

UNESCO and ILO research on and findings
from good practice

TOWARDS AN ENTREPRENEURIAL CULTURE FOR THE TWENTY-FIRST CENTURY

*Stimulating Entrepreneurial Spirit
through Entrepreneurship Education
In Secondary Schools*

Secondary Education in the 21st Century

International Labour Office – ILO

United Nations Educational, Scientific and Cultural Organization – UNESCO

TOWARDS AN ENTREPRENEURIAL CULTURE
FOR THE TWENTY-FIRST CENTURY

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A joint message from UNESCO and ILO

There are more than 1 billion young people between the ages of 15 and 24 in the world today, comprising 18 per cent of the global population. Youth and children together account for about 40 per cent of the world population. Across the globe, young women and men are making an important contribution as citizens, productive workers, entrepreneurs, consumers, members of civil society and agents of change. Their energy and capacity for innovation are priceless resources that no country can afford to squander. Although they are a national asset in every country, young people are also extremely vulnerable. They face high levels of economic and social uncertainty. All too often, their full potential is not realized because they have no access to productive and decent jobs. Young people are not a homogeneous group. Their employment prospects vary according to sex, age, educational level, ethnicity, health status and disability, etc. In many countries, female youth unemployment rates are almost invariably higher than male rates. Teenagers (aged 15-19) tend to experience higher unemployment rates than people in their early twenties.

The ILO estimates that about 86 million young men and women were unemployed in 2004, accounting for 45 per cent of the 191 million unemployed globally.

Registered unemployment, however, reflects only the tip of the iceberg. Young people worldwide are more likely to work longer hours under informal, intermittent and insecure work arrangements, characterized by low productivity, meagre earnings and reduced labour protection. In developing countries, young people, especially young women, make up the bulk of the underemployed and working poor in the informal economy in both rural and urban areas. Where there is a discouraged worker phenomenon, it is frequently among young people, especially young women.

In such a situation young people, including those who went through general secondary education and who are entering the labour market, hardly have a chance

to find employment. Self-employment is often a survival strategy to generate some income for subsistence.

Becoming owner of a micro or small enterprise could be an alternative for a young person who has an entrepreneurial mindset and has also acquired some generic skills together with fundamental knowledge. However, awareness of this career option on the one hand, and an enabling environment for enterprise creation on the other, play a crucial, and mutually supportive role for a successful start in self-employment or creation of a small enterprise.

Moreover, the potential effectiveness of entrepreneurship education for secondary school youth should be measured not just in terms of the acquisition of entrepreneurial skills, but in increased motivation, contribution to learning, development of creativity, self-confidence in different aspects of school life and in preparation for post-secondary pathways, the world of work and beyond. Stimulating entrepreneurship spirit in secondary education is not only about business and making profit; it is also about the connections to community well-being, poverty reduction and sustainable development.

Nevertheless, in most countries there is still an important disparity between the content currently taught in secondary schools and the expectations arising from the rapid changes in today's world. There is therefore a need for educating decision makers to renew the learning content of secondary education so that it can impact, in a holistic way, the relevant knowledge and life skills that will empower young people to engage in productive and self-fulfilling life and work, and to develop positive attitudes and values in dealing with the paradox and conflict generated by change.

Within the framework of the Education For All (EFA) movement, coordinated by UNESCO, the international community committed itself during the World Education Forum, held in Dakar in April 2000, to achieving six main goals, among them Goal 4, which reads "ensuring that the learning needs of all young people (...) are met through equitable access to appropriate learning and life-skills programmes." This goal is directly relevant to general secondary education which attempts to respond to the needs of youth and society.

Today, several national and international initiatives around the world are supporting the development of life-skills education programmes which include components on entrepreneurship and employability.

Working towards an entrepreneurial culture for the twenty-first century, as stipulated in ILO Recommendation No. 189, is therefore a common goal of UNESCO and ILO. The organizations have cooperated since 1954 in the field of technical and vocational education and are now extending their collaboration to general secondary education.

Both organizations recognize the importance of the development of entrepreneurial attitudes amongst young people through entrepreneurship education, training and entrepreneurship development.

Today, governments and the international community recognize the political urgency of responding to the challenge of youth education and employment as a precondition for poverty eradication, sustainable development and lasting peace. “To develop and implement strategies that give young people everywhere a real chance to find decent and productive work”, including through self-employment and enterprise creation, is a commitment of the Millennium Declaration; the ILO has taken the lead amongst the UN agencies in organizing the work of the Youth Employment Network (YEN) initiated by the United Nations Secretary-General as a means of meeting this commitment while UNESCO is working actively with all its partners in favour of educational reforms which are necessary for the achievement of EFA and the Millennium Development Goals.

By harmonizing their efforts in the area of entrepreneurship education and in several other fields, it is our hope that UNESCO and ILO can more effectively serve the interests of the young generation and thus contribute to the sustainable development of their countries.



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Foreword

During the last decades, much has been learned on the circumstances that lead young people into situations of vulnerability and on ways of improving their life chances. Lack of access to meaningful education and gainful employment opportunities, channels for exploring their talents and engaging more fully with their communities often combine to push youth towards the margins of society and increase the likelihood that they will fall into the poverty trap.

Based on this understanding, learning approaches have emerged that connect education and skills more directly to the real life situations of youth, especially those in “at risk” communities. Such approaches are building confidence, self-esteem and motivation to pursue different goals, while strengthening capacities to deal with changing socio-economic circumstances throughout the course of their lives.

Entrepreneurship or enterprise education are two specific delivery models that have emerged within secondary education to fill this need. They encourage students to think innovatively around their future career or employment options, as well as how they can contribute directly to their community’s well-being. The most successful programmes promote and stimulate an entrepreneurial spirit by unlocking the talents, imagination and creativity of youth as drivers of change, addressing important economic, environmental, health and food security issues within their communities as part of the programme framework. Such programmes are helping to reduce youth vulnerability, social marginality and poverty, especially in distressed or disadvantaged communities.

UNESCO and ILO have jointly developed the idea to launch a research on good praxis and programmes of entrepreneurship education at secondary schools. Many programmes with different approaches have been experienced. The aim is to provide young girls and boys already at school age with knowledge and understanding about the spirit of entrepreneurship and the role of enterprises for the

wealth creation at national level but also at individual level. This awareness shall open the mind of young students to consider self-employment and becoming an entrepreneur as a valuable career option and create a job for one's self and for others.

This book is intended for all those interested in youth development as the first step in a long-term strategy for information exchange on innovatory models of education delivery at secondary level. It draws on various experiences around the world and will hopefully generate discussion on questions such as: How can we harness the imagination and entrepreneurial talents of secondary students as assets for development? How should these talents be channelled? What are the contents, subjects, topics that support the entrepreneurial process? What should be the institutional framework for entrepreneurship education? What kind of teachers is needed? How do we systematically measure the performance of entrepreneurship education and training?

Particular thanks are given to the author of this book, Carmela Salzano, who carried out the research and who put all the findings together and wrote the report. Acknowledgement is due to Clement Siamatowe, Programme Specialist, and all other UNESCO and ILO colleagues for the inputs and contributions they provided for this publication.

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Executive summary

The world's population is growing at a time when traditional, stable labour markets are shrinking. In developed and developing countries alike, rapid globalization and technological change have altered both how national economies are organized and what is produced.

Countries differ widely in their restructuring practices, but redundancies, unemployment and lack of gainful employment opportunities have been some of the main social costs of recent economic changes around the world. The ILO estimates that 88 million young people are unemployed in the world today. Unemployment among young women and men is twice or more higher than among adults.

In many countries, youth as a group are marginalized in society. An estimated 284 million children between the ages of 12-17 worldwide are out of school and this figure will grow to 324 million by the year 2010.¹ But even children who are in school may have little information on post secondary pathways and career opportunities open to them in different sectors, especially entrepreneurship and self-employment. This limits their access to additional resources, including education and training and employment opportunities. Young women, in particular, face poorer employment prospects than men due to gender stereotyping and their disproportionate share of family responsibilities.

Governments around the world are increasingly concerned about the socio-economic effects of un-employment and under-employment. Urban drift and poverty are increasing. In many developing and transition countries, major towns and cities are now home to high numbers of street children struggling to make a living. Their social, economic and cultural isolation and lack of ties make them vulnerable

1. Source: UNESCO web site, 2002.

to exploitation and a multitude of dangers that further limit their choices and act as barriers to productive employment and well-being.

With an estimated 1.2 billion young men and women worldwide entering into the working age population over the next decade,² societal cohesion and employment creation pose a key challenge for national governments. The United Nations Youth Employment Network (YEN)³ has recognized the impending crisis and has recommended a new approach to economic and social development, one that views young people as assets, not liabilities, and provides them all the assistance they need in preparing them for the world of work and beyond.⁴

Across nations, what is needed are programmes that show young people how they can directly contribute to raising levels of well-being and prosperity in their communities. Preparation starts in the classroom where students, future workers, business owners and community members must also learn how to be responsible citizens.

