social demands is a question of social participation seen as a manifestation of popular culture. Popular culture is conceived as a terrain of political and social mobilisation and conflict where cultures constantly intersect, blend or clash, as a terrain of acceptance and resistance. From this perspective, social participation is an amalgam of creative, productive cultural practices in opposition to a consumption style. In the light of this approach, real participation implies the need for profound changes in power structures. It is characterised by resistance and opposition to the concentration of decision-making in the hands of only a few persons. It opposes authoritarian, co-optive and repressive social relations.

I have developed theoretical models to distinguish between real participation and symbolic participation (Sirvent 1984b, 1994a). Real social participation takes place when the members of an institution or group through their actions are effective in influencing processes of institutional life and decision-making, for instance in relation to objective needs for adult learning, creation, re-creation and reflective thinking. This means wielding real power in decision-making processes in policy, aims, strategies, implementation of decisions, and evaluation of institutional performance. Real participation also denotes the ability to change the balance in favour of the majority and to determine who benefits and what is decided in relation to identified objective needs and social demands. Conversely, symbolic or “false” participation refers to actions that exercise little or no influence over the formation of institutional policy or management and create for individuals and groups illusions of wielding power. Real participation is both an end in itself and a means of transforming social development processes in order to improve the distribution of national income in favour of the disadvantaged,
and to influence neo-conservative policies in reducing the gap between the rich and the poor.14

The notion of real social participation presupposes the collective awareness of objective needs and the articulation of social group interests, including educational interests in adult learning and lifelong education. It is a collective rather than an individual perspective. The concept of social demand for adult learning and lifelong education is associated with the recognition and articulation of collective educational needs and their transformation into social demands.

The three dimensions of power

The emergence of social demands and the processes of social participation are related to power relations. Power can be exercised at several different levels and viewed in terms of three analytical dimensions.15 The most obvious form of power is exercised by A within the formal decision-making chambers of society when A participates in decision-making that affects B. Power, strictly speaking, implies the use of threats (physical or not physical) to obtain B's obedience.16 In the second case, power is exercised when A devotes his or her energies to creating or reinforcing social and political values and institutional practices that limit the scope of a political process to public considerations of only those issues which are comparatively innocuous to A. In this case B is prevented, for all practical purposes, from bringing to the fore any social demand and issue that might in their resolution be seriously detrimental to A's set of preferences. Tactics such as threats, coercion, sanctions, co-option and disqualification have been used on committees, teachers, health professionals and retired persons. What those in power

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14 The question of poverty in Latin America is not only about “redistribution” but is also a question of who distributes and how. Numerous studies have pointed out that expanding economic growth alone in Latin American countries is not a sufficient condition to secure a more equitable distribution of national income.

15 Bachrach and Baratz (1962, 1963, 1970) and Lukes (1981) have strongly influenced my theoretical construction of the concept of social participation in relation to the three dimensions of power and the production and reproduction of “multiple poverty”.

16 Bachrach and Baratz (1962, 1963, 1970) differentiate between power (strictly speaking), influence, authority, manipulation and force. From my own theoretical perspective and empirical research, I conclude that all of them are variations of subordinate relations.
are effectively trying to do is to discourage the popular expression of demands so that they need not be treated publicly or by the relevant institutional authorities (Sirvent 1994c). The third case illustrates the most insidious use of power: preventing conflict from arising in the first place. Power may be exercised against the objective needs and interests of subordinate social groups even when the latter are unconscious of the damage being done to their interests and when they fail to articulate any counter proposal (Lukes 1981).17

Is it not the supreme and most insidious exercise of power to prevent people, to whatever degree, from having grievances by shaping their perceptions, cognition and preferences in such a way that they accept their role in the existing order of things, either because they can see or imagine no alternative to it, or because they see it as natural and unchangeable, or because they value it as divinely ordained and beneficial? What one may have here is a latent conflict, which consists in a contradiction between the interests of those exercising power and the real interests of those they exclude.

...... We are concerned with finding out what the exercise of power prevents people from doing. And sometimes even thinking. (1981: 24-25)

My research in suburban areas of Argentina shows that repression and the suppression of participatory institutions debilitates not only the capacity of the popular sector to participate but also their ability to recognise the vital social and human importance of participation.18 The historical repression and

17 In relation to these three dimensions of power, Graham Room (1986) states that it is “...important for the research to analyse how or what happens in ‘abnormal’ times”, e.g. political revolution ....the threats they pose to the dominant symbols and metaphors of the hegemonic world view and the opportunities they open for autonomous learning and action by hitherto subordinate groups. For a theoretical discussion on the three dimensions of power see Sirvent (1994a, 1994b, 1998a, 1998c).

18 I discovered that the repressive mechanisms were similar, both in the context of the role of the ruling class and in the context of internal divisions that undermine organisations. Mechanisms of co-option (absorbing opposition leadership), “internalism” (political party factional struggles), “brutalism” (strong-arm persuasion), “clientism” (patron-client relations) persecution and threats generate mistrust and fear, and therefore paralyse the emergence of social demands and social participation. We discovered that new associations in shanty towns, created before and after the last military dictatorship, though inspired by the slum
systematic suppression of participatory institutions diminishes their capacity to participate and to recognise social participation and education as social and human needs. Participation is perceived as fearful and unwanted social action. History has revealed that people's thoughts and voices have often been silenced by the successive dictatorships in Argentina.

Our research and educational experiences have shown that the weaker the organisation of a group, the greater the likelihood of its abandoning its demands in the face of mechanisms to suffocate them. It is therefore to be expected that in those groups with a long previous history of mobilisation we would find evidence of more articulated social demands for education. Our research has also shown that the mechanisms of social and institutional power in Argentina have weakened the social networks of our civil society. It has become a "weak civil society". Obstacles to the emergence of social demands in relation to poverty, marginality and unemployment are starting to appear. This is the context to the concept of "multiple poverty". 19

The concept of "multiple poverty"

The concept of "multiple poverty" refers to a complex set of "poverties" such as "poverty of protection", "poverty of understanding" and "political poverty". It refers to various unsatisfied needs at a given historical moment. "Poverty of protection" refers to the internalisation of experiences of external violence in daily life through "gangsterism", intimidation and fear. It is an important mechanism of social control and a factor inhibiting the emergence and articulation of social demands. Even the fear of losing a job is poverty of protection.

"Poverty of understanding" is related to factors that hinder access to information, knowledge and reflective thought. We suffer from a poverty of people's social movement of hope, were suppressed by the atmosphere and activity of the military dictatorship as well as the new democratic state. Since 1989, these associations have been weakened by non-decision making behaviour that was induced by threats, intimidation, physical force and factional struggles. The introduction of brutalism and internalism into these associations was like "having the enemy inside", which bred internal mistrust and alienation. The so-called non-decision making repressed social demands, by the evocation of the ghost of repression and fear.

19 For a detailed discussion on the concept of "multiple poverty" see Sirvent (1994a, 1998a, 1998c).
understanding when we assume that facts are understood and accepted as “what must be” and “they can’t be any other way”. In the present context, our common-sense notions of reality are determined by a thinking or mindset which supports neo-liberal economic policies as technical data rather than as a political problem.\textsuperscript{20} The dominant power has to convert its interests into our common sense.\textsuperscript{21} “Political poverty” is tied to factors that inhibit participation in social, political and work organisations.

Multiple poverty is related to social mechanisms of power that inhibit social demands. It is a phenomenon dialectically related to the level of educational risk. This poverty becomes socially pathological when it exceeds critical limits of intensity and duration. In the context of the present neo-conservative ideologies, the situation with regard to multiple poverty has worsened. Neo-conservatism has discouraged social organisations and prevented the emergence of social demands. To the neo-conservative, social order means the dislocation of social demands that oppose the free market.\textsuperscript{22}

However, my research experience has shown that real participation can oppose this neo-conservatism and free market principles, though it is a process that is gradual and sometimes difficult, and because it has advances and setbacks, demands various stages of development for institutional, group and individual change. Participation is not a “game”; it implies breaking with everyday collective ideological perceptions. It presupposes a learning process which makes possible a questioning attitude and a critical awareness of our “common sense”. It is a painful process of distancing oneself and learning. It is important to understand that participation does not develop spontaneously. Less still does it “sprout” from established power. Participation does not come from an “authority”. It is not a concession. Participation is not “granted” or “withheld”. It is a need and a right, which must be learned and won. The right to participate in decisions which affect our everyday life has to be learned.

My experiences show that participation without knowledge facilitates manipulation and symbolic participation. This has important implications for understanding the relationship between adult learning and the future of work. In this connection important questions can be raised. How is it possible to intervene to overcome the situation of educational risk facing the

\textsuperscript{20} Calcagno and Calcagno (1995); Sirvent (1998a).
\textsuperscript{21} Delgado (1995).
\textsuperscript{22} Lechner (1982); Sirvent (1995, 1998a).
majority of the adult population? What educational policies are necessary to overcome the issue of “destiny” and to break the circle of cumulative disadvantage? How is it possible to construct educational opportunities within the context of work so as to generate a social demand for adult learning and to increase the ability of social groups to participate in the decision-making processes that affect their working lives?

**Implications for work and adult learning**

From a political sociology perspective, we need to think about the central roles of the state and the civil society, the former in relation to formal and non-formal adult learning in the perspective of lifelong learning, and the latter in relation to the emergent social demand for lifelong education and adult learning so that these become an issue in the institutional and political arena.

It is necessary to think in terms of an articulation between the state and an emergent social demand for adult learning. Social organisations must work together dialectically. There must be knowledge and awareness of the national and international dynamics of work in order to improve people’s power to influence economic and educational policies at national and international level.

The situation of people at educational risk, and the gap between potential demand and actual demand for adult learning, require that adult education increasingly becomes a priority for educational policies. Potential demand for adult learning should be a priority in education systems. It is impossible to think in terms of equal educational opportunities for the new generation without taking into account the educational risk facing young people and adults who drop out from school. As Rubenson (1994) has said:

Thus it becomes clear that besides reforming the entire educational system for future generations the government also had to address the consequences of an earlier very selective, hierarchically organised parallel school system. (1994: 247)

At present, formal provision of youth and adult education at primary and middle level is not a priority for educational reform in Argentina. On the contrary, the official organisations in charge of national, provincial and municipal education are being dismantled (Sirvent 1996). We consider that the historical neglect of this education has converted it into a weak struc-
ture, which merely submits to the "adjustment" policies of the new state reforms. What is being offered, instead, through the project of the Ministry of Economic Affairs and the Ministry of Labour, and by enterprises and non-governmental organisations, is fragmented provision of work-related training without any pedagogical planning or perspectives.

The business approach to work-related adult education is characterised by its selective strategy, directed to professional executives. There are a whole range of knowledge, skills, competencies and attitudes which senior and junior executives are expected to learn. The restructuring of a company goes hand in hand with special training courses directed towards the needs of the company, without involving the workers at all. In addition, training and academic activities promoted by managers and professionals are related mostly to the promotion of particular kinds of occupation. The lack of commitment to lifelong education and adult education and the lack of real interest in equality are the expression of a conservative ideology that negatively affects education and democracy (Bélanger 1994). It highlights the process of cumulative advantage: the more education people have, the more chance they have of accumulating not only more but also better educational capital.

Within popular education movements, the retraining or upgrading proposals go beyond the pure production logic to take into account pedagogical perspectives emerging from critical thinking, democratisation of universal knowledge and respect for people's dignity and self-esteem. However, there appears to be a decreasing number of training places for individuals and groups within popular education movements. Many trade unions have developed special work-related training courses as part of all-round training for manual and clerical staff. While in the past, these courses emphasised the importance of scientific and technical knowledge as a fundamental tool for the worker's understanding of real work, they now aim at linking everyday and scientific knowledge in a collective whole. Such courses deal with learning through critical thinking, as well as from the point of view of promoting a person's dignity, in addition to satisfying his or her productive needs.

There are also a range of disparate popular education initiatives which aim at enabling people to see their lives with greater objectivity, to bring to it their own values, to participate, to organise, to create and recreate themselves and the groups to which they belong. These initiatives have been characterised by their socio-political, popular, cognitive, episte-
mological and methodological dimensions. However, despite efforts made towards establishing a common policy of critical and participatory lifelong education, it should be noted that these initiatives remain isolated activities. Instead, the business logic of the market predominates, serving the interests of only a minority of the population. Some research\textsuperscript{23} in Argentina supports the validity of the dual market theory in our present time.\textsuperscript{24} In the words of Rubenson:

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The heavy and increasing reliance on employer-sponsored education creates a major dilemma for a system that has started to rely on market forces. There are major inequalities to this kind of education, which is linked to work hierarchy. (...) Not only does the rate of participation differ greatly by level of occupation, but so does the nature of the educational training. Those in higher positions more often follow academically oriented, often externally organised courses, while unskilled workers receive some shorter form of on-the-job training. (1994: 254)
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How can this trend be changed under the present conditions described in this paper? Urgent intervention is necessary at the state level to satisfy the social demand for lifelong learning. The educational policies of the state have to change radically, giving priority to adult education in the context of a lifelong paradigm. This implies developing a global educational policy of lifelong education for all which is forward-looking, creative, autonomous and encourages participatory citizenship. Global educational policies have to be diversified, taking into account the different situations of people at educational risk and going beyond the aims of mere compensatory education for adult or non-formal work-related training.

This global policy should be the responsibility of national, provincial and municipal educational authorities in order to build a network of formal schooling and other non-formal educational resources - from work, political parties, trade unions, social movements, neighbourhood and community associations, to health institutions, the family and the media. To talk today of educational democracy means going beyond the resources of formal education.

\textsuperscript{24} Sirvent 1996; Carnoy 1975; Eng Fong Pang and Liu Pak Wai 1975.  
Segmented labour markets and educational hierarchies are reproduced through formal education and in-job labour training.
However, under present policy in many Latin American countries, the fate of adult and recurrent education will increasingly depend on what happens in working life and the extent to which unions are successful in pushing education and training at the bargaining table.\textsuperscript{25} This is the reason why, in the present situation of a weak civil society and multiple poverty in Argentina, described in this paper, we need to reinforce the central role of adult learning not only to answer or to anticipate social demands but also to generate them through collective discovery of potential participants’ objective needs, and thus to strengthen their capabilities for social and political participation.