Entrepreneurship and enterprise education are made up of all kinds of experiences that give students a vision of how to access and transform opportunities of different kinds. In the promotion of entrepreneurial talent, programmes also work to increase awareness of the environmental and social implications of enterprise and to be respectful in their interactions with society. In economically disadvantaged areas, this will especially have a long-term positive impact on social inclusion and justice, as well as competitiveness (ILO, 1998).

The present study analyses first the role of entrepreneurship within the society that goes far beyond the image of business creation for income generation and for making benefits. Entrepreneurship is considered as the driving force for progress in the social, governmental, and cultural arenas and this through-out time. The study takes a look at the linkages between entrepreneurship and society in relation to local economic development, employment creation, employability and poverty reduction.

Since the World Declaration on Education for All and the adoption of the Millennium Goals to reduce poverty in the world to the half till 2015, it is recognized that education is not only acquiring academic knowledge but the way to prepare young people for work and living in the society. Secondary education has to meet this challenge that consists of changing orientation to skills that can deal with changing economies and work patterns and for living with rapidly changing cultural

2. Source: International Labour Organization. www.ilo.org/yen

3. This is a global initiative launched by Kofi Annan, in which the ILO Director-General Juan Somavia has joined UN Secretary-General Kofi Annan and World Bank President James Wolfensohn, to create the Youth Employment Network.

4. To this end, the Youth Employment Network has created a high level panel of 12 eminent members that formed working groups on four themes: employability, equal opportunity, entrepreneurship and employment generation.

values of societies. Education that makes young people becoming entrepreneurial in a broad sense would help to achieve this goal.

The section on Findings on Entrepreneurship Education attempts to provide a brief overview of the elements of entrepreneurship and/or enterprise education programmes found in the course of the research. There is no one model. Traditions of education, work and enterprise find very uneven expression from community to community, from men to women and from rural to urban locations. The findings show that each education system must find its own route to models of educational delivery that are the most appropriate for meeting contemporary learning needs at secondary level. The elements described here are intended to stimulate thinking around how countries could mark their own course.

Measuring the impact and success of entrepreneurship and enterprise education programmes is still a major challenge. Unfortunately, there are few tracer studies available, i.e. tracing graduates of enterprise education and self-employment programmes to assess whether they have successfully been integrated into the social, cultural and economic mainstream of their communities. More importantly, it is extremely difficult to isolate the impact of a particular intervention without considering the interaction among different cultural, institutional and family influences on entrepreneurial behaviour in any given local or country context.

However, there seems to be a general consensus that, ultimately, the outcomes of entrepreneurship or enterprise education programmes at secondary level should not only be to stimulate employment opportunities, but to prepare young people for the complexities of life in today's urban and rural communities. Through the acquisition of practical learning, work and life skills, programmes should improve the ability of students to anticipate and respond to societal changes more easily.

Much of the evidence is anecdotal, but still valuable. Beyond quantifiable indicators, the success of youth entrepreneurship interventions could therefore be measured in terms of contribution to learning, contribution to teaching practice, to the community and poverty reduction and to more joined-up decision-making.

A number of lessons had been drawn from the research on how to design and implement successful entrepreneurship education programmes. The first set of lessons learned concerns the educational environment and pedagogical requirements that have to be addressed by the Ministries of Education, the curriculum institutions, the headmasters of schools, the teachers and the developers of entrepreneurship education programmes.

A second set of lessons deals with the need to create linkages between entrepreneurship education and the broader development framework for employment creation through enterprise promotion. A conducive legal and regulatory environment will enforce the impact of entrepreneurship education as entrepreneurship education will contribute to a positive enterprise culture that will foster enterprise development.

However, more coordination and coherence are still needed between different national strategies and initiatives with a common focus towards education and youth development – strategies that help young people avoid or work their way out of vulnerability and poverty. It is particularly important that education reform at secondary level be seen as an integral part of an overall social development vision. And while social development should not be driven by narrow economic issues, a strategy for education reform that makes no attempt to address younger people's economic concerns and challenges is a hollow one.

Chapter I

Entrepreneurship and society

I.1 The re-emergence of entrepreneurship

In recent years, the economic fortunes of different countries around the world have become less predictable as national economies become more closely woven together. Companies look for locations with the cheapest operating costs, while capital moves quickly across national borders seeking the highest return. Many population groups find themselves moving to follow employment opportunities or to secure a better quality of life.

The old paradigm of the twentieth century is being replaced with the new paradigm of the entrepreneurial society – a society which rewards creative adaptation, opportunity seeking and the drive to make innovative ideas happen. In fact, most commentators would now agree that a spirit of entrepreneurship is one of the principal factors in whether communities can successfully overcome the difficulties that global changes have generated.

But while entrepreneurship is now mostly commonly associated with business creation and much of the world's media has created an image of the modern day entrepreneur as the inspirational figure of our age – building a business empire out of nothing and in doing so, creating wealth and prosperity for him/herself and others – the true meaning of entrepreneurship goes far beyond the act of starting and running a business.

Entrepreneurs are essentially ideas people, who seize an opportunity to generate value or well-being in society by providing for unmet needs with a new product or service, or by carrying out an existing activity in a novel or more efficient way. They look for what is changing, what is needed and what is missing and then undertake (*entreprendre*) the task of achieving their vision, marshalling resources, demonstrating ingenuity in the face of obstacles and assuming responsibility for any risks along the way.

Entrepreneurs have historically played an important role in society because their willingness to take the lead, problem-solving skills and resilience lead to different types of economic and social innovations – the continuous supply of which drive progress and growth. And although the end result is now most commonly associated with a business venture in the private sector, entrepreneurship has been the driving force for progress in the social, governmental and cultural arenas throughout time.

Creativity, orientation to opportunity and resilience in any person, organization, industry or community can be described as entrepreneurial spirit. And as socio-economic circumstances around the world change, skills such as these are becoming more and more valuable. In fact, modern citizenship calls for people to adopt a more proactive approach to all aspects of their lives – weighing up different individual learning, employment and career opportunities and pushing their capacities to the limits in overcoming everyday problems.

The following sections take a further look at how the linkages and connections between entrepreneurship and society have become more apparent over the past two decades.

1.2 Entrepreneurship and local economic development

The insertion of local economies into globalized networks of production and consumption is reshaping local economic contexts. For example, the rural environment, and particularly the agri-business sector, have changed dramatically in Africa, Asia and Latin America over the last few decades. Competitiveness, trade liberalization, institutional changes in agricultural support and the reduction in agricultural subsidies now present enormous challenges for producers, consumers, civil society and private sector in the affected communities of these countries.

The former eastern bloc countries also face new realities. At the national level, centralized state-owned companies have been privatized, and at the company level, the administrative way of managing is being replaced by a more entrepreneurial one. Many local economies, which once relied on large branch plant structures as the main source of employment, have been stripped of their livelihoods, forcing many to head towards the main cities in search of new employment opportunities.

As pace of change quickens, some regions and the citizens within them have proved more adept at repositioning themselves than others. More than ever, an entrepreneurial spirit is the key deciding factor. At the level of local governance, this means looking carefully at the problems that regions are coming up against, assessing realistic options for people, firms and their territory, and being more creative and willing to take risks in the template for local economic policies.

Some local governments have tried to generate new employment opportunities by providing relocation incentives to large factories and companies. But this does little to reduce the vulnerability of future generations. Entrepreneurial local governments have recognized that financial investment is important, but that harnessing the territory's human capital (the talents and imagination of all its people) and social capital (trust and cooperation developed through generations of relationships and networks) will be the key to stimulating new opportunities, revitalising urban and rural economies and reducing the population flight from these areas.

Small firm growth is now one of the main pillars of territorial competitiveness strategies.¹ But entrepreneurial local governments have also understood that economic growth cannot take place in the long term without social stability and maintaining a decent quality of life for all. This in turn rests on finding a balance between economic, social and environmental goals. This requires dialogue and partnerships through which different stakeholders work together to find solutions for their broad range of concerns. And while these may not always be as effective as desired, there are at least greater civil society inputs into strategies to maintain social cohesion, to protect cultural identity and to promote more environmentally friendly behaviours in local communities.

Putting the economic future of the community in the hands of its own members reduces dependency on outside forces and rejuvenates the economic and social fabric. Local business creation tends to create a ripple effect, with indirect employment growing over time as disposable incomes increase and various markets for different products and services emerge. More importantly, because of their ties to the territory, local entrepreneurs tend to create jobs rooted in the social, cultural and environmental needs of where they live. As a result, their communities are better prepared to withstand changes in the global economic environment.

1.3 Entrepreneurship and employment creation

In many developing and transition countries around the world, structural adjustment and the fiscal crisis of the State have reduced the levels of public sector employment and its remuneration over the past twenty years. Meanwhile, in Africa and parts of Asia and Latin America, dominant economic sectors are still unable to generate enough employment opportunities for new school leavers.

1. In fact, the number of small and medium-sized enterprises (SMEs) and informal sector businesses is now growing massively in many regions of the world and SMEs now contribute to a significant proportion of any country's GNP and job opportunities, especially for the urban poor.