How can this be done? From an institutional and pedagogical perspective, any educational activity related to work has to be thought of as an integral educational activity where “the work” has to be converted into an object of collective inquiry and knowledge. Pedagogical activities related to work can be tools for democratising knowledge and culture by providing the means for people to develop reflective thinking and to “possess” scientific knowledge related to work, as well as to economic, political and social issues. One of the key pedagogical issues is to differentiate subjective and objective needs. Methodology has to start from a group’s subjective needs in order collectively to research its objective needs in the light of structural analysis. My research has shown that the possibility for change through participatory action research and popular education also applies to work (Sirvent 1986a, 1986b, 1986c). There is a continual interaction between everyday functional and scientific knowledge, and a collective process of cognitive and empirical knowledge construction. This highlights the need for a more holistic and objective view of everyday life and work, leading to constructive changes in work proposals and collective action. The recognition of objective educational needs and their conversion into social demands can help in breaking out of the “social trap” of the principle of cumulative disadvantage The collective analysis of reality and the creation of new participatory mechanisms for institutional and working life is itself a learning process. It means, in short, generating opportunities to devise a participatory and collective educational project (Sirvent 1994a).

The process of participatory research, popular education and collective knowledge construction enables a social group to become aware of repressive and manipulative power relations. It contributes to empowering

\textsuperscript{25} Rubenson 1994: 247.
the group to express its social demands and right to adult learning, to press for discussing them in the institutional arena of work and to press for change in social relations at work. In other words, it exerts pressure to modify the multiple poverty that the group faces in daily life.

It is necessary to point out the importance of creating pedagogical space not only at work but also in the context of the activities of trade unions and social movements. In all of these pedagogical environments, general and vocational education for youth and adults should not only include the necessary skills and technical aspects of production. It should also improve reflective and creative thinking and enable young people and adults to overcome inhibitory social perceptions of themselves and of the collective possibilities of changing the present situation. It should enable them to question the fallacies of so-called “universal thinking” and to prepare for complexity, structural analysis, reconstruction of individual and collective identities and the recognition of power relations. Looking at adult learning from this perspective, it will have to encourage collective learning and real participation in the decisions that affect daily life. Every pedagogical activity related to work should be an opportunity for people to strengthen their capacity for collective action. As Bélanger and Federighi have stated in their recent work (1999):

This is how educational projects can come to light and be formed, how a collective will can emerge to intervene coherently in the various dimensions of overall adult education policy: the expression of demand (individual rights, collective rights, etc.), reform of educational provision (establishment of education systems, reorganisation of services, etc.), improvement of conditions for the training of adults in everyday life and at work (health, jobs, tax regime, information, cultural infrastructures, etc.).

This means training organised political actors (Bélanger 1999). From my experiences of popular education and participatory action research in trade unions and social movements as well as in the context of teacher training programmes in Argentina, I have gathered considerable evidence to show the possibilities of creating educational opportunities to generate a new demand for adult learning. The challenge is to recreate this demand under the present conditions of increasing economic poverty, multiple poverty and restricting factors in the world of work. I have also discovered the importance of collectively “discovering” the “coherence” of common sense with apparently contradictory ideas, thinking and actions, making it possible
to achieve a “holistic” knowledge of reality and to set in motion pedagogical action for critical and participatory cultural development. As Antonio Gramsci (1959) asserted:

The beginning of critical elaboration is the consciousness of what one really is, that is, “know yourself” as the product of the historical process which has left you an infinity of traces jumbled together without the benefit of an inventory. First of all it is necessary to compile such inventory. (1959: 59)

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Social and cultural contexts of vocational learning in the informal sector: Implications for vocational education and training systems

Madhu Singh

Introduction

Statistics reveal that in large urban cities like Bombay, Calcutta, Jakarta, Mexico City, Nairobi and Sao Paulo more than 50 per cent of the population is engaged in unorganised sectors, in household production and service organisations. The informal sector is characterised by micro-enterprises which require small investments, have combined household and production facilities, and minimal state regulation because of the high cost of legislation. The establishment of one’s own enterprise represents a chance to overcome poverty and provide work to others (Sethuraman 1976). The latest ILO World Employment Report says the majority of new jobs in developing countries are being created in the informal sector, which, according to ILO estimates, employs about 500 million workers (ILO, 1998). The lack of skills of a large section of the labour force as well as lack of sufficient job growth in the formal sector of the economy have resulted in the growth of the informal sector. Yet, the informal sector is making a growing contribution to national economies. But it remains a weak area of governmental policy. People in the informal sector work under unprotected conditions of employment, without social security and frequently under precarious conditions. There is extreme dependence on the fluctuation of the market, intensive investment of time for low income, little chance of accumulating savings and inadequate access to relevant information (Specht 1997). The ongoing privatisation process of previously state-owned enterprises as well as lean-line personnel policy within the public sector are having an exaggerative effect on the informal sector (Corvalan 1997). This has increased competition and resulted in employment and income insecurity for many small entrepreneurs. In the field of education,
people in the informal sector are characterised by low levels of formal schooling, high drop-out rates and lack of access to tertiary education. This is particularly so in the case of women, who make up almost two-thirds of all those employed in this sector.

With regard to adult education, the vocational training and education of the people from the informal sector has long been neglected. Colonial power's legacy in the field of technical and vocational education in many developing countries prevented vocational education from developing local approaches (Crane 1965; Watson 1994). Vocational education failed to support local socio-economic development, especially of the informal economic sector. Multilateral assistance to vocational and technical education in developing countries has concentrated generally on physical facilities for formal technical vocational schools and to the diversification of secondary education through the integration of pre-vocational education into general education (World Bank 1991). There has been a total disregard for local cultures in the transfer of technologies. Technical assistance also completely overlooks the problems that have arisen in many developing countries because of the massive migrations to the cities and the growing informal sector. The vocationalisation of the rural curriculum has not been made attractive enough to promote a demand for vocational education in rural areas. Rather it has been used to stabilise traditional agricultural life by providing a 'second chance' solution to the problem of students who drop out of school without occupational skills, and to curb individuals from rural areas in general education past the capacity of labour markets to absorb them (Grubb 1985). What is more, the issues of diversification and vocationalisation of secondary education have been dealt with purely in economic terms (earning opportunities, better jobs and higher technical fields). But, neither the issue of educational and curricular effects of prevocational education (Foster 1965) nor the issue of the integration of productive work into curriculum have been taken seriously (Córvalan 1988). Despite several efforts to integrate a vocational stream into general secondary education to encourage young school leavers to settle on their own, training objectives and curricula have not been effectively oriented to the goal of self-employment or enterprise development (NCERT 1990). Overall trends point to the fact that public technical and vocational education institutions often have not had a good record in efficiency and flexibility and sometimes are far removed from local cultural and social as well as market realities. The majority of students are pursuing a vocational training that is unlikely to lead to the full-time wage employment they seek. At the same time, the graduates are out of
touch with the working conditions and technical possibilities in small and micro-enterprises. There is little or no attempt to cater for the needs of those who wish to continue living and working in rural areas and who as a result of their lack of skills are compelled to join the urban informal sector.

Since the mid-1980s there have been some attempts by international institutions, churches, foundations and other sponsors to provide vocational training in order to prepare young people for work in the informal sector (Fluitman 1989). The discussion on vocational training and education for special target groups from the informal sector has particularly engaged agencies involved in development co-operation, many of whom are now modifying their sector concepts in the light of the expanding informal economy (NORRAG 1996; Lohmar-Kuhnle 1992). However, the tendency up to now has been one of promoting a state-sponsored vocational education and training for the formal and modern sector and project-oriented approach for the informal sector. As a result, formal vocational training and education continues to cater to only a very small sector of the economy (Boehm 1997b).

In this paper it is argued that if vocational training and education is to cater to both the formal and the informal labour markets, then it needs to take into account the traditions and values of the system of vocational learning in working life. It needs to cater to the requirements of local development and be based on an understanding of the kinds of competencies people in the informal sector want, need and utilise, the socio-economic and cultural contexts within which they work, and how they cope and what skills, capabilities, attitudes and values are required in order to sustain their livelihood strategies. This paper will discuss key issues concerning informal vocational learning and try to relate them to the institutional, economic, social and cultural influences operating in peripheral economic sectors which have been neglected by both official and international vocational education and training programmes. It will propose a vocational educational strategy which is oriented towards a conception of the individual as a whole, and her or his social and cultural context. It will seek to relate systematic learning, based on prior competencies, to the positions individuals occupy within objective structures of society and to institutional and cultural influences. It will first examine the concepts of teaching and learning that have relevance for the informal sector as well the social and cultural contexts of vocational learning. These results will then be used as the basis for recommendations on the design of adult vocational training and education systems.
It is necessary to learn from the informal sector, especially as we are living in a time of major changes in the context of a more competitive global economy. The resulting concerns are not simply ones of employment but also of attaining secure livelihoods and the right to work for all (Lawrence 1998). There is a whole sector of people outside the formal labour market who neither have access to regular jobs at present nor the promise of permanent jobs in the future. These people are finding other solutions to the problem of work, such as becoming entrepreneurs in the so-called informal sector.

It will be argued that the present notion of vocational education and training institutions as means of preparing human capital is too narrow an approach to training. It concentrates too heavily on individuals in educational institutions and in this sense it ignores the wider social context within which much learning takes place, and the relationships – personal and institutional – which actually constitute the vehicles or channels through which learning takes place. It is precisely this relational domain that will form the subject of the ensuing social and cultural analysis of informal vocational learning.

Social and cultural aspects of vocational learning in the informal sector

In the early 1990s, a series of empirical studies were undertaken on the social and cultural contexts of vocational learning in the informal sectors in Nigeria, Rwanda, Nicaragua, Peru, India and the Philippines (Boehm 1997a). This paper will draw upon some of the findings of these studies as well on the author’s own study of the informal sector in New Delhi (Singh 1996). The informal sector makes a major contribution to the labour forces’ acquisition of skills and hence to their ability to survive in the sector. The significance of informal learning has increased as the sector has grown. The majority of the people in the informal sector acquire their competencies for conducting an economic activity outside the formal system of education, mainly through informal avenues of adult learning, which include: traditional forms of apprenticeships, non-formal programmes and informal learning processes. The acquisition of these competencies is necessary if small entrepreneurs are to succeed, be oriented to the market and show profits.

Traditional forms of training

A large proportion of young adults receive their vocational training through “informal apprenticeships” in micro-enterprises of the informal sector
Young people are integrated into daily working life at an early stage. Learning takes place through imitation and identification. Basic knowledge in weaving, carpentry or vehicle repair is passed on from the "Master" to the apprentice. Learning processes are directly linked to production and sales, and the skills taught are necessary for the local market. The use of traditional apprentices is widespread, especially among traditional craftwork (Singh 1996).

The significance of this vocational training system can be seen at two levels: on the demand side, many young people look for a livelihood outside traditional agriculture. Since the prospects for employment in the formal sector are extremely slight, people realise that the only chance for them is to get training in small enterprises in the informal sector. On the supply side, the proprietors of the enterprises regard accepting informal apprentices – together with their family members who help out – as an ideal way of enhancing their businesses without the accompanying overheads and the consequent increase in risk to the enterprise. It gives them greater flexibility to meet demand. Therefore apprenticeships in trades and crafts are often associated with the exploitation of trainees as a source of cheap labour (Singh 1996). At the same time, however, this very condition is the primary motive for training (Overwien 1997). Although in general, the duration of an apprenticeship is governed individually by the progress made by the apprentices, the interest shown by the master in the apprentice’s work and the funds available to him, by and large, short-term apprenticeships are related to the lower importance given to some trades (Singh 1996).

Though there is no general scheme or system of training – no certificates or other objective evidence of the level of performance obtained, there are various informal ways of deciding whether the apprenticeship is successfully concluded (Singh 1996; Overwien 1997; Adams 1995). Apprentices have the requisite skills when they can manufacture the products and have gained experience. The most common methods of acquiring skills are observation of the master and others in the enterprise, the master demonstrating a particular work procedure or explaining what steps have to be taken to do a particular job, learning by trial and error or ‘doing it yourself’. It is rare for an apprentice to ask questions or attend courses. The proprietor is not necessarily regarded as the only model. The other workers are also seen as examples. Training methods are related to both the complexity of the trade and the master’s level of education. They remain basic and simple, all the same. Specific knowledge is conveyed in accordance with the requirements of the
work in hand. When tasks are allocated, the emphasis is on the work to be done rather than on learning objectives or elements of training. There is no theoretical training. Apprentices often start with assisting others and by gradually learning about tools and work processes. Small entrepreneurs demand that apprentices perform private services besides working for the business. The transmission of skills is not logically planned and implemented but is governed by chance, by the demands of the work and the personal relationships with other workers. Trainees are employed wherever there is enough work for them rather than where they can best learn a particular skill.

Socio-cultural mechanisms play an important role in informal training (Singh 1996). An apprentice’s choice of occupation depends in part on social, family and cultural factors. In India craft enterprises, such as work in pottery and traditional weaving, include those enterprises in which particular occupational castes are specialised in skills that are taught and passed on within the family (Singh 1996). As these trades are conducted as caste occupations, people in them are more or less continuously engaged. But there are seasonal variations in the demand for their products. Traditional craftsmen used to be independent: they and their families would control and carry out the whole process of production and marketing, but with the emergence of market societies, a division of labour in production and marketing has gradually evolved.