A realistic option for most teenagers in certain countries is to create their own income-generating activity in the informal sector (often at subsistence level), accept poorly paid or unregulated work in that sector² or go in search of income-generating opportunities elsewhere. The size of the informal sector in terms of employment stands around 40 per cent in Bangladesh, India, Indonesia, Nepal and Pakistan.³ In a survey of those living in the slums of Bangkok, 87 per cent of those in employment earned a living through the informal sector and undoubtedly a large number of these had little or no education.

Even in the diversified economies of the West, the increasing delocalisation of production processes has dramatically reduced the number of work opportunities in traditional manufacturing and industrial sectors, while the level and complexity of skills required in other key market areas have risen sharply.⁴ In some regions, changes in skill requirements have had the hardest impact on women and minority population groups whose traditional employment opportunities were found in low-skill sectors – jobs that are becoming scarcer in the new global economy.

There is no doubt that in the future, the majority of new employment opportunities must come primarily from the growth of new businesses in the formal and informal economic sectors of local economies. Young people will be called on to create their own employment opportunities. This could be in traditional economic sectors or in new sources of employment such as wireless technology, web-based enterprise and business services, e-commerce, e-education and e-health. In either case, those who embrace and manage change, are willing to pursue their passions and see self-employment as a viable career option will get ahead.

1.4 Entrepreneurship and employability

While small and micro enterprises are viewed as the only viable alternative for income and employment generation on a large scale, the survival and competitiveness of all companies, small and large, depend increasingly on the quality of their workforces. Workers need to be able to work autonomously, to take responsibility and decisions, to be flexible and creative and to update their skills continually.

2. See www.ilo.org, International Labour Organization, Report to the International Labour Conference June 2002 on Decent Work and the Informal Economy.

3. The size of the informal sector in terms of employment stands around 40 per cent in Bangladesh, India, Indonesia, Nepal and Pakistan. ILO Yearbook of Labour Statistics, 1995.

4. Innovations in information and communication technologies across the board are having a dramatic impact on work patterns in different market sectors. Even in the agricultural sector, the adoption of more sophisticated farm machinery requires workers to learn new ways of working.

Different types of relationship between entrepreneurship and the world of work

Freelancing. From writers and photographers, to carpenters and interior design consultants, many people run their careers by going freelance. Working at home or lugging a laptop to their favourite thinking spot, freelancers promote their services to whoever has work to be done. They manage themselves as a business – finding the work, balancing their books and taking care of their taxes and maintaining control over where, when and how they work.

Contract work. Contract workers benefit from the diversity of opportunities created by employers who farm out their jobs on a project-by-project basis. They pick and choose the projects they prefer, learn to live with risk and balance out their work to get them through the lean times. They find their contracts through large corporations or small businesses, government or non-profit organizations and build a portfolio of expertise that allows them to apply their skills to a wide range of projects.

Business ownership. Millions of people around the world choose to start their own business every year, working long hours to turn their ideas into business plans and to build something out of nothing – creating jobs for themselves and for others.

Intrapreneurship. Intrapreneurs, or enterprising employees, bring their ideas to fruition by using existing resources, networks and business structures, creating entrepreneurial opportunities within an established organization. Within the bounds of their jobs, they come up with projects that fulfill their goals and bolster their company's bottom line at the same time.

Social entrepreneurship. Those who want to make the world a better place – on their terms – often choose social entrepreneurship, championing causes ranging from community development to international aid, creating and running programmes that serve society's social, but often non-revenue-generating needs. By honing their skills in fund-raising and project management, they use their entrepreneurial instincts to make a difference in their world.

Source: Adapted from the internet site of the Centre for Entrepreneurship Education and Development (CEED), Canada. <http://www.ceed.info>

In some regions within countries, local labour markets cannot even absorb the graduates of basic and higher education systems. Here under-employment is a major problem and young people usually move further a-field in search of jobs that match their skills set. This leads to significant brain drain and the emptying out of areas. For the less well-educated, where once a strong back and a will to work guaranteed steady employment, these people now find themselves in low-paid, high-turnover service sector jobs.

As a result, even those who choose the more traditional employment pathways will still need entrepreneurial skills to get ahead in the modern workforce. Young people must be able to sell their competencies to the highest bidder, display self-confidence, responsibility, leadership, and accountability to succeed in their chosen profession and re-skill and seize career opportunities over their life time.

1.5 Entrepreneurship and poverty reduction

Countries differ widely in their restructuring practices, but cuts in welfare budgets, redundancies, unemployment and lack of gainful employment opportunities have been some of the main social costs of economic changes taking place around the world.

Restricted access to education, secure employment, financial and infrastructural capital, skills and motivation often lead young people to drift to the margins of society, where they become vulnerable⁵ to a variety of dangers, including poverty, crime, disease and drug abuse. The mutually reinforcing relationship between disadvantage and poverty is then reflected in demographic and urban patterns.

Due to the absence of gainful employment opportunities in their communities, young people drift towards large urban settlements where they live in unplanned settlements that are often lacking in access to basic assets and services. Certain groups are more at risk, especially those who have experienced barriers to entry and progression in different education, training and employment streams as a result of gender,⁶ HIV/AIDS, disability, ethnic or religious origin, are disadvantaged by geographic location or remoteness.

The problem of youth vulnerability is not exclusive to developing or transition countries. In many western countries, in spite of sustained economic growth throughout the 1990s, income inequality is increasing year-on-year. Income inequality in the United States is the highest among all industrialized nations, due, in part, to the decline in real wages of low-skilled workers.⁷ The Rockefeller Foundation estimates that one in every eight persons in that country now lives below the poverty line.

With societies changing at an ever more rapid pace, finding solutions to the problems of urban and rural poverty must rest on reducing the potential vulnerability of future generations through targeted education and training and workforce entry strategies. These should provide the right tools so that young people will be able to build preferred futures rather than merely using their survival instincts to respond to immediate exigencies.

In 2003, the Commission on the Private Sector and Development, convened by United Nations Secretary General Kofi Annan, and co-chaired by Prime Minister Paul Martin of Canada and Ernesto Zedillo, Mexico's former president, was asked to respond to two questions: how can the potential of entrepreneurship

5. The Second Trends Report (1999) prepared by the Research Correspondents' Group at the Youth Directorate of the Council of Europe has defined vulnerability as "the scarce response capacity of certain persons and groups inside society to confront, adapt or cope with specific economic, social, cultural and political challenges to which they are permanently exposed". See "Vulnerable youth: perspectives on vulnerability in education, employment and leisure", Council of Europe, Youth Directorate, 1999, p. 6.

6. The Beijing Platform for Action recognized that gender differences have had a long-term impact on levels of poverty and the ability to rise out of it.

7. Source: Rockefeller Foundation web site, 2002.

be unleashed in developing countries as a force for poverty reduction, and how can the existing private sector be mobilized to meet that challenge? Answering these questions led to the report “Unleashing Entrepreneurship: Making Business Work for the Poor”.⁸ The messages from this Report were reinforced at the 2004 G8 meeting in the United States. In Georgia, G-8 leaders agreed on the U.S. driven action plan “Applying the Power of Entrepreneurship to the Eradication of Poverty.”

What are the main messages of these reports? On the one hand, they call for the empowerment of communities through increasing possibilities for, and the tools to sustain local entrepreneurial activities and enterprise growth. On the other, they underline the importance of increasing the supply of services and products to the poor, widening choices and reducing prices. They also suggest that the orientation to innovation, technical and organizational expertise of the private sector should be drawn into the process of extending social infrastructure in areas where governments do not currently reach. The first creates employment and income growth. The second improves the quality of life for communities.

Setting new heights for the bottom line

Many programmes that help communities adapt to, and cope with, changing socio-economic circumstances often head straight for the bottom line. That is, they focus on a business-oriented expression of harnessing entrepreneurial talent, promoting individual opportunities for self-employment and income generation as a way of building community assets and reducing the symptoms of vulnerability and poverty. The old quote of Lao Tzu: “Give a man a fish and you feed him for a day. Teach a man to fish and you feed him for a lifetime” continues to be a fitting reflection of this tendency.

While this is a critical dimension of promoting an entrepreneurial culture, is this enough? Is the recent orientation to promoting entrepreneurship justifiable if emerging economic activities only serve to repeat the same mistakes of the past, or ingrain poverty even further?

If entrepreneurship is to truly benefit the urban and rural poor around the world, a new model is needed – one that links enterprise development directly with collective or community well-being and poverty reduction, one that binds the community together rather than pulling it apart. This is particularly important as the inter-relationships between business activity, environmental degradation, food security, health, inequality and conflict become clearer.

Interventions designed to foster entrepreneurial attitudes, behaviours and skills must therefore ask and answer some critical ethical questions, particularly with regard to the “what”, “how” and “who” of the entrepreneurship process.