Although many members of individual castes have moved into new types of work, the social origin and membership of a group is of paramount importance (Singh 1996). Trades are chosen because relatives are employed in them. This provides them with the opportunity to learn distinct orientations, ethics, functions and standards, providing them with guidelines for the specific production process, commercial transaction or business strategy. The difference between ‘production orientation’ and ‘entrepreneurial or business orientation’ is primarily due to family background and is the basis for all ensuing learning experiences and practices in micro-enterprises. Kinship ties play a very important role in the selection of an informal apprentice. The minimum work requirements sought for are trustworthiness, loyalty, family allegiance, work experience, performance and cheap labour rather than just skills and education. Trustworthy apprentices are often offered advances, which are in effect interest-free loans. First, proprietors want to attract particular workers. The acquisition of skills by the workers in this way is planned in advance on a long-term and continuous basis. Secondly, employees accept such advances because they have to cover the immediate costs of a
wedding or an illness in the family. The payment binds the worker to the proprietor until he can pay back the loan. The approval of those already employed is crucial to the recruitment of an apprentice. This process both reduces the organisational costs of recruitment and responsibility for the apprentice and, by relying on those already employed in the enterprise, makes it easier for the apprentice to adapt and to fit into its daily running.

In recent decades, the traditional informal apprenticeship system has changed considerably (Singh 1996). The tradition of the close relationship between the apprentice and the master seems no longer to be so important. The tradition of identification with the master as the model is gradually being eroded. This is attributable, firstly to the collapse of traditional crafts, and secondly to the fact that entrepreneurs in traditional craft trades wish to see their children take up non-traditional occupations. Furthermore, apprentices are considered expensive and complicated. Given that most of the entrepreneurs are confronted by a hostile institutional environment, they find that feeding and training apprentices is an additional burden to them. The reduced demand for informal apprentices is reflected in the increasingly shorter duration of apprenticeships in comparison with those served by the entrepreneurs themselves (Singh 1996).

Non-formal education.

Non-formal education which is organised education outside formal education, is particularly effective in terms of its accessibility, participation and low cost. In contrast to the top-down approach, non-formal educational schemes strive to carry out education at grassroots level and towards greater relevance to learners. They strengthen community feeling and facilitate the questioning of socio-economic and political structures and conditions. Non-formal education has an identifiable clientele and clear learning objectives. Lenhart (1998) has made a typology of non-formal training programmes for the informal sector: These are: (1) Vocational training within the framework of trade-boosting programmes for individuals and groups who are already active in production. The main elements include technical consultation, supply of materials, granting of loans or other direct economic inputs; (2) Vocational training in the form of survival training for young people often comprises practical courses that are imparted as bridge courses to facilitate access to formal vocational training. For trainees to succeed in this kind of non-formal education, a prior assessment of market opportunities is important. (3) Interventions for improving the training abilities of masters in the informal sector. Apprentices are offered a
broader based training than that which their masters/teachers can offer them. Training is provided in different settings: in a production unit where the master has a command of a certain technique; through a mobile training unit at the workplace, or in a formal training institution. Vocational training measures within the framework of community development are parts of a series of activities comprising housing, health, women’s groups, neighbourhood council, counselling, co-operative management, youth work, social work or special education projects.

**Informal learning processes**

Unlike formal learning situations with standardised curricula, informal learning processes are characterised by a lack of structure, absence of an underlying curriculum and a particular time set aside for learning. Learning takes place primarily by doing and through experience and active acquisition, rather than by receptive learning. The learning situations proceed from situations specific to different working and living conditions of persons and groups. Learning takes place in the family, the community and on the street or as a “helping member of the family” in working processes. It therefore often overlaps with socialisation processes. This contrasts with the colonial legacy of formal technical and vocational training introduced in many developing countries. It destroyed the cultural practices of local people. Vocational education and training ceased to be a preparation for life; instead it came to be seen as a means of achieving the necessary qualification to earn a living in white-collar government jobs. The introduction of formal and linear school system meant that the transmission of knowledge was mainly through curricula and textbooks, reinforced by an examination system and in a foreign language. The training courses were held in locations distinct from the actual work situation — a separation counterproductive to the trainees’ relationship to the realities of genuine production processes. Individuals were taught in learning sequences and a certain time frame was allotted for completing tasks.

**Work-related competencies in the informal sector**

Small producers require a wide variety of general as well as vocational competencies. General competencies include cognitive, social and entrepreneurial competencies, as well as dispositions and orientations or personality traits. Work-related competencies are closely related to economic survival and making a living in the context of family, community, work,
physical location and social relationships. They refer to person's ability to earn money and secure a livelihood, as well as to her or his ability to market and service products. Social competency defined as the ability to co-operate and communicate, and to represent collective interests, is central to conducting business in the informal sector. A small producer depends largely on her or his informal relationship with customers; advertising takes place through recommendations of friends and acquaintances; information regarding new machinery is transmitted through personal contacts (Singh 1996). In the light of the above, the conventional division between business and social competencies may be counterproductive for planning management training. Social competencies are also important in organising co-operative forms of production, when it comes to pooling know-how, co-operating in fixing the prices of products and searching for new customers. They help small producers in enlarging the sum of their alternative possibilities, such as reducing transaction costs, enlarging market access, improving quality of products and stabilising expectations of the future. Membership of credit societies makes access to finance easier, in order to meet production costs. The activities of self-help groups aim at creating social security and 'informal entitlements'\(^1\) often through the development of an unwritten code of conduct and sanctions relating to conflict management, informal partitioning of land, protection of members from attack by the local authority and negotiation with the local administration.

Also important for the success of the micro-entrepreneur is the ability to work hard as well as a range of personality factors, dispositions and orientations (readiness to compromise, tolerate frustrations etc.). Literacy and cognitive competencies also make up general competencies. They facilitate the organisation of economic activities and are used to develop communicative skills such as giving advice, convincing and negotiating.

General competencies need to be seen in relation to institutional and economic influences operating in the informal sector (raw material acquisition, infrastructure and marketing). While the complexity of entrepreneurial activity in the informal sector is difficult to capture through imported theoretical

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\(^1\) According to Drèze and Sen (1989) 'while the concept of entitlement focuses on a person's legal rights of ownership, there are some social relations that take the broader form of accepted legitimacy rather than legal rights enforceable in a court .........' 'Extended entitlements' is the concept of entitlements extended to include the result of more informal types of rights sanctioned by accepted notions of legitimacy.' (p.10).
concepts, such as production management, marketing, accountancy, financial and investment planning or personal management, which are usually separated from general competencies, micro-enterprises nevertheless have those competencies. These are well adapted to their economic circumstances and problem-solving methods.

General competencies also need to be seen in relation to livelihood strategies. In contrast to the formal sector, where the state and industry heavily subsidise those preparing for employment, in the informal sector it is the family or household, and the community which are of central importance for securing basic survival needs. Livelihood strategies are usually diverse and often complex. Of central importance is whether people in the informal sector possess social capital and are able to convert this capital into economic benefit and human capital. One of the most important characteristics of the informal sector are the household-based enterprises which combine different trades, various sources of income, credit and human resources to secure daily subsistence and to maintain the enterprises through periods of weak economic activity. The household economy plays an important role, especially as the start capital for a business is often contributed by family members. Migrants from rural areas are able to compensate for their low general educational levels by bringing with them the craftsmanship acquired as occupational castes within their families. Furthermore, they are often supported by a network of social ties in the city (Singh 1996). An important factor for securing a livelihood is the significant role of working in clusters and self-help organisations of micro-enterprises. These may be occupational groups who jointly organise production or trade associations or credit societies. Membership of particular nationalities, families or friendship groups is an important criterion for access to such trade associations. Entrepreneurs with networks generally do better than those operating individually. The explanation given is that they gain information through their network about new technologies, new markets and about opportunities for subcontracting. They are able to improve their economic position by gaining access to markets, sinking transaction costs, enlarging the clientele, pooling knowledge and know-how, and promoting social security by establishing and strengthening social ties. It has been shown that creative and innovative entrepreneurs operating in clusters, make use of networks and self-help organisations. Vocational learning in the context of self-help organisations and networks implies that learning is not only generated in the process of production, but takes place also through other external mechanisms such as 'learning by negotiating' and 'searching for openings'. Learning means a
process of becoming aware of the potential of a network or cluster of enterprises to solve problems, and acquiring those competencies that are needed to implement solutions.

**Implications for vocational education and training systems**

*Recognition of general competencies*

Vocational training and education for the informal sector needs to build upon the competencies with which the people from this sector are often well endowed: their own competencies - their own knowledge, values, skills and attitudes and resources. The higher the physical, technological, market, or socio-economic stress, the greater the probability that individuals and communities from this sector will generate innovations and create alternatives for using their competencies (Gupta 1997). Policies and programmes should aim to acknowledge individual and collective creativity by providing unique identity to local competencies and innovations. A database could be part of the knowledge network linking problem-solving entrepreneurs across the world at grassroots level. This could promote people-to-people learning and lead to the conservation of resources and knowledge around it. At the same time new avenues need to be created to encourage people to take a more inclusive approach (understanding cultural, ethnic and linguistic diversity) to defining and promoting the use of knowledge. New information technologies and communication have to be used so that barriers of language, literacy and localism can be overcome to connect innovators and potential entrepreneurs and investors across regions.

In most approaches to training for the informal sector there is a tendency to promote technical skills, including management and bookkeeping skills. In all these approaches, however, the general competencies or key qualifications are often neglected. It is not the development of technical skills

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2 In the German debate on vocational training, the teaching of 'key qualifications' plays an important part. Key qualifications are identified as process-independent skills, such as flexibility, technical intelligence, perception, technical sensibility and responsibility. Key qualifications are expected to guarantee better adaptation to the requirements of a rapidly changing labour market. Such qualifications are 'knowledge, abilities and skills that do not involve an immediate and restricted relevance to particular disparate practical activities, but rather a) suitability for a
alone but that of general competencies that are the basis for future productivity, adaptability and equity. It is here that the emphasis on quality and attention to relevance can be merged. The greater interest in promoting creativity, problem identification, trying out different solutions, manipulative skills, familiarity with different materials and techniques, insight into the practical application of scientific concepts and principles have led to a reduction of the distance between vocational and general competencies (Ducci 1998).

In the promotion of general competencies vocational training and education should take into account the entrepreneurs' own learning habits, such as learning by doing. It should make the learner the centre of the learning process - not the curriculum, and take into account the specific learning environment of specific groups. The provision of basic education is fundamental for the development of other competencies. Learning processes are more continuous when taught in the framework of local organisations and in the context of a cluster or network of enterprises. General competencies need to be taught in the context of work processes. General and vocational competencies should not be seen as belonging to separate locations. They should be taught not as a separate subjects, but in relation to actual schemes of production for the market. And finally, it is important to balance social capital and economic aspects of human capital.

**Focussing vocational education and training on sustainable livelihoods**

In the face of the changing world of work, educational agencies, governments and private organisations should look at developing 'sustainable livelihood patterns' in addition to job creation (Lawrence 1998). Vocational training and education which may support a sustainable livelihood would include educating more thoughtfully on the concept of vulnerability and risk management in relation to survival strategies. It should promote the management of self-help organisations, encourage participation of groups in political decision-making, and increase negotiating and bargaining positions of disadvantaged sections and strengthen existing group orientation (Singh 1997). It should take into account the economic unity of household and enterprise. Appropriate skills in the basics of business management are needed to improve the ability of small

large number of positions and functions as alternative options at the same point in time, and b) suitability for the mastery of a sequence of unforeseeable changes in requirements in the course of a lifetime.
enterprises to withstand crises (Specht 1997). New information technologies should bring information to the remotest of communities by providing equitable and well-tailored access to information on peoples' rights, to participate in policy dialogue, to legal recourse, to protection of assets and entitlements, and to basic social services. The Human Rights education effort has provided some experience base on which to initiate these kinds of approaches, as well as pointing out some of the difficulties (Lawrence 1998). It should give due consideration to traditional and informal methods of acquiring vocational competencies, taking into account their social and cultural contexts.

Reform of national training and education systems in the context of the lifelong learning perspective

Implicit in the perspective of lifelong learning is the recognition of formal, non-formal and informal learning as equally valuable aspects of the overall adult learning process. Informal learning may be described as the lifelong process whereby all individuals acquire attitudes, values, skills and knowledge from daily experience and from educative influences and resources in their environment. By including learning in informal and non-formal settings, the concept of lifelong learning recognises the increasing blurring of work and learning. There is much learning taking place on the job, and there are many examples of employers setting up training schools. At the other end of the spectrum, schools are setting up their own businesses and providing opportunities for students to learn through hands-on experience (Singh 1998). Lifelong learning entails a holistic approach to competency development. It includes as many sections of the life situation as possible and is broader than just literacy development or remedial education.

Informal learning opportunities are increasingly being involved in a wider learning process. Such learning, whilst not highly structured is to some extent planned and deliberate, employing problem-solving strategies to help people tackle the issues confronting them in their everyday lives. It is marked by a particular context. In working situations, the products to be made or services offered play a certain structuring part. Although informal learning opportunities especially in the voluntary and community sectors, are focussed on issue-based learning and learning through action, they also involve partnerships with formal and non-formal sections in the provision of more formal education for local communities.
The demand for lifelong learning for the entire labour market and all active populations, dramatically increases and diversifies the demand for vocational training and education. Systems of vocational and general education should offer adult education and training for the entire labour market, including the informal sector. In several countries, revised national policies recognise that adult learning has a special role to play in relation to national systems of general and vocational education (Greer 1998). Three issues are at stake in integrating work-related adult learning into the general and vocational education systems (Ducci 1998). (1) Devising flexible, diverse and continuous VET to meet the demands of both informal and formal labour markets; (2) Building partnerships between different providers; (3) Ensuring equitable access to adult education.

The existing systems of general and vocational education should undergo diversification and must be opened to those who work in the informal sector (Boehm 1997). This applies both to the subject matter and to the design of learning processes, for example in introducing experience-related learning and promoting the acquisition of general skills. There are significant changes already taking place. In order to ensure that the labour force can adapt to changing skills demands, the past distinction between general education, training and the real world of work are becoming less relevant. Competencies required in the world of work include general knowledge, techno-professional skills rooted in a sound foundation of aptitudes, attitudes and values. Therefore the platform of solid general education and core competencies are being considered essential for subsequent training and work, emphasising not only narrow technical specialisation but knowledge and skills that are portable across jobs.

Diversification also implies promoting self-employment by combining learning processes with opportunities that help to gain work experience. The curricular implications of diversification have been elucidated by Boehm (1997): orient curricula to work tasks which describe products and services produced; go beyond skill training, by contributing to promotion of general competencies and personal development; take account of the widening technological gap between the formal and the informal economy by catering to both technological levels; and combine technical and vocational courses with support programmes for potential business starters.
Partnership issues

If adult learning is going to respond to the changes in the world of work, then new and complementary roles for the state and the private sector need to be defined. The goals is to bring about a culture of learning, involving government, enterprises, individuals and other stakeholders. Most important is the commitment and greater involvement of enterprises in both pre-employment and continuing training. New apprenticeships should provide a particular focus on the needs of micro-entrepreneurs and on encouraging further opportunities in emerging industries, such as information technology and service industries (Ducci 1998). A minimum standard should be set up for this variety of training suppliers. Small and micro-entrepreneurs should be supported in their training efforts, as they are likely to have very limited training opportunities at their disposal. Difficulties, such as lack of time, technical capacity, financial resources and awareness of benefits, prevent micro-entrepreneurs from embarking on training programmes. This is particularly important as the small and micro enterprises can provide training which is closely linked to the market.

The World Bank’s 1997 Report which deals with “the State in a Changing World” accepts that the state has a role in market-led development by providing the right environments of rules, institutions and core services. Full employment needs an enabling environment of economic and financial policies, an appropriate legal and institutional framework, a competent, effective and accountable public administration, and clear policy priorities to create and expand employment.

Ensuring equitable access to adult continuing education

At a time of rising inequalities and increased vulnerability amongst workers, it is imperative that measures be taken to redress equity imbalances. The social protection of all workers – displaced, the unemployed, home-workers, prisoners, persons with disabilities, indigenous groups, immigrants, refugees - should become an integral part of the opportunities for vocational education and training. These are the people who have always been marginalised and are now acknowledged to be suffering even more from the indirect effects of the same globalisation which offers such opportunities to their more fortunate fellowmen. Vocational education and training related to enterprise can provide them with a chance not only to make a living but also to gain or regain their self-respect, realise their potential as human beings and to participate actively
in economic and social development. Enterprise and self-employment cannot solve all problems, but they can make a significant contribution. Small productive units need training to become competitive, to link with larger enterprises as clients, suppliers and sub-contractors, thus entering into the stream of development and growth. If vocational education and training does not support self-employment of the socially disadvantaged, then society will have to bear other costs, in terms of social security and welfare.

All efforts at improving the system will go down the drain if we do not target women. Trainers and teachers of women should be trained in different teaching and learning methods that promote independent and critical thinking, in addition to social and marketing skills. In a study on competency requirements in the informal sector, it was found that women are more likely than men to sell perishable products (Burckhardt 1997). This has a lot to do with the socialisation of women and their school education which demands adaptation to fixed norms instead of creativity, and memorisation of textbooks instead of critical thinking.

Conclusion

We are experiencing tremendous changes in the area of work. At the same time, even within the same societies traditional and conventional technologies continue to be used and the informal sector is still present. This co-existence as well as the co-existence between the formal and the informal sector is a necessity not only for the survival of people but also for the survival of whole societies. Vocational education and training for the informal sector should therefore be conducted on a system-wide basis rather than segmented-based.

The competencies of people cannot be reduced to vocational skills. They have to be related to social relations, personal development, cultural and human values, particularly in this period of change and transition. Job-specific technical and entrepreneurial skills, although a mandatory condition of survival, are not sufficient on their own. The implications for vocational education and training are many: It is necessary for vocational education and training that adopts a human capital approach to training to shift its attention to the kinds of context and culture which promote communication and mutual learning, where learning is a part of the fabric of everyday life (see Coleman 1988). These kinds of institutional relationships may be both collaborative as well as competitive. Rather than accumulating certificates as evidence of human capital, we need to have a balance of the different areas of knowledge.
across the lifetime of individuals and groups. Equally important is the development of informal institutions and organisations, as they focus attention on people’s empowerment, that is, on the active participation of individuals in their communities, on the ability to make informed choices in daily life situations and to negotiate better conditions for themselves. These activities are often treated by economists and manpower development planners as having little relevance to productivity and competitiveness. They fail, however, to see that wider social relations have a positive value in terms of human capital. Strong families, strong communities and strong social institutions are crucial to many forms of effective vocational learning. This fact is applicable not only to the informal sector in many developing countries but also to all sectors of the economy and human resource planning.

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World Bank
Competencies for innovative entrepreneurship

Günter Faltin

Operating in a competitive and increasingly complex environment demands entrepreneurial behaviour as well as people who have the necessary competencies to work within such a context.

"This is the entrepreneurial age. Entrepreneurs are driving a revolution that is transforming and renewing economies world-wide. Entrepreneurship... gives a market economy its vitality. New and emerging businesses create a very large proportion of innovative products that transform the way we work and live... They generate most of the new jobs" (Bygrave 1994:1). Even if this may seem an exaggerated idea of entrepreneurship and a typical American euphemism, understanding entrepreneurship may give valuable insights into the future of work. It can be argued that assisting entrepreneurship will most certainly constitute some characteristics of the skills and competencies in the future.

The common rationale for this seems to lie in the need to help managers and workers cope more effectively with high rates of change in society, particularly as they contribute to much higher levels of uncertainty in business, and consequently, the labour market (Gibb 1998:1). At the root of the policy concern is the issue of competitiveness and the ability of economies to sustain economic and social development in an increasingly 'open' society. In the labour market context it is argued that there is a need to find means of helping individuals cope with circumstances under which they may need to change jobs, occupations and locations numerous times during their careers. On a national or societal level there is the context of concern for the development of 'entrepreneurial cultures' in society (p. 4).

Understanding entrepreneurship

First, let us take a closer look at how the figure of the entrepreneur is treated in economic theory. Astonishingly, in the literature on economics the
entrepreneur has been largely left out. "Entrepreneurship is an important and, until recently, sadly neglected subject," says Mark Casson (1990: XIII), who could be called the rediscoverer of the entrepreneurial figure.

In the past ten years, research has taken a new direction, bringing out the separate and distinct function of the entrepreneur in contrast to that of the manager. A great deal of emphasis is placed on this difference, because entrepreneurship has a quality of its own. "The essence of entrepreneurship is being different," says Casson. According to him, while the manager must operate under normal conditions and in routine business, successful entrepreneurship requires exactly the opposite qualities.

The entrepreneur is not a capitalist either. This distinction between the capitalist and the entrepreneur goes back to J. B. Say and was taken up by Joseph Schumpeter (see the 1993 edition: 217). This distinction is significant, since the two functions have been repeatedly treated interchangeably in both non-specialist literature and to some extent the history of economics. The difference between a capitalist and an entrepreneur can be expressed in a current bon mot: "The entrepreneur creates jobs, the capitalist opens them up." The entrepreneur has an idea, founds a business, employs people. The capitalist has money, buys into an enterprise and tries to increase the return on his capital. He rationalises or closes unproductive parts of the business, thereby tending to make employees redundant.

Schumpeter, too, describes the entrepreneur as forsaking well-trodden paths to open up new territory and turning dreams into reality (op. cit.:125 ff.). Schumpeter puts the stress on innovation, not on invention. The entrepreneurial function consists not of inventing things, but rather of bringing knowledge to life and into the market (op. cit.:128 ff.). Schumpeter himself assumes that with innovation existing structures are destroyed. He sees the markets, realistically viewed, as dominated by oligopolies. Competition, and with it, a more efficient allocation of resources, arises only through the invasion of these markets by new entrepreneurs, who destroy the existing market equilibrium with their innovations. This mechanism has been referred to in the economic discourse as "creative destruction".

Hans Hinterhuber (1992) points out a special relationship between the entrepreneurial vision and the person. According to him entrepreneurial ideas are an expression of one's own life and professional experience. He even speaks of the "feeling of a mission". This sense of mission must be present to set free the energies needed to implement a new idea successfully.
Hinterhuber gives several examples of entrepreneurial ideas that have marked our society more than others, because their originators had "an idea in the Platonic sense" and were imbued with a sense of mission: Gottlieb Duttweiler in Switzerland, with his idea of breaking down traditional commercial structures and offering products more cheaply, especially to poorer population groups, or Steven Jobs and Stephen Wozniak, with their vision of democratising the computer. Also interesting is the view that an entrepreneurial vision is "an idea of sweeping, classic simplicity" (op. cit.: 44). Going along with this, however, is a sense of reality that ideas by themselves do not constitute vision. A sense of reality means seeing things as they are, not as one wishes them to be.

In developing countries, micro-entrepreneurship is a common phenomenon. Until recently, it has been regarded as forced upon the poor, with no other potential than to accompany and disguise poverty. However, since Hernando de Soto published his El otro Sendero, those assumptions have been called into question. It has come out, for example, that it is not so much the lack of capital that places micro-enterprises at a disadvantage but the bias of bureaucracy and restrictions on micro-entrepreneurs (de Soto 1992). In fact the informal sector in many developing countries produces up to 40% of the Gross National Product, employs more than half of the working population and has become the focus of interest for micro-entrepreneurship. In a micro-credit experiment in Bangladesh, known as the Grameen Bank, replicated by non-governmental organisations in many other countries of the world, Muhammad Yunus, the founder, has set an example of the poor running micro-enterprises in a surprisingly successful way. Since its establishment 21 years ago, the bank has given loans of about $2.3 billion to more than 2 million clients. "I'm against charity," he says, "it takes away human dignity and initiative" (International Herald Tribune, Feb. 28 – March 1, 1998:5). Right through history, entrepreneurship has been shown to offer important opportunities for minority groups and migrants such as the Indians in East Africa. For the majority of the poor who do not find jobs in the formal sector, setting up a micro-enterprise gives them the only opportunity to escape the demeaning conditions of poverty.

There seems to be a growing awareness of the value of micro-entrepreneurship to the individual and to society. No longer is the formal sector and the large project approach considered the only route to economic and social development. Hence, most economists are beginning to recognise the potential of micro-enterprises. And, at some points, they are making their
presence felt already. In industrialised countries, the success of newly created enterprises has moved entrepreneurship to centre stage. It is particularly in the field of Internet-related businesses that innovative entrepreneurship has proven to be an immensely powerful tool.

Entrepreneurship and intrapreneurship

Most commonly, the term entrepreneur refers to a person who founds a new business venture. This interpretation inherently seems to put entrepreneurship out of reach for the vast majority of people. ("I'm not a genius, and I've not the financial background necessary, hence how can I think of entrepreneurship?")

But even the large grown-up organisations have come to realise that...
they lack entrepreneurial thinking. Hence they have an interest in entrepreneurship of a much broader scope, sometimes labelled *intrapreneurship* (Pinchot 1985) defined as the *harnessing of entrepreneurial behaviour within the large company or institution* associated with changes in corporate culture, organisation and structures, often in favour of smallness and decentralisation. The impact of information technology, leading to greater interest in the potential for distributed networks, has reinforced interest in the management of disaggregated organisations (Gibb 1996).

**Entrepreneurship is more than being self-employed**

The German term for self-employed, *selbständig*, which is often used to describe the small shop owner, has another, quite popular connotation: One has to do it all oneself (*selbst*) and one has to do it all the time (*ständig*). This, of course, is not an attractive prospect. One becomes overburdened and overworked.

Self-employment is very often given the same meaning as entrepreneurship. This hinders a true understanding of the possibilities offered through entrepreneurship. Running an enterprise by choice, as opposed to being forced to run it by circumstances of poverty, are two very different situations. This can be illustrated in the following way.

The entrepreneur is like a surfer, with an optimistic attitude towards his sport, building on his own talent and preferences, enjoying the challenge of ever changing waves and winds, quickly overcoming mistakes or minor defeats. The surfer is ready and willing to sharpen his skills, gather new know-how, welcoming all available inputs and using them in a creative and efficient manner.

The self-employed is like a sailor on a battered ship with all the elements conspiring against him, cursing the ever-changing waves and winds, lacking adequate materials and qualifications. Maybe his original occupational choices could not be pursued, or circumstances turned against him: so here he is, stuck with his sailing ship. He is in a desperate mood, seeing nothing but trouble and storm, sceptical towards new ideas and new inputs.

Of course, these pictures are symbolic representations. In reality the problems are not such stark contrasts, but the comparison is useful. It illustrates that the challenges are encountered and dealt with in quite
different ways.

In line with the above distinction, the qualifications required by the self-employed usually make up a long list of skills, knowledge, attitudes and values. The self-employed have to know almost everything in order to survive in business: accounting, keeping an inventory, negotiating with suppliers and customers, knowing the legal aspects of the business, managing employees, maintaining equipment, creating team spirit, and so on. One could have an almost endless list of qualifications and competencies that the self-employed need. It is this perception and the demand for all-round qualifications that makes self-employment a deterrent to many ordinary people. Although it goes without saying that entrepreneurs need to have the key qualifications of general know-how and an understanding of business management, it is certainly counterproductive to require all these competencies to be fully developed in one person, let alone the fact that such persons are rare.

**Applying the principles of division of labour to entrepreneurial abilities**

Developing competencies for entrepreneurship requires applying a division of labour to entrepreneurial abilities. First, people have different skills, attitudes and preferences. It may not be possible to train an engineer in salesmanship if it goes against his professional and personal attitude. It makes more sense therefore to separate these two functions and allocate them to two different persons. There are too many business techniques to be learned. To handle each of them adequately would be simply overwhelming. However, this division of labour does not preclude the acquisition of all-round key qualifications by entrepreneurs through general education.