(continued on next page)

8. Report presented to Kofi Annan on 1st of March 2004, www.undp.org/cpsdf/report/index.html.

Meeting local needs

The first important question should be: What kinds of goods and services are being produced? Is it enough that the final product satisfies the unmet needs of a consumer in some distant place?

Entrepreneurship interventions cannot be indifferent to what they are encouraging their participants to produce. Nor should they be blind to the potential for meeting community interests. If thousands of impoverished communities use their training to manufacture T-shirts or similar products, it is fair to conclude that the impact on community development will be zero.

A simple tenet of community entrepreneurship is this: Tailor goods and services to meeting the community's basic needs, such as food, health, energy, and housing first; once these needs are met through local production, then consider moving into non essential items for broader wealth generation.

The most community-minded entrepreneurship programmes channel the entrepreneurial talents of participants directly into addressing problems that immediately affect local households and families. They teach their budding entrepreneurs that fulfilling unmet local needs is, by definition, going to be better for the community in the long term than exporting dolls houses. In doing so, they are building a lasting capacity within communities for addressing and resolving issues of concern to them.²

How are the goods and services produced?

The next important question is 'how are the goods and services produced?' Learning to grow a business and ethical business behaviour mean more than just providing a punctual, reliable and value-for-money service to clients. They also mean paying liveable wages and providing benefits to the workers that make the business successful. They mean using natural resources in ways that do not harm the capacity of future generations to take care of their needs

(sustainable development) and they imply respect for the environment in which the enterprise is located. Communities can only generate healthy, sustainable livelihoods if they assume a responsibility for the impacts between their activities and the well-being of the broader community.

The question of ownership

Lastly, we need to ask who owns the fishing gear and the pond? Is the ownership local, or is it a franchise of a large corporation with little commitment to the community? Businesses that are shaped by community needs and owned by community residents are more likely to become long-term assets for local development, creating stable jobs, feeding the local economy and generating taxes for schools, health care services and other types of essential infrastructure. Furthermore, unlike their global competitors with no links to place, when labour and environmental standards rise, such businesses will tend to adapt rather than flee.

Entrepreneurship training for true community development is possible, but it will not happen over night. There is still too much emphasis on the bottom line. That is a great way of helping a few street operators become rich. But if we are really going to turn around disadvantaged communities, we must teach entrepreneurs that there is one other important bottom line – the community's. So, along with basic skills in management, marketing and organizational development, budding entrepreneurs must also be taught the value of socially useful goods and services, high environmental and labour standards and local ownership. Failing to make these criteria essential features of entrepreneurial programmes risks leaving poor communities behind for another generation.

Adapted from an article by Michael H. Shuman² on "Community Entrepreneurship" appearing on the web-site of NHI, Shelterforce on-line. For the full article, please see <http://www.nhi.org/online/issues/107/shuman.html>

1. Leadbeater, 2002. 2. Michael H. Shuman is the author of *Going Local: Creating Self-Reliant Communities in a Global Age* (Free Press, 1998).

Chapter II

Entrepreneurship: A challenge for secondary education

II.1 Secondary education comes centre stage

As markets, forms of work organization and technologies change around the world, knowledge, and particularly skills, are coming to be seen as the basis for national competitiveness, employability, livelihoods and well-being. Those with low skills levels, outdated skills or no employable skills are less likely to get a foothold in local labour markets and are more likely to miss out on opportunities in the economic and social mainstream of their communities. In fact, irrespective of country or region, having the right mix and type of knowledge and skills is now critical for young people, especially those living in rural and economically distressed urban areas.

According to the World Declaration on Education for All:

Every person shall be able to benefit from educational opportunities designed to meet their basic learning needs. These needs comprise both essential learning tools (such as literacy, oral expression, numeracy, and problem solving) and the basic learning content (such as knowledge, skills, values, and attitudes) required by human beings to be able to survive, to develop their full capacities, to live and work in dignity, to participate fully in development, to improve the quality of their lives, to make informed decisions, and to continue learning. The scope of basic learning needs and how they should be met varies with individual countries and cultures, and inevitably, changes with the passage of time.

In the years following the World Education Forum (WEF, Dakar, Senegal 2000), there has been unprecedented commitment among governments, donor agencies, intergovernmental organizations, professional associations and civil society to

programmes designed to ensure free access to basic education for all learners as part of a long-term strategy for human development.

The scope of the issues that secondary education now has to address is very broad, and the population it covers has multi-faceted needs. Some are the changing role of teachers and head teachers, the new orientations for learning contents, the use of ICTs and distance education, youth counselling and guidance, life skills, bridges between general secondary and vocational education, the transition to higher education, and quality assessment.

The immediate task for the EFA movement has been to assist countries to develop or revise EFA National Action Plans or strengthen EFA components in existing sectoral development plans. The commitment of the international community to EFA implies that national governments may obtain the financial and intellectual resources necessary for reinvigorating General Secondary Education. Certainly, the time has come for the sector to be updated to reflect the reality of life for young people in the twenty-first century.

One of the continuing paradoxes of the present situation is that, while many countries badly need qualified human resources to support their development initiatives, there are very limited avenues for secondary students to directly participate in development strategies. Meanwhile, due to permanently escalating educational requirements to enter waged employment, there may be even fewer job opportunities in the modern sector for those who have not completed twelve years of secondary education. Rates of poverty and joblessness are thus extremely high among secondary school leavers in several countries of Africa, Asia and Latin America. The informal sector has become the main source of employment.

How can youngsters be drawn into active civic engagement in their communities while at the same time being better prepared for entrepreneurial self-employment once school is over? There is an overwhelming need to show young people who look at the future with anxiety that there are different paths to the future, different options based on positive actions and values.

In recent decades, some countries have introduced entrepreneurship education and entrepreneurial skills development within general secondary education as part of efforts to respond to the changing needs of society. The following sections take a closer look at some of the factors behind this trend.

II.2 Changing orientation of secondary education: preparing students for work and living in society

During the crucial years of secondary education, young people are beginning to make decisions on how they should channel their talents, skills and energy, learning to assume the responsibilities of adulthood and preparing to enter the world of work and society.

Most countries, at some intermediate age between 11 and 15, channel students into education streams that emphasize either academic or vocational skills. The academic stream usually prepares young people for tertiary education and entry to university and has relatively little job-related content, while the vocational stream includes a wide range of programmes with various levels of work-based content.

These streaming decisions, which generally involve some form of individual assessment, have traditionally been immutable, but they are becoming increasingly permeable. Education systems increasingly facilitate new pathways and progress between various types of education and training.

This trend reflects Goal 3 of the Dakar Declaration on Education for All:

Ensuring that the learning needs of all young people and adults are met through equitable access to appropriate learning and life skills programmes.

... as well as the recommendation of the Peking Secondary Education Expert Meeting (2001) that an effective secondary education in the twenty-first century must provide a good balance between academic education and skills development including technical and vocational education at the secondary level.

The situations now facing young people in today's world clearly show that acquisition of knowledge through academic education is not sufficient to prepare adolescents to cope with life issues and to make choices which could have important impact on their future life as workers and adult citizens.

UNESCO is therefore promoting a holistic and integrated approach to the renewal and reform of learning approaches and contents through...

i) Skills for dealing with changing economies and work patterns

In today's work place, young people need to meet the demands of new work patterns that reflect the transition from industrial and manufacturing economic bases to knowledge-based, high technology and/or service-oriented economies. Individuals may need to be flexible and adaptable in order to engage in a variety of occupations during the course of their lives. The emphasis on **lifelong learning** reflects concerns about skills obsolescence and need for re-skilling in times of rapid technological and workplace change.

Against this background, the relevance of knowledge about facts is diminishing, while the need to learn how to access, analyse and exploit information and transform it into new knowledge is increasing. This ability is based on critical enabling and core work skills. The first includes literacy and numeracy, listening and oral communication skills, problem-solving skills and creativity, personal effectiveness (self-esteem, goal-setting and motivation, skills for personal and career development), group effectiveness (interpersonal, teamwork and negotiation skills) and organizational effectiveness and leadership skills.

Core work skills are seen to include so-called labour market “navigation” skills, including job search skills, skills to identify career options and opportunities and identify further education and training opportunities, as well as familiarity with the Internet as many jobs, career opportunities and guidance services are increasingly available online.

ii) Skills for living in society

We learn from a young age that the development of positive, engaging and equitable relationships is critical to our success as human beings. Basic social skills enable us to interact in the community, as well as to understand the meaning of citizenship. Sound social skills allow us to understand both social rights and claims, as well as obligations and responsibilities. But imagination and emotional engagement are as important as social skills. More than ever, there is a need to actively engage young people in finding creative solutions to improving the welfare of their communities, while contributing to collective prosperity in ways that do not damage natural resources. Intelligence should include the ability to envisage alternative futures, to resolve open-ended problems with more than one way of doing things.

Life skills and the United Nations Literacy Decade

The 56th session of the United Nations General Assembly adopted on 19 December 2001 Resolution 56/116 “Literacy Decade: education for all” in which it proclaimed the UN Literacy Decade for the period 2003-2012 towards the goal of Education for All. The Resolution recognized that “literacy is crucial to the acquisition, by every child, youth and adult, of essential life skills that enable them to address the challenges they can face in life, and [literacy] represents an essential step in basic education, which is an indispensable means for effective participation in the societies and economies of the twenty-first century...” (Preamble).