There is a growing tendency, especially in American studies on economics, for entrepreneurship to be seen as distinct from business administration. The emphasis in entrepreneurship is on innovation and the start-up of a new venture whereas business administration emphasises the organisational aspects of existing units. Although many successful businessmen in the past have combined entrepreneurial qualities with organisational skills, in today’s complex contexts of transformations in the world of work, globalisation and the use of new technologies, it makes more sense to promote a division of labour in the tasks of establishing a business and organising its processes of day-to-day production.
Focusing on the development of ideas

The quality of the entrepreneurial idea is of utmost importance. Whether one can successfully operate in the market or has to fight for mere survival depends very much on the quality of the concept that one develops and refines. Generating a new and innovative idea (in Schumpeter's sense of innovation) is different from simply having thoughts or impressions in one's head. It requires in-depth analysis in the particular business field, and perseverance in trying to create a new solution. Before ideas are put into practice, which in itself is an arduous process, they should be tested to discover whether they offer a strong foundation for a business. If one is going to produce a film and spend a lot of time, money and energy, does it make sense to base it on a weak story?

An entrepreneur does not necessarily need to be an inventor but should be an innovator. To enter the market requires innovative ideas. Lacking this means that existing businesses - businesses which already have customers, experience with suppliers, knowledge about the product and their environment - will have a competitive edge. Innovation is an important ingredient for success and survival. Statistics show that, at least in developed countries, about 50-80% of all new start-ups do not survive more than five years.

One also needs innovation to stay competitive. This is perhaps more difficult than the original start-up because proprietors of businesses often find themselves quite unexpectedly in new, unfamiliar territory. Very often, day-to-day routine and administrative details take up an increasing proportion of their time and energy, when they should rather be enhancing or adapting their original idea or vision. To have an innovative idea in the beginning is, therefore, not usually sufficient for the long-term success of a business. That needs the continuous reaffirmation of innovation. In addition, there are many problems that have to be overcome, such as competition from imitators and problems created by big and influential companies.

De-mystifying creativity

Although it is a common perception that creativity is something rare and outstanding, modern research findings do not substantiate such an assertion. One need not be a genius to create a good idea. There are a number of rules that can be learned by almost everybody. Goleman, Kaufmann and Ray
(1993) have demonstrated how creativity is accessible to each of us. They emphasise the need to keep a “prepared mind”, perseverance, and the ability to allow the solution to a problem to emerge with time. The German researcher Goebel (1990) also found that within a group of about fifty young successful entrepreneurs it was their persistent reassessing of the problem that was their significant common characteristic.

My own experience with students at Free University Berlin is that what they regard as an entrepreneurial idea is something like a flash, a first impression of what they would go for - but far from anything one would call a mature entrepreneurial idea. Usually their idea is not thoroughly thought through or researched. Often, connecting links, analogies and cross associations have not been tried. In short, the potential of generating a powerful idea is not realised. Above all, there is a tendency towards what I would call “fixation on the first idea”. Like falling in love or falling down a trap door, these students are unable to let go of the fixation. A similar fixation has been observed in the advisory work of the Berlin Institute of Entrepreneurship. In my own workshops, called Entrepreneurship Laboratory, I offer a contract, in which an idea is discussed and deliberated upon, but the one who introduces the original idea continues to be its owner. By means of this ‘contract’ the owner gets his idea enhanced and enriched. At the same time, the fear that the idea could be stolen is diminished.

**Adapting to societal values**

We should be aware that it is values which motivate entrepreneurship and it is a value system that creates culture in society. Max Weber has described this phenomenon most strikingly and in depth. "For Weber the main motivating factor for the entrepreneur was religious belief or the Protestant work ethic, which established social norms that discouraged extravagance, conspicuous consumption and indolence. The result was higher productivity, increased savings, and investment, all factors which are vital to growth." (Kolshorn and Tomecko 1995:3). In a time where we become increasingly aware of our limited resources it seems not too far-fetched to predict a comeback of at least some of these values.

Although we cannot impose a set of values on entrepreneurship, by creating a culture of entrepreneurship and by opening up the field to more groups in society that are not traditionally linked to business, we can expect an input of more values, new patterns of problem-solving and new ideas into
entrepreneurship. Entrepreneurs will be seen to be more in tune with society, rather than being viewed simply in terms of short-term profit-making.

Let us assume that an entrepreneur, not unlike an artist or a scientist, wants to create something extraordinary and unique, and make a name. Goebel (1990), in his survey of young entrepreneurs in Germany, describes the positive aspects of doing something that nobody else has done, which sets free tremendous energy. It makes the person capable of working hard and effectively even under extremely difficult and adverse conditions (p.87). We should recognise and encourage such attempts. It will enlarge and enrich the pool of entrepreneurs. Not least, they can enhance the standards and attractiveness of entrepreneurship in society. We have to cast the net wider to create a more vivid and diverse culture of entrepreneurship.

Entrepreneurial ideas must be woven into the fabric of societal values and shared problems. What Gareth Morgan (1991) demands from managers (p.292), is even more valid for innovative entrepreneurs. According to him, indifference to social problems scares the public, undermines confidence, and almost always backfires, especially in the long run. Entrepreneurs of the future will have to develop a much greater sense of responsibility, not for lofty moral reasons, but for their survival and success².

² Does it pay in real life to tune in with society's values? At least there is some anecdotal evidence. According to Lipper International, an agency that evaluates investment funds performances, American investors who put their money into socially screened funds did better than their counterparts, who put their money into ordinary funds (Not long ago the idea of screening funds for their investment philosophy and emphasising on social issues was the target of all kinds of jokes among the Wall Street community).

A possible explanation for this phenomenon could be that it is not so much social criteria that is given as a reason for good performance, but managers' willingness to understand and follow their customers' philosophies and needs, recognising new trends at an early stage and reacting accordingly.

A typical fund of this kind “does not invest in companies that manufacture tobacco, alcohol, nuclear power, or derive more than two percent of gross revenues from the production of military weapons or supply services to gambling operations”. Stocks that pass this screen - which is fairly typical of most funds – get priority from investment managers if they practise good “corporate citizenship”, like putting women and minorities on their boards and in top management positions, having strong benefit programs for employees and “progressive policies towards gays and lesbians”, showing „respect for the natural environment‟ and making “safe and useful products”. (Washington Post, 7.2.99)
My work in the context of the "Entrepreneurship Laboratory" also brings me to the issue of values and entrepreneurship. I like to invite participants from extremely different disciplines. This opens up a wide spectrum of new ideas with which to play with. I try to be wary of people with dogmatic and authoritarian attitudes. I like to enrol participants who display curiosity and are aware of societal issues, and who point to the new directions and trends in society. I also prefer participants who are outsiders in their field. It is this mixture of people - as well as clear-cut structural and methodological inputs from my side - which promotes new and powerful ideas. As a by-product, an increasing number of participants are unwilling to wait for policies and initiatives from political parties or governments. Instead, they themselves recognise entrepreneurship as a promising tool for change.

Environmental concerns offer a fertile breeding ground for entrepreneurial ideas. Social welfare and public service projects are also frequently raised. We may even think of new approaches in which more imaginative, less bureaucratic solutions are found to deal with delinquent youths or persons with disabilities. Although these areas and fields are usually regarded as non-profit and non-business areas, it is precisely here that one can combine entrepreneurial spirit with the spirit of social commitment and at the same time enlist the participation of people who lack an entrepreneurial background.

**Refining the idea**

After the entrepreneurial idea has passed through the explorative phase, has acquired an innovative core and has proved - theoretically - to provide a competitive edge, the next step has to be its refinement. Idea development is a process of "opening up" to new horizons and contents. Idea refinement is a process of focusing, of going into details. Without opening up, we will not introduce an innovative part into our business idea; without refining, we will not get the idea to run smoothly in real life. Refinement means more than just giving a finishing touch. The questions that need to be addressed here are: Are there any areas left for further improvement of the idea? What developments have to be watched carefully, and how could these affect the original idea?

An important aspect in the understanding of idea refinement is the notion of "synergies". Is there anything that can be used that someone else...
also uses or needs? Are there any by-products, for example, that offer spin-offs? Is my input also someone else's output? The Thai farmer Mahaju provides an excellent example of how to use synergies. He invented a production cycle consisting of pigs, ducks, fish and rice, in which the waste product of one stage became the input of the next stage. The field of synergies is a field which offers the creative use of existing potentials and is useful in refining entrepreneurial ideas.

Refinement means the chance to anticipate mistakes even before implementing ideas. It means the chance to study future customers more carefully, possibly by doing some more detailed research on them, to get as much precise and intimate knowledge of target groups as possible, to find out whether pre-financing, payment in advance by customers, etc., is a possibility. Idea refinement also relates to future business partners. It means finding out who would be one's most cost-effective and reliable supplier, advisor, tax consultant and so on. Part of this is encompassed in the traditional concept of a “business plan”. Frequently these people can provide knowledge for further improving one's entrepreneurial idea. Finally, refinement also means anticipating one's market-entry. It means refining one's strategy to counter possible imitators of one’s idea, to make sure that one is acknowledged and accredited for the innovation.

Innovative entrepreneurship needs curious eyes and an attitude that there are plenty of discoveries still to be made. New participants in the “Laboratory” often tell me that they feel they live in a world where everything exists already and is merchandised. In fact, if one goes through magazines and sales catalogues one is tempted to feel the same. Is it true that all our reasonable needs have been met already and that the products for those needs are on offer? I do not believe that the products for our needs have already been developed. In fact it is quite the opposite. We are in need of a new breed of entrepreneurs, who, embedded in their social culture will develop a better understanding of their contemporaries' needs and bring with them a childlike curiosity, humour and perseverance.

Implications for adult learning and the future of work

1. Our existing educational system has failed to facilitate an adequate approach to entrepreneurship and maybe to dealing with real-life situations in general. Ivan Illich pointed out that most learning takes
place in out-of-school contexts and is the result of unrestricted participation in real-life situations. Even educational projects that combine education with production, or those that introduce school-run enterprises do not really reflect the reality of the market. There is quite a different lesson to be learned from the real functioning of markets. Entrepreneurial ideas, quality and pricing must fit people's demands. Customers and staff are the people one depends on. Building reliable relationships is one's most valuable asset. Participation in community matters is necessary to deal with formal and informal power structures.

2. Intrapreneurship could induce a profound change in educational goals and maybe the orientation of job seekers. Normally they offer their certificate of education, and wait for an employer to buy into it. Were they to offer an entrepreneurial idea or mind-set, their bargaining power and chances would immediately improve – as would the potential of the company that hires them! How can they deal with each other? The applicant could say, "If you employ me, I am willing to put my business idea into practise in your company." This is an attractive offer for a company that lacks innovative entrepreneurship. The deal would also be attractive for the applicant. Since he would avoid the burden of establishing and running his own business administration. It would be a novel approach and it would be interesting to see how the mutual benefits could be negotiated.

3. Providing young people with appropriate entrepreneurial skills means essentially developing programmes with a strong pedagogical emphasis upon encouragement of creativity, problem-solving, development of leadership skills, decision making, risk taking, initiative, persuasion, negotiations, selling and a variety of other life skills. Such pedagogy can be developed within any curriculum context: it does not necessarily have to be business-related (Gibb 1996: 26). This is not to be confused with training in business administration, which does not provide real insight into idea generation and the start-up of a new venture.

4. At first sight, entrepreneurship seems to offer access only to rich and highly qualified people, but entrepreneurship is a field open to everybody. The emphasis has to be put on creativity by de-mystifying the subject (it is not for geniuses only) and by providing tools and a
creative setting to work on idea development. Entering the market place goes along with having a new, innovative idea which is thoroughly thought through.

5. The concept of the market economy as a set of rules has neither inherent value nor inherent direction. Its “value”, if one wants to call it that, is to lead to the most efficient use of resources. Economists tend to regard this lack of a value system as an advantage. Almost everybody else does not. Given that it is values that motivate people, the best option is to create a culture of entrepreneurship to which people feel attracted and have open access. To have entrepreneurial ideas woven into the fabric and shared problems of society will not only improve relations with customers but also with public opinion and the media. Environmental concerns and social concerns offer a fertile breeding ground for entrepreneurial ideas (“take a social problem and turn it into an entrepreneurial idea”). The challenge for adult learning could be to make entrepreneurship understood as an opportunity for active participation in society’s affairs and even in those fields that are commonly regarded as the exclusive domain of politics.

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UNIFEM programme in entrepreneurship development for women: an experience from Lebanon

Randa EL Husseini

Introduction

The long war in Lebanon has resulted in massive human and physical destruction. In addition, because of the Gulf war there has been a decline in migrant remittances, impoverishing many Lebanese families. The resulting economic crisis added to the decrease in fertility rates and expanding urbanisation, have led to increased participation of women in the labour force, as providers of secondary and, in some cases, primary incomes for their families. However, in spite of the higher participation of Lebanese women in the labour force compared with women in neighbouring Arab countries, it is limited by the scarcity of employment opportunities, and by women's need to balance economic activity with family responsibilities. As a response to this, many women have turned to the informal sector, where business is precarious, earnings are often very low, and where there is virtually complete lack of support services, including adult learning opportunities, and benefits.

The UNIFEM/UNDP project came into being, with the aim of improving the socio-economic conditions of women, by providing the support services needed by their small and micro-enterprises. The project is executed through institutional support to the Ministry of Social Affairs, and specifically to its Community Development Centres (CDCs) and the Social Services Training Centre (SSTC), in order to strengthen their capacity to provide training, counselling, links with financial institutions and marketing services for potential women entrepreneurs.

This paper starts with a presentation of the macro-economic contexts, challenges and issues. It then describes the situation with regard to the training of trainers, the training of potential women entrepreneurs, problems faced and the response to them. It will conclude with the economic
empowerment plan 1999-2001 of UNIFEM, as well as with the implications of the project for adult learning and the future of women’s work in Lebanon.

**Current employment status in Lebanon**

In its intensive networking efforts for improving the impact of the project interventions and pushing for collective action towards enhancing the work environment, the project participated in an ILO workshop in Beirut from 3 to 5 February 1999 on Employment in Lebanon, which brought together a group of representatives from the government, the labour union and the employers. The information recorded is being reported in this paper in order to give some insight into the macro-context of the project, especially that concerning employment conditions and enterprise development programmes as these cannot be treated separately from the macro-economic framework.

*Employment characteristics and data*

Since Lebanon has limited capital and physical resources, it has to rely on its human capital, which is the nation’s competitive advantage and a means of promoting economic growth. The population is estimated at 4 million, with an annual growth rate of 2.4%. The active population is estimated at around 1.36 million (1997), i.e. 34% of the population count, with an increase from 30% in 1987 and a further increase from 26.9% in 1970 (Central Administration of Statistics on active population in Lebanon). The female active population represents 21.5% of the total active population, with an increase from 17.3% in 1970. However, these figures do not account completely for female and male employment in informal sector activities, daily employment, seasonal employment and family aid.

The sectors of commerce and services absorb the majority of the labour force with around 65% including administrative employees. The share of the labour force engaged in agriculture was 9% in 1997 compared with 29% in 1970, a fact which correlates with the declining share of agriculture in the total economy. Employment in industry, construction, and energy maintained almost the same levels recorded in 1970, around 25% of the total labour force. Female workers are concentrated in education (24%), service sector, health and social assistance.

The private sector has always been the prime engine of economic life in Lebanon. It absorbs around 80% of the labour force, compared with 14% employment in the public sector. Recent available statistics reveal that a
total of about 198,000 establishments are operating in Lebanon, of which 90% are employing less than 5 employees. The permanently salaried population represents around 64% of the total labour force, compared to 59% in 1970. Independent workers represent around 25% of the labour force and are mostly engaged in transport and communication activities, agriculture and commercial activities.

The available unemployment data in Lebanon show that around 8.5% are unemployed, 11% are under-employed and 5.8% have seasonal employment, with obvious trends towards an increase in the volume of the informal sector, child labour and poverty. Unemployment rates showed an increase after 1990 as a result of the Gulf crisis and the reverse migration into the country, thus increasing the supply of labour. A concentration of the unemployed is detected in the 20-39-years age group, constituting 60% of the unemployed population in 1997, and mostly those who are seeking jobs for the first time. The unemployment period is 13 months, and 45% of those who present applications to the employment office are holders of university degrees.

Next to the unemployment problem and the need to find jobs for the ever-rising (3 per cent per year) demand for employment each year comes the problem of wages. The minimum wage reached a low of $64 in 1990, and increased to $191 in 1996, at current prices. It was only a 37% increase in terms of constant prices (Consultation and Research Institute). Since 1996, and despite the inflation rates recorded during the past three years, no wage adjustment has been taken into account for workers in the private sector. The 1996 wage adjustment, is expected to be implemented in 1999 in the new salary scale for public employees. Recently released statistics reveal that the average monthly salary is around $450 to $600 (1997) (about 2.3 times the minimum wage); it is necessary to know that the poverty line lies at $750 to $800, and around 21% of the labour force do not draw proper wages. Disparities are also recorded in the level of wages based on gender, work status, geographic area, occupation, etc. The average monthly wage level for females is estimated at $372 (Consultation and Research Institute). Furthermore, daily paid male labourers earn twice as much as daily paid female labourers for carrying out similar agricultural tasks (daily pay for males is $13, while the daily female pay is equivalent to $7. (PRA carried out in rural areas of the country). In the poor region of the Beka’ around 51% of female workers earn less than the minimum wage, compared to around 20% for males.
Macro-economic challenges

The destruction caused by the war affected the physical infrastructure and service base of the country and slowed down private investment. Lebanon is challenged by two competing goals: firstly the reconstruction (which means more investment in social security and social safety nets), and secondly the restructuring of its economy and finding its competitive advantages. The other macro-economic problems affecting the Lebanese labour force are:

- The GDP is not yet back to the 1974 levels. The major factors contributing to the remarkable slowdown in GDP growth are the high-interest treasury bills issued by the government to finance its budget deficit, causing local deposits of foreign capital to rush into no-risk and high-profit investment, thus competing with the private sector on available financial resources.

- Stabilisation policy adopted by the government: an improvement was recorded in the exchange rate of the $US vis-à-vis the Lebanese pound, however the consumer price index continued in its ascending trend.

- A surplus has been recorded in the balance of payments over the last few years as a result of the influx of foreign capital, attracted mainly by the high levels of interest rates in the Lebanese treasury bills, although it was subject to shocks concurrent with the maturity of old bonds. Against this surplus, the annual balance of trade figures continued to record a huge deficit.

- The Central Bank gross reserves in foreign currencies displayed remarkable improvements, rising from $2.2 billion at the end of 1993 to $6.4 billion at the end of 1998. However these reserves were subject to alternating trends as a result of the interference from the central bank in the market when supplying/purchasing dollars to maintain monetary stability.

- Since 1992, the percentage of deficit to total public spending has not fallen below 39% and reached a high rate of 59% in 1997. These huge rates of deficit came as a result of the unmanageable spending, under-collection of revenues, and the growing debt service representing around 41% of total spending in 1998.

- In 1998 The net public debt represents around 111% of the GDP (LL 27534 billion), and 80% of the revenues equal what is required to service the public debt. In 1997 The government started substituting the internal debt by increasing the weight of external debt, which had started
to constitute around 23% of total debt after having been of the order of 13 to 15%.

- The private sector which is the engine of the Lebanese economy has not benefited from the rehabilitation of infrastructure launched by the government, and its effect on the development of the economy is still limited. The investment rate is weak as a result of the persisting ambiguity concerning the new economic role of Lebanon in the region.

- Construction spending ($4.5 billion from 1993 till 1998) was not fully integrated into the economic activity, and the major part of spending (70%) flowed outside the country (foreign labour, imported machines and equipment, and profit for foreign construction companies.), and was not fuelled back into the national economy.

- Various economic sectors are suffering from structural problems: these include the lack of competitiveness due to increasing production costs (capital, electricity, land..); operation below optimal capacity, at levels which do not exceed 20 to 30%; inadequate production quality; and lack of sources of financing. As a result of these problems, the productive sectors are incapable of properly upgrading the skills of the workers to improve their productivity, and hence their income. In 1996, the available statistics showed that only 17% of the labour force received any kind of in-service training.

- Technical and regular education systems are not adequately responding to the needs of labour, due to the absence of policies to organise the relationship between educational institutions and employers.

- Competition with foreign labour, especially the unskilled and semi-skilled labour categories, increasing the unemployment rate among the low-wage earners and causing money to flow out of the country.

**Issues to be tackled**

At the end of the workshop, the participants agreed on the following recommendations:

- The difficult economic and employment situations call for the urgent instigation of a more intensive talks between the government, the private sector and the labour unions in order to identify the different scenarios of growth and effects of globalisation and trade liberalisation on the national labour market.
The problem of wages should also be carefully addressed since the minimum wage and the average wage do not match living requirements and are still below the poverty line of households. Social allowances and safety nets also need to be restructured.

A new legislation environment is needed to protect the labour force against the negative impact of globalisation, and the various forms of labour contracts, such as subcontracting for instance, which do not protect employees.

There is a need for an industrial policy to limit imported products, protect local industry, and strengthen competitive capacity, by adapting the structures for facilitating the introduction of new technology.

There is a need to upgrade the skills of the labour force through strengthening the educational system and linking the system to the requirements of the market.

The real issue was stated as being that of social security, and the need for a new vision and new legislation in this respect.

A more suitable environment for private investment is needed. The economy should be decentralised in order to alleviate the regional imbalance and create the various links among the different economic sectors that will allow the development of higher value-added activities.

High production costs should be reduced by first lowering the interest rates on capital.

Enterprise development should be encouraged and supported through the setting-up of a superior council for enterprise development.

Women's work should be supported and facilitated so that it can make a greater contribution to the national economy.

*Training of trainers: social workers from the Ministry of Social Affairs*

During its early phase, the project has been active in setting up the foundations essential for institutionalising entrepreneurship development programmes, thus ensuring the sustainability of the interventions needed beyond the duration of the actual project. It focused on building the capacity of the Ministry's affiliated institutions (the SSTC, and the CDCs) to integrate entrepreneurship programmes and deliver business development services to Small and Micro Enterprises (SMEs) run by women.

It implemented a series of Training of Trainers (TOT) schemes in Start Your Own Business, business counselling, follow-up methodologies.
and other related topics, including participatory rapid appraisal and gender orientation. The TOT courses were followed by giving most of the trainers several opportunities to act as co-trainers in courses directed at potential entrepreneurs. This method was found to be constructive in further training of the trainers, and, as a result, a team of eleven trainers and fifteen co-trainers are now considered to be the project link at ten CDCs located throughout the country’s five provinces.

Problems faced by trainers

However, most of these trainers are not yet able to provide the professional support expected by the small and micro-entrepreneurs. The problems faced by the project in training the trainers and the enterprise development programme through the Ministry of Social Affairs have been summarised as follows:

- The dominance of the “social welfare” approach in the provision of services;
- The CDCs’ mandate is not yet properly set, and most of the CDCs lack proper planning experience. The CDCs activities generally lack focus, being scattered and non-integrated in a comprehensive programme, with little follow-up on the impact of their different interventions (vocational training, awareness campaigns in health and social issues, primary health care...);
- The low salary of staff causing a problem of sustainability;
- The relative absence of qualified staff in order to reach a larger number of women;
- Lack of adequate knowledge of characteristics and needs of the different target groups;
- Little knowledge in the identification of training needs;
- Confusion in applying selection criteria of participants for training courses;
- Lack of computer skills and the relative absence of a foreign language, which limits the exposure of staff to international experience and literature;
- Lack of training materials that can meet the needs of various target groups, urban and rural areas;
- Complexity of some of the training materials available, particularly the forms for business plans, which do not fully meet the needs of micro-projects;
Weakness in follow-up of women graduates from the Start Your own Business courses;
Little knowledge in measuring the impact of training and in monitoring the results;
Relative absence of information and literature relevant to micro and small enterprises, as well as databases and directories;
Relative lack of support services to SMEs.

Training of potential women entrepreneurs

To date more than 1000 women trainees have participated in the training programmes of the project: in business awareness and in how to improve skills for starting or expanding a business.

The full course lasts between 10 and 12 days, with two to three day intervals after the end of each main session. The intervals are scheduled so as to allow the participants to gather the information they need to fill in the market, production and feasibility forms related to their chosen business idea or for the business they wish to relaunch or expand. The first part of the course deals with the participants personal traits, the entrepreneurship pre-requisites, the evolution of a business idea and its elaboration, and the choice of the most suitable project according to personal and market criteria. The exercises are implemented in a participatory way through games, role-play and brainstorming sessions. The second part includes the market and production laboratories. The market lab comprises the marketing skills and strategies, costing and pricing, consumer purchasing power, and the various factors affecting the market. This is followed by distributing the market forms to be completed by the participants. The production lab shows the participants the steps required in setting up a business and the management skills required to achieve the optimal output. This is also followed by a break in the classroom training so that the required information can be found pertaining to costs and revenue, the description of the production process, or the means by which the service is to be delivered, taking into consideration the estimated potential customers and existing competitors. The three final days are devoted to putting together the business project and conducting the feasibility study, along with establishing the contact with credit institutions in order to negotiate access to financial requirements.
Problems faced in the training of potential women entrepreneurs

The follow-up to the first nine Start Your Own Business (SYB) courses (implemented during 1996 and early 1997) showed that an average of 30% have succeeded in starting and/or expanding their enterprises, even though only an average of 15% had access to credit. It was also observed that the training and project interventions have mostly benefited the lower and middle income trainees, and they were not very helpful in the case of the poor and the very poor. The scarcity of the required resources for helping women graduates from the training courses to develop their business ideas into feasible projects left a great majority of the trainees in a state of frustration. They were also facing two other main problems:

- Business ideas proposed by participants are traditional ones.
- Marketing problems faced by SYB graduates are, in many cases, related to the business idea selected.

Realising that shortage of credit was one of the important constraints impeding the promotion of women SMEs, the project is intensifying its negotiations and discussions with the credit institutions. It has also been involved in preparing a project proposal for creating a new credit scheme. The credit institution has funds and is currently preparing the launch. The training courses have also been halted until the project and the host organisation have established effective links with existing institutions that can provide complementary support services (in particular credit facilities).

It was also realised that the women targeted by the project need training in new, non-traditional skills so as to improve their competitiveness and help them engage in more profitable economic activities. The project focus is on entrepreneurship development based on women’s existing skills; the provision of jobs and training of women in new lines of self-employment is beyond its scope. Therefore, it is trying to strengthen links between its business training and the technical training needs of women entrepreneurs. These links are being made with the National Employment Office, the Ministry of Social Affairs’ and Maison de l’Artisan, as well as the technical and vocational training institutes concerned with the upgrading of technical skills and marketing.
Thus, the project is planning to:

1. Incorporate gender dimensions in enterprise development programmes of the institutions concerned, for which a manual on gender and SMEs is being prepared, and this will be used in training the trainers, service providers and the trainees.

2. Initiate research on entrepreneurs and problems faced. Different thematic studies (gender and SMEs, Laws and Regulations, and Marketing prospects) will be implemented and the results will be put into the hands of women at the business counselling centres.

3. Prepare and analyse the case studies in order to assist in formulating/identifying possible policy level inputs that may help to make the economic environment more conducive and enabling for the stimulation of micro and small enterprises.

4. Develop a wider strategy within a deeper appreciation of the country’s socio-economic context, where not only training is provided but work is also conducted on the macro-economic issues.

5. Give particular attention to vocational training, which can help in the generation of innovative business ideas, and coordinate the incorporation of entrepreneurship training into technical programmes.

6. Concentrate on the business counselling centres’ operation. The project trainers/counsellors are expected to do Participatory Rapid Appraisal research, mobilise the local community, and do SMEs needs assessment before selecting a project’s beneficiaries and the subsequent implementation of training tailored to their needs. They are also supposed to create all the different kinds of databases, including those for the locally available support institutions, as well as to develop appropriate monitoring and referral systems for the networking assistance to be provided to the community surrounding the CDCs.