II.3 Particular challenges facing secondary education

Since 1990, the breadth, range and depth of reforms in secondary education around the world are helping to increase its quality. Such reforms relate to educational planning, management and administration, the financing of the system and personnel. They also include the design of completely new types of curricula, including environmental science and HIV/AIDS prevention.

But still in many developing countries, a complete basic education for all remains rhetoric rather than reality. Distribution remains skewed towards the lower levels, and those who do reach secondary school sometimes do so without adequate basic literacy skills that are essential for learning, trainability, employability and access to decent work in today's world.

In many parts of Sub-Saharan Africa and Southern Asia, there are inadequate financial resources to generate internal efficiency at primary level, or to create sufficient school places for the increased number of learners completing primary schooling. Expanding secondary education in low population-density rural areas is particularly costly, while the cost of curriculum renewal and instructional materials remains prohibitive for many governments. Qualified teachers may also not be available in sufficient numbers.

In middle-income countries, there is usually uneven access to different education and training streams. For example, Arab youth do not benefit sufficiently from vocational training, even if some countries such as Algeria, Egypt and Jordan have tried to develop vocational training programmes to 'absorb' out-of-school youth. Here, the challenge includes offering flexible schooling alternatives to young adults and recent drop-outs who are already engaged in some income-generating activities, but who need secondary education to secure fixed employment.

Even in western countries, where secondary education and training systems once paved the way to higher education or steady employment, millions of young people are now entering a less predictable adult world, one in which traditional reference points are shifting or have changed completely. In many contexts, education provision now seems irrelevant to the situations that young people find themselves in and more and more students look at the future with uncertainty.

Local economic realities are often not taken into account. Rural secondary schooling in particular has suffered the tendency for provision to reflect national education planning that focuses on traditional higher education pathways rather than taking into account the dominance of the informal economy and local agricultural sector as the most likely option once students leave school.

Too many students around the world now feel that the traditional structures of schooling, and many of the approaches embedded in them, are not working. They can't see the connections between their academic training and the wider economic and societal developments around them. Employers complain of skills mismatch while students become disconnected. The frustrations of teaching are also plentiful,

and the challenges faced by teachers of at-risk students even more overwhelming. Students often bring obstacles in their home lives into the classroom, and have low motivation due to repeated cycles of failure. This can sometimes create an unspoken belief in pre-determined failure within these students.

II.4 Moving ahead

Far-reaching reforms are now being introduced that lead to a fundamentally different kind of secondary education system, involved not just with traditional schooling, but connecting with students in ways that inspire them, instilling the value of education through knowledge, skills and tools that are relevant in different local economic, social and cultural contexts.

Those delivery models that are having the greatest impact try to balance the fostering of an entrepreneurial approach to career development with preventative strategies for combating youth vulnerability, poverty and exclusion. They aim towards increasing self reliance, reducing the potential for educational failure and tackling community issues. They also try to adopt a life-cycle approach to secondary education policy – one that takes into account the inter-generational aspects of youth vulnerability.

In this light, different interventions are emerging that specifically target students in precarious circumstances, where parents may have low socio-economic status, be affected by HIV/AIDS, involved in substance abuse, or even in jail. Focusing on the youth with special needs is at the heart of inclusive education – an approach that recognizes each child to be a unique learner and requires ordinary schools to be capable of educating all children in their community regardless of physical, intellectual, social, emotional, linguistic or other differences. A very special marginalized youth group is those with disabilities. In some countries around the world, their number has increased as a result of armed conflicts.

The use of **Information and communication technology (ICTs)** both as a vehicle for accessing and learning from existing curricula and teaching methodologies for different circumstances is yet to be fully exploited. And even though access to this powerful medium is constrained by the lack of financial resources, infrastructure and connectivity in many regions of the world, education planning that takes into account the possibilities for sharing experiences and resources through modern communications networks could nevertheless trigger synergies in the delivery of secondary education.

In practical terms, there is still also a need for greater flexibility of educational delivery at secondary education, scaling up innovative strategies that recognize the diversity of learning circumstances and human needs. Ministries of Education will have to look more closely at how they can work collaboratively with civil society, and particularly the private sector, to create valuable outcomes for everyone involved.

II.5 Defining entrepreneurship or enterprise education

How does a young person acquire entrepreneurial skills and attitudes and develop further his entrepreneurial vision?

Different countries around the world seek to integrate **entrepreneurship** and **enterprise** education into schools at secondary level through a variety of modalities and at different speeds depending on the availability of expertise and resources. There is no single pathway or approach.

For the purposes of clarity, it is however important to make a distinction between the two different types of programming. It is also important not to confuse these types of programmes with **economics** or **business** education. Business courses generally address the competencies of a learner in a business setting. Sometimes the courses assume that the student is developing skills to be some type of manager or advance up the career ladder in a large business. Rarely have business courses assumed the students will be ideas generators, business creators and/or owners.

It is also important to underline that even those programmes that focus on fostering business-oriented behaviours, attitudes and skills usually stimulate learning opportunities against the background of, and with sensitivity to, the wider socio-economic and cultural context of the communities in which the schools are located. In many cases, they also reflect and incorporate the principles described in enterprise education.

Entrepreneurship education has been defined as “a collection of formalized teachings that informs, trains, and educates anyone interested in participating in socioeconomic development through a project to promote entrepreneurship awareness, business creation, or small business development”.¹

1. Bechard and Toulouse, 1998, Validation of a didactic model for the analysis of training objectives in entrepreneurship, p. 320.

The importance given by the European Community to entrepreneurship education was recently underlined in the *European Charter for Small Enterprises* (adopted by the General Affairs Council, 13 June 2000, and welcomed by the *Feira European Council*, 19/20 June 2000) which stated:

Europe will nurture entrepreneurial spirit and new skills from an earlier age. General knowledge about business and entrepreneurship needs to be taught at all school levels. Specific business-related modules should be made an essential ingredient of education schemes at secondary level and at colleges and universities. We will encourage and promote youngsters' entrepreneurial endeavours, and develop appropriate training schemes for managers in small enterprises.

Enterprise education (also called **entrepreneurial education**) on the other hand, is usually conceived more broadly, seeking to foster self-esteem and confidence by drawing on the individual's talents and creativity, while building the relevant skills and values that will assist students in expanding their perspectives on schooling and opportunities beyond. Methodologies are based on the use of personal, behavioural, motivational, attitudinal and career planning activities.

As far back as 1988, the OECD educational monograph, *Towards an Enterprising Culture*¹, stated that,

Changes in educational method are needed [...] to foster competence in 'being enterprising' as a vitally important qualification needed by the young as they enter society.

What this implies is that:

...people will need to be creative, rather than passive; capable of self-initiated action rather than dependent; they will need to know how to learn rather than expect to be taught; they will need to be enterprising in their outlook and not think and act like an "employee" or a "client". The organizations in which they work, communities in which they live, and societies to which they belong, will, in turn, also need to possess all these qualities."

Foundation for Small and Medium Enterprise: University of Durham

The University of Durham's (United Kingdom) approach to enterprise education shows that there are a number of different objectives and outcomes that can be achieved:

- i) to develop enterprising skills, behaviours and attitudes *through* any curriculum subject at every phase of education to provide a wider preparation for autonomy in life. That is in work, family or leisure.
- ii) to provide insight into and help young people understand *about* the entrepreneurial and business development processes through business education in secondary schools and in further and higher education allowing young people to work more effectively in a flexible labour market economy or working in a small business.
- iii) to develop awareness of, and capability *for*, setting up a business now or sometime in the future. This approach can be used in vocational and professional education.

For further information, please go to the web-page of the Foundation for Small and Medium Enterprise at the University of Durham.

1. This Monograph was issued soon after the 'Inter-governmental Conference on Education and the Economy in a Changing Society, held under the auspices of the Organization for Economic Co-operation and Development (OECD) in Paris in 1988.

Thus enterprise education is very much concerned with the development of the “enterprising” young persons rather than the sole development of entrepreneurs who might set up and run a business. In this version, schools should support the process of developing a culture of enterprise within society in contrast to one of dependency.

II.6 Entrepreneurship and enterprise as a dimension of quality education

Entrepreneurship and enterprise education can support further increases in the quality of secondary education because...