7. Disseminate publications on procedures for setting up a business.

8. Devise new approaches to be adopted in the creation of new businesses and diversify these approaches for the support of the micro and small enterprises.

9. Identify new roles for micro and small enterprises support institutions within globalisation (as a major force that will modify the environment of the micro and small enterprises).

10. Work on facilitating access to credit for the entrepreneurs, and assist in devising new credit schemes for solving the issue of access to credit.
11. Promote and strengthen a club for the project beneficiaries; this is expected to act as a lobby movement, and a forum for articulating the needs of the women entrepreneurs and strengthening their voices, as well as exchanging experience and peer counselling.

12. Network and coordinate with other ongoing projects: the UNDP poverty mapping, gender statistics, and the UNDP/ILO employment strategy, the national employment office.

13. Coordinate with marketing channels, i.e. Maison de l’Artisan, Chamber of Commerce, Industrialists Association...

The response made to some of the problems faced

The UNIFEM/UNDP project in Lebanon, in cooperation with the UNIFEM regional office and the United Nations Economic and Social Commission for Western Asia (ESCWA) have already addressed a number of these problems, though more still needs to be done. The following have been undertaken to remedy some of these problems:

1. Business awareness courses have been introduced on a large scale, as a selection process for Start Your Own Business (SYB) course participants. These courses also helped the organisers to better understand the needs of the target groups.

2. Training materials have been modified, following a quick assessment of the needs of the target group, and the evaluation of the courses. The training curricula are being further adapted with the introduction of a component on legal issues and the available referral services, similar to the component compiled for the credit sources.

3. Needs assessment of the target group has begun through the Participatory Rapid Appraisal techniques, though it is still at a very limited stage.

4. Follow-up of SYB graduates is being implemented in a more systematic way, and databases are being established.

5. Documentation of the training courses is being introduced in and is a useful tool for assessing the participants, and improving/adapting training materials.

6. Training materials on business counselling have been developed by the UNIFEM project in Jordan and the material have been tested and adapted in the training of the Lebanon project coordinators.
6. Furthermore, ten pilot CDCs were equipped with the required computer hardware and software, and the designated staff/project coordinators have just completed their work-plans, and they are currently attending computer courses. It is hoped that these preparatory activities will enable the project to give the CDCs/pilot business counselling centres a free hand in the planning, preparation and implementation of the various activities targeting women potential entrepreneurs.

7. The project joined in the regional training of trainers events, organised by UNIFEM and ESCWA. The most notable was the "Simulation Exercises and Learning Lab development Camp" in Amman from 6 to 11 December 1997. The Camp, implemented by an international SME expert, was very constructive in better understanding methods of identifying the problems and needs of different target groups, and in devising mechanisms that can help the trainers in designing new training modules and learning labs.

8. Last but not least, the project participated in the organisation of missions, meetings and workshops for the setting up of a regional technical unit to support the projects aimed at developing the SME sector in the Western Asia region. The establishment of this unit is justified by the growing needs being manifested by the institutions concerned in the promotion of SMEs. The experience of these institutions is very recent, and the available expertise is not yet fully developed. Furthermore, no institution alone has the capabilities and qualified staff to address all its needs in the field of SMEs: material development, needs assessment, impact assessment of training, business counselling, follow-up, databases, etc. And, it is more cost-effective to address certain needs (especially the training of the human resources, and the development of material) at the regional rather than at the national level.

An opportunity for the project: the new UNIFEM programme on women’s economic empowerment to be started in 1999

The United Nations Development Fund for Women (UNIFEM) is an activist donor agency and a catalytic organisation that sets new directions for its constituency of women. During this year and the three years to come 1999–2001, the fund will be focusing on women’s economic empowerment, especially in the Asia-Pacific region, building on the fact that “Despite the negative consequences, economic crises represent an opportunity to
consequences, economic crises represent an opportunity to influence and shift mainstream thinking”. The economic empowerment programme will define key development problems and opportunities for women in the region that could successfully be addressed by UNIFEM, given its comparative advantage, resource base, past experiences and current work in progress.

Thus, the programme will work first on the synthesis, consolidation, and refinement of existing work, for the consolidation of recommendations and advocacy positions that have emerged from the various projects. Parallel to this, it will also focus on mapping out the paths for women’s economic empowerment, to reshape gender-skewed rules of the game, reshape the market, enlarge women’s economic choices, and expand their ownership and management of assets.

The focus will be on two questions: (1) What is happening in the marketplace in terms of new issues, trends and events? And what kind of market conditions would empower women? (2) What kind of economically empowering capacities do women need in order to expand their market share and increase their assets?

The implementation of this three-year programme will be based on the following core activities: advocacy, brokerage, constituency building, and regional meetings aimed at discussing business strategy and organising trade fairs and catalogues of women’s goods and services. It will include:

- Monitoring and analysing emerging market trends and economic issues of relevance to women in order to ensure a true representation of the economic situation and contribution of women. Over the years, the East and Southeast Asian regional office has collected and analysed a significant amount of gender-desegregated data on the economic role and contribution of women, and has produced a briefing kit for the dissemination of information. A project entitled “Globalisation and sustainable livelihood: a gender perspective” will be launched, in addition an online news service is to be set up as an ongoing monitoring vehicle on an everyday basis. The aim is to ensure a true representation of the economic situation and contribution of women, and establish the links needed between the specific realities of women’s lives and specific policies, regulations, and plans, so that the limits of generic approaches to gender policy-making are overcome, and policy-makers can be made aware of the need for more gender-sensitive policies.
Engendering national censuses and developing gender-sensitive statistical databases in relation to women’s economic role in specific markets, sectors and sub-sectors of relevance to women’s economic empowerment, women’s ownership of assets (including property, means of production, savings, investments, etc.), public provisions and market affordability of social safety nets, including public housing, low-cost education, insurance for health and accidents, old-age provident funds, etc.

Consolidating experiences of work in enterprise development, product development, process development, marketing development in relation to the experiences of other organisations and networks in similar work.

Systematically building women’s business capacities (basic literacy, numeracy, business literacy, legal literacy). Brokering a sourcing system for critical inputs (e.g. from legal firms, registrees of businesses and companies, accounting and auditing companies, business schools, banks, design institutes, production engineers in specific sectors and sub-sectors, marketeers and promoters, warehouses, freight forwarders, etc. The capacity building will range from transformative leadership to business know-how. It will try to address business realities (e.g. demand and supply, profit and loss), meet challenges (e.g. the economic crisis) and maximise opportunities (e.g. lower export prices) that arise in the marketplace.

Umbrella programming. Cross-regional links for consolidating recommendations and advocacy positions vis-à-vis trade liberalisation and globalisation, information exchange in relation to engendering an economic database with sectoral and sub-sectoral precision.

Entrepreneurship development projects to be pulled together under one umbrella sub-regional technical coordinating unit which would provide common services and technical backstopping to the independent projects. Consolidation of lessons learnt from local projects, and focus on sustainable revenue and profit-making of enterprise projects in the marketplace for moving from supply-side capacity building to interactive capacity building. In addition, there is a need to meet the challenges and maximise the opportunities of the marketplace.

Establishing links with women’s human rights and political empowerment that are necessary to women’s economic empowerment. Women’s rights to equal representation before the law are an essential precondition for their economic rights to own assets, to manage businesses, to enter into
contracts, to conduct transactions, to inherit money, etc. Attention must be paid to the legal, political and social context for women’s economic empowerment.

- Mobilising concerted effort from all concerned parties. Monitoring what is being done by the others?
- Mobilising women’s organisations and women at grassroots level so that they can articulate their agenda for economic empowerment. Business strategies to be developed at the regional and national levels, to reclaim those parts of the market that are currently less than women-friendly. In a mainstream business world dictated by self-interest, a fundamental shift in business thinking and action can be brought about only through the infusion of larger, collective interests, articulated coherently and implemented systematically.
- Planning and implementing projects to achieve cumulative and systematic progress towards the objective of women’s economic empowerment. In addition, benchmarks should be developed for bringing about market conditions conducive to the empowerment of women.

Conclusion: implications for adult learning and training and the future of women’s work

The UNIFEM/UNDP/EU “Economic Empowerment and Reproductive Health” programme in Lebanon is aimed at enhancing the economic capacity of Lebanese women for duly and positively reflecting on their status within and beyond the household, and at creating a greater balance in the existing social and gender relations. In its implementation, the project concentrated in its early phases on the training of adults (Ministry of Social Affairs staff and potential women entrepreneurs). These initial steps created momentum and recognition of entrepreneurship as a means of supporting women in their livelihoods. However, after some time and a thorough follow-up procedure on trainees, the project realised that the training offered needs to be constantly improved and to be made context-specific. In addition, it has to be linked with vocational and technical training and educational institutions, where it could be further developed and made available to a larger group of individuals. Furthermore, the training of adults in enterprise development needs to be coupled with a package of activities stretching from influencing the macro-economic conditions, through organising lobby or interest groups, to the development of strong links and coalitions with the various support
institutions and groups concerned as well as gender mainstreaming. Finally, the informal sector ought to be given greater consideration since it is more aware of the realities of production and of the learning requirements amongst labourers and entrepreneurs, and hence ultimately in providing the resources needed. Accordingly, the training in entrepreneurship and the regular basic and VET education systems have to be regularly modified in the light of the changes occurring in the market and in the workplace. The skills acquired in taking initiatives and in increasing creativity, innovation and responsiveness to the market requirements may expand labour opportunities, especially those for women.
Part Three

Proposals and Challenges
Proposals for discussion on the future of work and adult learning

*Contribution by the informal working group on the future of work and adult learning to the Second International Congress on Technical and Vocational Education*

We, from all regions of the world, specialists in the field of adult learning, vocational education and training, university-based adult educators, members of unions, entrepreneurs and industrialists, in continuation of our work at the UNESCO International Conference on Adult Education in Hamburg, Germany, July 14-18, 1997, and now meeting at the UNESCO Institute for Education, Germany, February 19-21, 1999, in order to prepare for the Second International Congress on Technical and Vocational Education: Work, Education and the Future,

**Recalling** the words of the *Hamburg Declaration on Adult Learning* of the UNESCO International Conference on Adult Education, July 1997:

Adult education thus becomes more than a right; it is a key to the twenty-first century. It is both a consequence of active citizenship and a condition for full participation in society. It is a powerful concept for fostering ecologically sustainable development, for promoting democracy, justice, gender equity, and scientific, social and economic development, and for building a world in which violent conflict is replaced by dialogue and a culture of peace based on justice. Adult learning can shape identity and give meaning to life. Learning throughout life implies a rethinking of content to reflect such factors as age, gender equality, disability, language, culture and economic disparities,

**Taking into account** points 30-33 of CONFINTEA’s *Agenda for the Future* for theme V- Adult learning and the changing world of work:

30. The changing world of work is a multifaceted issue of enormous concern and relevance to adult learning. Globalisation and new technologies are having a powerful growing impact on all dimensions of the individual
and collective lives of women and men. There is increasing concern about the precariousness of employment and the rise of unemployment. In developing countries, the concern is not simply one of employment but also of ensuring secure livelihoods for all. The improvement needed in terms of production and distribution in industry, agriculture and services requires increased competencies, the development of new skills and the capacity to adapt productively to the continuously changing demands of employment throughout working life. The right to work, the opportunity for employment and the responsibility to contribute, at all ages of life, to the development and well-being of one's society are issues which adult learning must address.

_We commit ourselves to:_

31. Promoting the right to work and the right to work-related adult learning:
(a) by recognising the right to work and to a sustainable livelihood for all and by fostering, through new solidarities, the diversification of models of employment and recognised productive activities;
(b) by ensuring that work-related adult education provides the specific competencies and skills for entry into the labour market and occupational mobility, and improves the ability of individuals to take part in diversified models of employment;
(c) by promoting partnerships between employers and employees;
(d) by ensuring that knowledge and skills informally acquired are fully recognised;
(e) by emphasising the powerful role of vocational adult education in the lifelong learning process;
(f) by integrating in informal and non-formal adult education processes an analytical and critical perspective in relation to the economic world and its functioning.

32. Ensuring access to work-related adult learning for different target groups:
(a) by encouraging employers to support and promote workplace literacy;
(b) by ensuring that work-related adult education policies address the needs of self-employed workers and workers in the informal economy and facilitate access for women and migrant workers to training in non-traditional jobs and sectors;
(c) by making sure that work-related adult education programmes consider
gender equality, age and cultural differences, safety in the workplace and concerns for workers’ health, protection against unfair treatment and harassment, as well as the preservation of the environment and the proper management of natural resources;
(d) by enriching the learning environment at the workplace and offering flexible individual and collective learning activities and relevant services for workers.

33. Diversifying the contents of work-related adult learning:
(a) by addressing the issues inherent in agriculture, natural resource management and food security;
(b) by including elements relating to agricultural extension services, citizens’ rights, organisation-building, natural resource management, food security and reproductive health education;
(c) by stimulating entrepreneurship through adult education;
(d) by promoting gender-sensitive approaches within extension services, answering the needs of women in agriculture, industry and services, and enhancing their capacity to disseminate knowledge on all these fields and issues,

Bearing in mind the words, at the closing address, of Federico Mayor, Director-General of UNESCO:

This conference marks a turning point. It is a turning point because for the first time in adult education discourse, productivity and democracy are seen as simultaneous requirements for human development. (.....) It has reiterated the central importance of community involvement at all levels of organisation. (......). It has demonstrated the transformative force that women’s participation can bring to redefining societal relations in the 21st century. (...) This Conference has succeeded, through a new dialogue between governmental and non-governmental participants, in linking adult education with sustainable and equitable human development, job creation, income generation and the overall goals of social development. (...) now is the moment to seize this momentum, recover the basis for practice, and get to work. Rather than build a wall to keep out the wind, we must build a windmill and generate the tremendous human power that adult education and lifelong learning can bring.
hereby present the following proposals for discussion at the round table at UNESCO's Second International Congress on Technical and Vocational Education, Seoul, Korea, 26-30 April, 1999:

**Workforce at the global level**

1. The future of work and adult learning will depend on global trends, both the dangers and the new opportunities facing today's societies, on the nature of the international division of labour, on the use of new technologies and on people's power to influence economic policies at national, regional and international levels. Many economic, political, social, technological and cultural variables will determine the possible scenarios of the international dynamics of work. But everywhere it is clear that the changes in the structures of production and the organisation of work are inducing a tremendous demand for access to working and training activities related to retraining, skill upgrading and the improvement of basic competencies and organisational and communication skills throughout life. At the same time, the social demand for adult learning is also influencing the nature of work. The right to work and the freedom to choose work are emerging as fundamental rights, inextricably linked to other fundamental rights.

2. Policies to promote employment, including a strengthening of community life and work in the community, and the creation of solidarity, are crucial for the inclusion and participation of all in society. In this context, adult learning is not only a key to meeting the demands of the global society, but also to generating new demands for equitable and sustainable societies.

3. In all countries in the world, workers are to be found in the informal and the formal economy. In developing countries especially, hundreds of millions of workers — men, women and children — who exist and work in the informal economy have had no opportunities for initial formal education and training for generations. In order to enable and empower these workers to face the present and future challenges of the world of work, it is the responsibility of the State, employers and the civil society to create and ensure the availability of opportunities for lifelong learning encompassing adult education and continuing vocational training, basic education, and education for citizenship, participation, and development. At
the same time social and economic systems need to recognise the eco-
nomic and cultural contribution of informal sector workers, with little or
no formal education, at national and international levels.

4. The majority of the workforce, both in the informal and formal sectors of
production, do not enjoy basic work-related rights, such as the right to
social security, pensions and medical care, despite the fact that these are
upheld by several ILO conventions. By the same token, there is a need
for much greater efforts to ensure adult learning rights in the workplace,
such as paid educational leave, as well as to create enriching learning
environments. The majority of the workers are excluded from participat-
ing in negotiations with the State, employers, and trade unions regard-
ing work and adult learning policies. These include minority groups,
migrants, refugees, retired people, the unemployed and the self-
employed. Women, because of their lack of economic and social power,
are particularly disadvantaged in this respect. The same is true, to an
ever greater extent, of exploited children. Many categories of workers
are still discriminated against because of ethnicity, caste, religion, gender
roles, and geographical origins. The discrimination is greater for women
belonging to economically deprived social groups. Women’s contribu-
tion to economic life and to the reproduction of mankind is still not ade-
quately recognised. Most adult and continuing training and education
opportunities are being provided to the better-off and privileged rather
than to disadvantaged sections of the workers. In many countries highly
educated and trained persons are migrating to other parts of the globe,
depriving these countries of a pool of highly qualified workers. Other
migrants are compelled to leave their countries for survival reasons.

5. An absence or insufficiency or no initial training has important conse-
quences for further opportunities in work and continuing training and
education. The notion of ‘educational risk’ refers to the population with
low initial formal education which is most likely to suffer social, politi-
cal and economic marginality throughout life. Educational risk also af-
facts hundreds of millions of people who lack the necessary technologi-
cal literacy and skills to make a productive contribution to an
increasingly technical world.
Partnerships in work and adult learning

6. The economic and social participation of all sections of society is crucial to the future of work and adult learning and to the democratisation of society. New social and work-related demands are making it increasingly necessary for each and every worker to continue renewing his or her knowledge and skills throughout life. Of central importance in this transformation is the new role of the State and the emergence of expanded partnerships with employers, unions, non-governmental and community organisations, and indigenous peoples’ and women’s groups. These have a responsibility to interact and to see to it that the social demand for education is satisfied. In order to meet the challenges of lifelong learning, there is a need for permanent tripartite consultations (between the State, trade unions and employers) as well as bipartite consultations (between trade unions and employers) at both industry and company level.

8. It is of the utmost importance for public structures at local, national and international levels to initiate labour and educational and training policies that contribute to the human development of workers, as well as to their integration into the labour market. Relationships between public and private initiatives, including voluntary associations, need to be built up to ensure that the privatisation of training does not neglect adults’ personal development.

9. Union leaders and entrepreneurs must prepare themselves through adult learning for the complex changes taking place in the nature of work. Economic and political decision-makers need to be made aware of the profound effects of their decisions on the future working opportunities of millions of people and therefore on adult learning as a whole. We need the political will at the national and international level to support adult education and continuing vocational training initiatives that bring learning opportunities to all women and men at all ages in all parts of the world.

Knowledge, technology and work

10. The relationship between work and adult learning has important implications for our understanding of knowledge and knowledge dissemination. Very often, knowledge within institutions of education and training
is treated as “given” or “universal”, although this knowledge is often “partial” and even “borrowed”. Special consideration should be given to supporting new paradigms of knowledge which respect the knowledge systems of all cultures, communities and contexts.

11. We must grasp the cultural revolution driven by new technologies as an opportunity for democratisation and for solving the problems of mankind and building a better world. If society is to achieve true technological literacy, both understanding and mastering new technologies and ways of organising work, it must adopt a more human-centred, sustainable and environmentally friendly form of development. It is also important, however, that people should not be marginalised by the creation of new centres of power dependent on the advantages created for some by the acquisition of technology. Technologies should be for people’s empowerment, taking into account the significance of both traditional and new technologies for the survival of societies.

Adult learning

1. Technical and vocational education must take into account the learning aspirations of adults. Adult learning is not only an answer to the social demand for learning, but a key to generating new social demand through the collective discovery of people’s needs and through the strengthening of capabilities for active economic and social participation. The recognition of the social demand for education concerns education not only for the producer, but also for the citizen and the human being. The complex contexts of the changing world of work today demand that institutional answers be extended beyond the producer, the specific needs of a labour market and the enterprise.

2. The providers of work-related adult learning should improve the opportunities for working populations living in rural areas to be included in programmes of lifelong learning and work and give them the know-how to make their products profitably. Rural work-related adult learning should address the issues inherent in agriculture, natural resource management and food security and include elements of agricultural extension services.
3. Policy-makers in adult education should link adult education policies with full employment policies. For this it is necessary to provide sufficient and adequate access to opportunities for work. Technological literacy should help in integrating those previously excluded into the technological labour market.

4. Providers and institutions of general and vocational education for young people and adults should promote the necessary technical, practical and instrumental skills for production, but also prepare people for critical thinking, complexity, systems analysis, reconstruction of personal and cultural identity and the handling of power relationships.

5. Institutions of technical and vocational training must be transformed into institutions of lifelong learning. Vocational training has to become a continuing and lifelong process and be made accessible to all, especially those with educational, cultural and economic disadvantages. Experiential learning and paid leave for education are necessary to reduce the barriers that prevent the young people and adults from profiting from adult education.

6. Institutions and providers of adult education and continuing vocational training must meet the challenges of lifelong learning by paying special attention to the needs of adults returning to the system, taking into account adult learners' backgrounds, daily schedules, informal counselling, prior learning and life contexts. There should be no formal barriers to their re-entry. The vocational education system has to have trained teachers with a mixture of general and vocational qualifications, pedagogical theory, training technical and practical experience. The teacher should have the competencies to motivate, analyse, plan, implement, identify and develop learning processes. These competencies should be available to the whole society.

7. Providers of work-related adult learning must take into account the fact that the majority of school leavers will never find employment in the formal economy, and should therefore place considerable emphasis on the inculcation of creative and productive entrepreneurship, and promote the development of ideas so that young adults can become self-employed. But if innovative entrepreneurship is to be extended to millions
of independent producers and their associations, these will need a new form of training for entrepreneurship that is embedded in the value systems and cultures of their societies.

8. Institutions of technical and vocational training must promote community service in which young adults are encouraged to participate in the provision of learning opportunities for those who have not had access to vocational education and training in the past.

**Signatories**

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Prof. C.J Daswani, Professor of Linguistics, Consultant to UNESCO, New Delhi, and Chairman of the IPCL Committee of the National Literacy Mission, Government of India

Prof. Günter Faltin, Professor of Pedagogy and Economics, Free University of Berlin, Germany

Dr. Raphael Ferrerya, Director of Extension Services and Co-ordinator of Institutional Evaluation, The Aeronautical University Institute, Córdoba, Argentina

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Dr. Charles M. Nherera, Director of the Human Resources Research Centre, Faculty of Education, University of Zimbabwe, Zimbabwe
Dr. Maria Teresa Sirvent, Researcher and Professor, Institute of Research in Sciences of Education, University of Buenos Aires, and Director of Research Programme on Cultural Development and Lifelong Education, Argentina

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Dr. Jean-Claude P. Quenum, Director, Institute of Training of Adults (Voix d’Afrique Formation), Paris, France

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Dr. Madhu Singh, Senior Research Specialist, UNESCO Institute for Education, Hamburg, Germany
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Nicole Arnaud has a doctorate in the sociology of work from the University of Paris. She was Assistant Professor from 1975-1986 in the Sociology Department at the Ottawa University and specialised in the sociology of work and ethnic relations. As President of the Association for the Development of Research, Training, and Education in Paris, and within the framework of the FORCE programme, Brussels, she was involved in continuing vocational training activities and did a comparative study of vocational training systems in Europe. She has worked in public health projects in Cape Verde for the Canadian International Development Agency (CIDA), and has published on colonialism, nationalism as well as on theories and methods in the social sciences.

Dr. Richard G. Bagnall is Associate Professor in Adult and Vocational Education, Faculty of Education, Griffith University, Nathan, Queensland, Australia. The focus of his teaching, research and research supervision is on the ethical implications of alternative constructions of adult (including adult vocational) education, and the ethical impact of contemporary cultural changes on the nature of adult education provision and engagement. He has published extensively in those and related areas. Through engagements with non-government organisations such as the Asian-South Pacific Bureau of Adult Education (ASPBAE), he seeks to inform efforts directed to enhancing educational justice and value for adults.

Paul Bélanger is Director of the UNESCO Institute for Education, Hamburg. He was Secretary General of UNESCO’s Fifth International Conference on Adult Education. He is author of many books on adult education: The Emergence of Learning Societies: Who Participates in Adult Learning? (with Sofia Valdivielso) and Lifelong Education (with E. Gelpi). He is chairman of the editorial board of the International Review of Education. His forthcoming book (with Paolo Federighi) is on Adult Education Policies.
J.A. Bofill is Dr. Ing. Industrial and executive president of VEMSA group of companies. He is ex-secretary of the Engineers Association in Catalonia. He is founder of Associations of Human Communication, Ecology, Complex systems and Education, and organiser of educational and cultural activities. He has collaborated with the UNESCO in different conferences. His publications relate to education, economy, sociology and linguistic epistemology.

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C.J. Daswani, Professor of Linguistics, has worked in the areas of linguistics, adult literacy and non-formal education. He is currently consultant to UNESCO, New Delhi in education with special emphasis on elementary education, adult literacy and teacher education. He is also Chairman of the IPCL Committee of the National Literacy Mission, Government of India. He has many publications in linguistics, adult literacy and tribal education.

Günter Faltin is Professor of Pedagogy and Economics at the Free University of Berlin since 1977. He is co-founder of the Berlin Institute of Entrepreneurship and founder of the business company "Projekt Werkstatt" trading in tea. His numerous publications have dealt with educational planning, vocational training, integration of working and learning and small enterprise promotion. In recent years he has specialised in innovative entrepreneurship, idea development and refinement. His doctoral thesis was on Milton Friedman’s Theory of Consumption.

Raphael Ferrerya, Mechanical Engineer from the University of Córdoba, Argentina, has taught mathematics, physics and astronomy. He has been UNESCO consultant on teaching physics in schools in Latin America; UNESCO specialist in Science Education in Colombia for two years; Science and technology and education specialist in a UN project of food and nutrition in 1976 in Chile; Involved in redesigning the Ministry of Education teacher training, curriculum and educational research institution, Córdoba, Argentina. In his capacity as a UNESCO Regional Adviser on the training of educational personnel he started a new UNESCO office in Quito, Ecuador and was
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**Randa el Husseini** has a Masters in agriculture. She is presently co-ordinating a UNIFEM/UNDP/EU project for women’s economic empowerment and reproductive health. Ms Husseini has worked as an associate expert with FAO and a research assistant in the Crop Production Department of the American University of Beirut and has published in Oxfam’s Journal of Gender and Development. She has been active in agricultural production and is active in social issues in her country, giving lectures on the family in Lebanon, gender and citizenship, political participation of women and their representation in parliament.

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Maria Teresa Sirvent has her doctorate as well as her Master of Arts and Master of Philosophy from Columbia University/ New York, majoring in Sociology and Education. Licenciada in Sciences of Education University of Buenos Aires Argentina. She received the John Simon Guggenheim Memorial Foundation Fellowship (1996). She is presently researcher and Titular Professor at the Institute of Research in Sciences of Education University of Buenos Aires and Director of Research Programme on Cultural Development and Lifelong Education.
This book examines the theme of adult learning and the changing world of work. The first part deals with global issues and contexts which create a social demand for adult learning, and the role of different partners in meeting this demand from the perspective of lifelong learning. The second part presents concrete case studies of research, reforms and projects for improved policy-making and practice in adult and continuing vocational education from selected countries. Part three includes proposals for future strategies and approaches to work-related adult learning in a changing world. Geographically the book covers many countries, including Argentina, India, Zimbabwe, Norway and Lebanon.

The papers raise important theoretical, ideological and pedagogical issues dealing with the relationship between work and learning.

Adult learning and the future of work poses the challenges, that national policy-makers, the research community, funding agencies and international organisations are facing, in rethinking the relationship between work and education from a lifelong learning perspective.

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Title: ADULT LEARNING AND THE FUTURE OF WORK

Author(s): SINGH, MADHU

Corporate Source: Publication Date: APRIL, 1999

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