- (i) They are in line with many national governments stated education objectives. For example, the mission statement formalized by the Ministry of Education in Malaysia in 1995 reflects the Ministry’s commitment to the goals of Vision 2020: “To develop a world class quality education system which will realize the full potential of the individual and fulfil the aspirations of the Malaysian nation.”
- (ii) They stimulate or act as a catalyst for thinking and acting in various dimensions of the education process, from goal setting to management processes, from teacher training and recruitment to classroom teaching styles.
- (iii) They inject creativity into the learning experience. Schools are adopting innovative ways of making the learning experience more relevant, often by adopting non traditional teaching styles, creating new working arrangements and seeking out new implementation partners.
- (iv) They recognize that youth are a diverse group, with diverse qualities, talents, motivations and learning objectives. Programmes help to open up possibilities in the curriculum that considers students’ different capabilities and needs.
- (v) They continuously generate progress in developing curriculum and appropriate pedagogy. As the programme examples show, entrepreneurial schools are helping to modernise curricula of general subjects by making more explicit the connections and real life applications and providing more definition to what the learning should be for.
- (vi) They support education success and school-to-work transition. Programmes challenge learners’ attitudes and assumptions about what is possible, acceptable, or even expected in different contexts. By retaining the learners’ attention and motivation, programmes are helping to even out inequalities in educational achievement and securing post secondary pathways, particularly for women and marginalized young people.

- (vi) Through the use of ICTs and a variety of educational tools, programmes are increasing responsiveness to technological changes, making it easy to integrate these changes in the system.
- (vii) Because the local private sector and communities are directly involved in programme implementation, schools are securing the active engagement of civil society and commitment to the achievement of educational goals.
- (viii) Teaching staff themselves are being trained to display the characteristics of successful entrepreneurs, that is, to be enterprising in the ways they overcome resource constraints and teaching difficulties in the classroom and encourage their students to be enterprising so that the ultimate result is a forward-looking school environment.

II.7 Creativity, the arts and education

Arts and creativity are very important to a child's development. Arts encourages creativity, a key ingredient of entrepreneurship. Imagination and creativity, or the ability to visualize images and ideas and create things that are unique and have value in society, are capacities that can really make a difference in the lives of children.

The concept of imagination has been defined as the capacity to think of things in terms of possibilities, and is a conscious and intentional act of mind, as well as the source of new and useful ideas and things in a particular context or discipline.² In an educational context, 'Arts education' is a critical channel for drawing out the imagination of students, particularly those for whom the worlds of education, training and work have little meaning or connection with their everyday lives. When a child is given the space and tools to share their inner vision and creativity with their peers, parents or others, they are given the opportunity to express their reality in different forms as they understand, apprehend and appreciate it, as well as to offer alternatives. This validates and gives a voice to their aspirations and is part of the process of overcoming disaffection.

From a purely cognitive and learning point of view, according to Dr. Maria Montessori:

...artistic activity is a form of reasoning, in which perceiving and thinking are indivisibly intertwined. A person who paints, writes, composes, dances... thinks with his sense...[but] genuine art work requires organization which involves many and perhaps all of the cognitive operations known from theoretical thinking.

2. Egan, Kieran (2002). *An Imaginative Approach to Teaching Literacy*. Simon Fraser University, Burnaby, British Columbia, Canada.

Ten key lessons

According to Elliot Eisner (Lee Jacks Professor of Education, Stanford University), there are 10 key lessons that arts teach:

1. The arts teach children to make good judgments about qualitative relationships. Unlike much of the curriculum in which correct answers and rules prevail, in the arts, it is judgment rather than rules that prevail.
2. The arts teach children that problems can have more than one solution and that questions can have more than one answer.
3. The arts celebrate multiple perspectives. One of their large lessons is that there are many ways to see and interpret the world.
4. The arts teach children that in complex forms of problem solving purposes are seldom fixed, but change with circumstance and opportunity. Learning in the arts requires the ability and a willingness to surrender to the unanticipated possibilities of the work as it unfolds.
5. The arts make vivid the fact that neither words in their literal form nor number exhaust what we can know. The limits of our language do not define the limits of our cognition.
6. The arts teach students that small differences can have large effects.
7. The arts traffic in subtleties. The arts teach students to think through and within a material. All art forms employ some means through which images become real.
8. The arts help children learn to say what cannot be said. When children are invited to disclose what a work of art helps them feel, they must reach into their poetic capacities to find the words that will do the job.
9. The arts enable us to have experience we can have from no other source and through such experience to discover the range and variety of what we are capable of feeling.
10. The arts' position in the school curriculum symbolizes to the young what adults believe is important.

Thus in following a process to realise their vision, children learn the skills to 'deconstruct' or reduce the complexity of certain tasks, particularly tasks with a creative and/or technological dimension.

In the long term, a focus on creativity and the arts within the curriculum can lead to developments in personal and social skills, including an enhanced sense of purpose and direction, an increase in self-esteem related to the ability to realise one's potential and improved relationships between tutors and students. Changes can also be noticed in students' self-confidence and motivation for finding a job, especially resulting from a sense of enjoyment of, and interest in, creative industries and communication skills.

Ultimately, through the interplay of the imagination and rational learning processes, it is possible for young people to visualize and imagine a different reality for themselves and their communities, as well as take into account the reality of others.

Chapter III

Findings from entrepreneurship education

The following section attempts to provide a brief overview of the elements of entrepreneurship and/or enterprise education programmes found in the course of the research. There is no one model. Traditions of education, work and enterprise find very uneven expression from community to community, from men to women, and from rural to urban locations. Each education system must find its own route to models of educational delivery that are the most appropriate for meeting contemporary learning needs at secondary level. The elements described here are intended to stimulate thinking around how countries could mark their own course.

III.1 Long-term goals and aspirations for students

The stated rationale for entrepreneurship and enterprise education programmes in different countries is often similar, with the emphasis varying according to whether the programme is focussing purely on developing students' skills to start their own ventures, or a more enterprising attitude to different situations.

On the whole, however, programme rationale is usually viewed as part of a broader development strategy towards:

- developing more creative, innovative approaches to learning, school work and the school community;
- developing in students the self-esteem, confidence, and positive attitudes necessary for consideration of entrepreneurship or self-employment as a viable career option;

- developing in students the attitudes, skills and behaviours to succeed in workforce entry and career progression;
- developing in students the positive attitudes, skills and behaviours needed for integration into the community and participation in its development; and
- developing in students the capacities to positively contribute to the social and environmental sustainability of their communities.

The UN Conference on Environment and Development (1992, Rio de Janeiro)

The Earth Summit, as it is also called, helped educators around the world realize that education must be oriented to a vision of sustainability that links economic well-being with cultural traditions and respect for the Earth and its resources. The Conference produced Agenda 21 in which education was affirmed as a foundation for sustainable development in Chapter 36. Following the Earth Summit the Commission for Sustainable Development (CSD) appointed UNESCO to be the Task Manager for this Chapter.

Ten years later, the Plan of Implementation¹ of the World Summit on Sustainable Development, Johannesburg 2002, establishes linkages among poverty alleviation, human rights, peace and security, cultural diversity, biodiversity, food security, clean water and sanitation, renewable energy, preservation of the environment and the sustainable use of natural resources.

1. The Plan of Implementation, WSSD, Johannesburg, September 2002. For other WSSD Documents refer to www.johannesburgsummit.org

III.2 Guiding pedagogic principles of entrepreneurship education

From the survey of programmes, a number of guiding principles can also be identified. The programmes reflect an underlying belief that:

- circuits of educational success can be created by identifying and tapping into talents and skills of young people at an early age;
- dynamic, flexible and inclusive curriculum underpins students' life pathways, including employability, personal growth, social participation and the development of shared values;
- experiential learning, as one of the principle pedagogical pillars, enables participants to draw on their own life and cultural backgrounds and is more likely make school based learning relevant, applicable, and meaningful;

- promoting real life applications allows students to reach for high levels of achievement, while creating their own solutions for addressing cross-cutting issues improving their environment and community infrastructures;
- education, coupled with guidance and counselling, will enhance the process of shaping a confident, responsible, independent, and complete young person;
- role models and mentoring extend students' aspirations, increase motivation and lower the risk of drop-out;
- teachers and instructors should assume a role of facilitators with students exercising increased responsibility for their learning; and
- regular evaluation of the curriculum should be promoted to ensure its capacity to truly connect students to their schooling and their community and to engage them as active, self-directed learners.

III.3 Implementation frameworks

III.3.1 International assistance frameworks

One of the key events towards the institutionalization of entrepreneurship education in several developing countries in recent years was the workshop organized by UNESCO in Lusaka, Zambia from 11-14 August 2003. The purpose of the workshop was to start the process of developing training modules in entrepreneurship and enterprise education. The workshop is part of a long-term plan to assist a number of countries introduce entrepreneurship education in secondary schools as part of their curriculum reforms.

Participating countries presented papers outlining various entrepreneurship programmes under implementation in their home countries. They noted their successes and failures and presented what they perceived as the main obstacles. The country reports were shared among workshop participants in order to give countries the opportunity to learn from each other. Participants were drawn from Kenya, Malawi, Tanzania, Uganda, Zambia and Zimbabwe.

Some of the main outcomes of the workshop were the outline proposals for training modules for General Secondary Educations. The main recommendations include the need to have entrepreneurship education as part of the regular secondary education curriculum and the need for clear policies by various governments in the region on entrepreneurship education and its relevance to poverty reduction.

Cross cultural exchanges

Through a cooperative relationship between two Norwegian Upper secondary schools, Sotra and Eid Upper Secondary Schools in the neighbouring counties of Hordaland and Sogn og Fjordane; and Mbala High School in northern Zambia, an integrated entrepreneurship education project is being introduced at Mbala High School at secondary level.

All three schools are joined by their mutual interest in learning through the exchange of experiences across cultural, geographic and social boundaries and their belief that, as local actors, they have an obligation to encourage and contribute towards the development of viable and sound communities through their investment in the relationship between the young population and their local environment. This investment has equal importance both with regard to present and future economic activity and livelihoods, as well as social cohesion and stability.

In Zambia, integrated entrepreneurship education has so far been taught only in further education, but not in primary and upper secondary education. The relevance of introducing the subject in lower grades is apparent given the high levels of unemployment in the country, as well as the large informal economic sector in that region. In Norway, school-integrated entrepreneurship has now been practiced in a number of the country's secondary schools for several years and these experiences so far indicate that skills are most successfully taught through practical exercises. The idea is that students are supposed to learn through actual realisation of their own business ideas. Under the guidance and surveillance of teachers as well as business mentors, students plan, set up and take responsibility for their own small enterprises.

Against this background, the two Norwegian schools and Mbala High School in Zambia have decided to create a pilot project, intended as a framework for trying out a locally adjusted version of the main elements in the Norwegian model, particularly in terms of pedagogy and training materials, as well as teacher training practices. Through this Pilot Project, the Norwegian schools and teachers will gain further competencies in the teaching of entrepreneurship, given their broadened perspective on how entrepreneurial ideas work in a different social context. Meanwhile, the Zambian school and its teachers will gain experience and ideas for how school integrated entrepreneurship may be taught in a Zambian context. Meanwhile, it is expected that the Norwegian and Zambian students participating in the classes will gain knowledge and skills of each others economic and social structures, as well as opportunities for network building.

One of the most flexible tools already developed by the International Labour Organization is the “Know about Business” (KAB) package.¹ It addresses the challenge of youth unemployment highlighted in the *Millennium Development Goals* and taken up by the *Youth Employment Network* (YEN).

The general objective is to contribute towards the creation of an enterprise culture in a particular country or society by promoting awareness among young people of the opportunities and challenges of entrepreneurship and self-employment.

1. For more details, please refer to the Youth Entrepreneurship section of ILO's Small Enterprise Unit internet site: <http://www.ilo.org/SEED>

Students come to understand the role of business in the society, its contribution to the wealth of nations and the imperative of social responsibility. They also come to understand their own contribution to shaping their future and that of their country's economic and social development.

The specific objectives of the KAB package are to:

- Create awareness of enterprises and self-employment as a career option for young people in secondary and vocational education.
- Develop positive attitudes towards enterprises and self-employment.
- Provide knowledge and practice of the desirable attributes for and challenges in starting and operating a successful enterprise.
- Facilitate the school-work transition as a result of a better understanding of functions and operations of enterprises.

The package provides 120 hours of course work for a typical age group of 15-18 year olds. The materials are intended for use by students in secondary education and trainees/students in vocational and technical training institutions whose learning curricula do not include these components. A specific adaptation of KAB has been made for Polytechnics and Universities.

The implementation process starts with a request from national ILO constituents and progresses through the following steps:

- Programme information workshop for representatives of the public and private training sector;
- Selection of education institutions interested to participate in a pilot phase;
- Training of teachers/trainers with generic KAB materials by ILO certified trainers;
- Adaptation of KAB materials to local social and economic context;
- Pilot testing of KAB in selected institutions during one school year;
- Coaching and exchange of experience among the teachers under the guidance of a KAB trainer;
- Assessment of KAB as entrepreneurship education for the national curriculum;
- Government decision on the introduction of entrepreneurship education at national level;
- Training and certification of local KAB trainers; and
- Assistance to the education sector during the general introduction phase of entrepreneurship education at national level.

What does the KAB Package consist of?

The KAB package is designed to provide teachers and trainers with the material necessary for a 120-hour course. It comprises a trainer handbook and nine modules. Each module represents a key area of entrepreneurship and is divided into several topics:

- Module 1: What is Enterprise?
- Module 2: Why Entrepreneurship?
- Module 3: Who are entrepreneurs?
- Module 4: How do I become an entrepreneur?
- Module 5: How do I find a good business idea?
- Module 6: How do I organise an enterprise?
- Module 7: How do I operate an enterprise?
- Module 8: What are the next steps to become an entrepreneur?
- Module 9: How to develop one's own business plan

As can be seen, the titles of the modules are in the form of questions, which the trainees should be able to answer after the completion of the module. Module 9 is facultative and can be added at the end of the course. Also parts of the package are a **workbook** for the trainees and a **business game**, which simulates transactions within an enterprise and among market actors. Teachers and instructors are trained to run a real school business during the one year training cycle. An interactive self-training and resource kit for teachers and trainers on CD-ROM is part of the KAB package.

The implementation of the pilot phase takes in average two years. The second phase of the implementation starts with the government decision to introduce entrepreneurship training as part of the national curricula. The duration of this phase depends entirely from the government's strategy how fast the subject should be introduced, at which education level and how many education institutions will be covered.

The Training Guide is directed towards teachers and instructors in public and private general secondary education systems, as well as vocational and technical training and higher education institutions. It provides an introduction to the subject and the objectives of KAB, as well as an overview of the course structure, the duration of the modules and topics and an explanation of the training methodology with a variety of teaching techniques.

To date, the package has been integrated into the national curriculum for vocational training in Kazakhstan and Kyrgyzstan, and is under pilot testing in more than 20 countries in Central Asia, Africa and Latin America, South East Asia and East Europe in vocational, secondary and higher education.

III.3.2 National policy frameworks

In some countries, reforms to technical and vocational education are already familiarising students with the concept of entrepreneurship within the national education framework.² But few countries have created clear and comprehensive policy frameworks to promote entrepreneurship and self-employment within general secondary education. Instead, what we find are models of education and training delivery that seek to connect school-based learning more directly to the world of work, the world of enterprise and community empowerment.

Those countries that have accelerated quicker have done so by situating secondary education reform within broader reforms to promote enterprise, local economic development, social cohesion and environmental sustainability. This has involved extensive cooperation and coordination between the Ministries of Education, Ministries of Enterprise, Trade and Industry, Ministries responsible for social welfare and poverty reduction and training providers at the national level. It has also involved cooperation between schools, businesses, Chambers of Commerce and local/regional/national government at the local level.

Australia

The new VET in Schools initiative allows secondary students to take vocational education courses at school, or with public and private training providers, and combine work with general and vocational education, on a part or full-time basis. Students graduate with full or partial VET qualifications and a senior secondary certificate that will boost their prospects of finding jobs. They are also able to use the credits so gained towards VET qualification at higher levels.

Enterprise education is a priority area within the *National Goals for Schooling in the Twenty-First Century*, endorsed by the Ministerial Council on Education, Employment, Training and Youth Affairs (MCEETYA) in 1999. It is also highlighted in the MCEETYA endorsed *Framework for Vocational Education in Schools*, released during 2001. In 2002, a two-year “Action Research Project in Enterprise Education” was established by the Commonwealth Department of Education, Science and Training to assist schools to identify and document innovative approaches to, and best practice in, enterprise education. A total of 194 schools is currently participating in the Project, which ended in March 2004.

For further information, please see: <http://www.whitehouse-design.edu.au/school/vet.html>

2. For example in Finland, as of August 2001, all vocational qualifications involve skills in entrepreneurship. Further qualifications of “Entrepreneur” and “Specialist Entrepreneur” have been established separately, the latter being intended for persons who have been entrepreneurs for at least five years. In 1999, an Act on Apprenticeship Training for Entrepreneurs entered into force.

Cambodia: Vocational training to alleviate poverty

The ILO's Vocational Training for the Alleviation of Poverty (VTAP) project has strengthened the capacity of Cambodia's Ministry of Education, Youth and Sports to implement flexible, demand-driven training programmes linked to identified income-generating activities. It succeeds the *Vocational Training for Employment Generation* project that trained over 5,000 people who were returning from Thai border camps or were internally displaced.

In 1996-98, the project provided 75 counterpart staff management and training skills, and trained 3,302 persons belonging to vulnerable groups. Fifty-one per cent were women. Operating in seven provinces, the project set up a network of training centres and mobile training programmes. The project's success can be attributed to its flexibility and systematic approach to identifying employment and self-employment opportunities for vulnerable groups, particularly women, the disabled, unemployed youth and demobilized soldiers.

It trained teams that identified individuals' training needs, promoted gender and equal opportunities, developed curricula and trained instructors. In 1998, the Department of Technical and Vocational Education and Training took over the project's activities. Under an Asian Development Bank loan project, the system has been expanded and integrated into Cambodia's new training system covering 14 provinces.

For further information, please see: http://www.logos-net.net/ilo/150_base/en/report/ch_5.htm

Indonesian Youth Employment Network (I-YEN)

In 2003, the Government of Indonesia has volunteered to be a *lead country* in the United Nations Secretary General's Youth Employment Network (YEN) with the specific aim of developing a National Action Plan on Youth Employment.

Indonesia has more than six million unemployed young women and men between the ages of 15 and 29, representing three-quarters of the total unemployed population. The youth unemployment rate is about 15% in rural and 25% in urban areas. The vast majority of working youth are in the informal economy where they lack adequate income, social protection, security and representation.

At the recommendation of the ILO Office in Jakarta, the Coordinating Minister of Economic Affairs established an Indonesian Youth Employment Network (I-YEN). The I-YEN involves senior policy-makers from the Ministries of Economic Affairs, Manpower and Transmigration and Education, as well as prominent representatives from the YEN core partner institutions, workers' and employers' organizations, youth and civil society groupings, and the academic community.

Under the direction of the I-YEN steering committee, a National Youth Employment Action Plan for Indonesia (I-YEAP) has been drafted. This draft is currently being shared with a core group of these stakeholders. The draft will support efforts to enhance the quality of education and to improve educational relevance and efficiency.

For further information, please see: <http://www.ilo.org/yen>

Namibia: Entrepreneurship and Skills Development Project (Education III)

In June 2004, the Namibian Government, with the assistance of a credit from the African Development Bank (ADB), announced its intention to finance the Entrepreneurship and Skills Development Project (Education III). The project falls within the Namibian Government's national development plan and responds to the objectives of the national education policy.

According to an ADB release, the education project "aims to contribute to the responsiveness of the education system to the skills requirements of the labour market and the production capacity of the economy."

The loan would be used to finance the establishment of the National Centre for Innovation, Entrepreneurship and Technology (CIET) in Tsumeb "with a view to enhancing the framework for innovation, entrepreneurship and technology adaptation." It was also to help improve the quality and efficiency of vocational education and training programmes in Namibia.

For further information, please see: <http://www.afrol.com/articles/12906>

Thailand: "Think Smart, Act Smart"*

This is a collaborative effort of the National Youth Bureau, the Ministry of Education and the Thailand Productivity Institute. These three partners have contributed to the strengthening of enterprising competencies among high school students. The objective is to make the productivity concept more directly meaningful to the students by helping them develop the skills, habits and practices found in highly productive individuals. These included creative and thinking skills, the ability to manage through using processes, measuring progress, and making adjustments, and team work.

Under the slogan, "Start Them Young", the pilot project adopted an activity-based approach as against one which is classroom-oriented. [http://www.google.fr/search?q=cache:wDVbW72EmrsJ:www.cefe.net/datenbank/files/2361/1/ - 11http://www.google.fr/search?q=cache:wDVbW72EmrsJ:www.cefe.net/datenbank/files/2361/1/ - 11](http://www.google.fr/search?q=cache:wDVbW72EmrsJ:www.cefe.net/datenbank/files/2361/1/-11http://www.google.fr/search?q=cache:wDVbW72EmrsJ:www.cefe.net/datenbank/files/2361/1/-11)The campaign was piloted in 37 schools in Bangkok and five neighbouring provinces. Each participating school had to fulfil three main tasks. One was to set up a "Think Smart, Act Smart" club. Club activities had to be undertaken by the students themselves with the teachers playing an advisory role. The second task was to assign a core team of one teacher and two students to attend a productivity and quality training programme. The same team would later impart what they had learned to others in the school involved in the project. The third task was for each school to undertake a productivity improvement project. Part of the training content included introduction of the PDCA (Plan, Do, Check and Act) method with the attendant skills and tools such as brainstorming, team building, conflict management, survey methodology, among others.

For further information, please see the web-site of the Ministry of Education, Thailand.

* For more details, please see Annex 2.

III.3.3 Partnership arrangements

We are caught in an inescapable network of mutuality, tied in a single garment of destiny. Whatever affects one directly, affects all indirectly.

MARTIN LUTHER KING

A common theme is that programmes are often delivered within the framework of partnership agreements at local level, and inter-sectoral collaborative arrangements at both regional and national levels.

At national level, partnerships often take the form of strengthened cooperation between Ministries of Education and Industry or Enterprise, national education and skills training agencies, national enterprise promotion agencies, etc. An example of a successful partnership created at national level is the Ontario Secondary School Business Plan Competition. Here, the Ministry of Economic Development and Trade (MEDT) and its network of Small Business Enterprise Centres have collaborated with the Ministry of Education to launch local business plan competitions for secondary school students in the communities they serve.

At local level, partnership agreements are seen as a way of gaining a clear and substantial commitment from different actors to work together. These partnership agreements are established at either individual school or school cluster level. Partners may include regional government, regional education authorities, enterprise promotion agencies, local Chambers of Commerce, the local business community and community-based organizations.

In southern France, the *Entreprendre au Lycée* framework, coordinated by the Regional Institute for the Creation and Development of Enterprises (IRCE), results from a partnership dialogue between the regional government for Provence-Alpes-Côte d'Azur and the regional education authorities (Academies) of Aix, Marseille and Nice. In Ireland, inter-school competitions are organized by the Young Entrepreneurs Scheme (YES) National Committee in collaboration with the City & County Enterprise Boards throughout the country.

Within partnership frameworks, there are also numerous examples of direct private sector support to secondary education in different settings. Local businesses directly sponsor courses, while local entrepreneurs act as classroom speakers, serve on the advisory boards and curriculum committees of secondary schools, or work placement employers. Private sector firms occasionally supply curriculum guidelines and materials, or subsidise courses, as part of a particular sponsorship programme.

A sense of community partnership is often apparent in rural and regional communities, especially those confronted by substantial issues of economic and social change. These partnerships are more informal, with concepts or skills taught by parents who may be local business leaders or by volunteer students on entrepreneurship courses at local universities. The involvement of communities tends to lead to interesting innovations geared to the local environment.

Encouraging an entrepreneurial culture: The case of the Confederation of Norwegian Business and Industry (FERD)

FERD has recently agreed to support Ungt Entreprenørskap (Young Entrepreneurs), a Norwegian charitable organization that works to give school children and students first-hand experience of setting up companies and value creation.

FERD has agreed to provide annual financial support of NOK 200,000 for three years. In addition, members of the FERD management team will directly support the work of Ungt Entreprenørskap. This includes Ferd's CEO Johan H. Andresen jr., who has already agreed to address meetings of young entrepreneurs and a course for 200 teachers from secondary schools and colleges. Several members of the Ferd team have acted as judges for young entrepreneur competitions, and a number of their colleagues are keen to play this role in the future.

Ungt Entreprenørskap is organised as a not-for-profit organization with no political affiliation, and its objective is to promote an entrepreneurial culture and creativity among school children and students. The organization is supported by a number of leading names in Norwegian business and industry, and its Chairman is Jens Ulltveit-Moe, the President of the Confederation of Norwegian Business and Industry.

"We offer a range of educational concepts for secondary schools and colleges as well as at the university level, but all of these are based on pupils and students setting up and running a company," explains Jarle Tømmerbakke, Director of Ungt Entreprenørskap. "It really means something to meet a leading business leader face-to-face. It gives the students the chance to meet people they would otherwise only see on the television or in newspapers, and it is a real inspiration to meet someone who is responsible for a company's success".

Norwegian legislation makes special provision for companies run by young people, and over the last academic year, 1,300 'student' companies were registered with the Norwegian Register of Business Enterprises, giving 7,800 school pupils and 100 students first-hand experience of realising their business ideas.

It was very clear that there was no shortage of ideas and creativity when 1,070 pupils representing 57 student companies met at Hellerud School for a Ungt Entreprenørskap competition in February 2004. The competition covered 10 categories, ranging from the best student company and business idea through to the best corporate logo and best salesperson. Many of the young entrepreneurs present had clearly put in a great deal of effort and commitment, and the results achieved were very impressive.

"This was an extremely valuable experience for the young people involved. It also represents a further step in building a new approach to business and industry. Schools are increasingly keen to welcome involvement from the corporate sector, and companies are also showing much greater interest in playing a role in the education system. This is what Ungt Entreprenørskap wants to encourage in order to foster an entrepreneurial culture and stronger value creation here in Norway", commented Jarle Tømmerbakke.

Summary extracted from the FERD web-site. For further information, please see: <http://www.ferd.no/ferd/show.do?page=12&articleid=1034&lang=en>

III.4 Programme focus

The precise focus for entrepreneurship or enterprise education is usually decided by individual schools according to locally identified needs. Some programmes adopt a sectoral focus (e.g. agricultural entrepreneurship, new technologies, e-commerce, environmental sustainability, developing innovative social frameworks). Some programmes also specifically target different population groups, such as minority or indigenous groups, young girls and women, or have a geographic focus, i.e. rural areas or urban slum dwellings.

A broader model has recently evolved around the **concept of life skills** which encompasses the psycho-social aspects of dealing with issues related to vulnerability and poverty, as well as **education for citizenship, community welfare and health**. But most interventions try to integrate the natural learning processes and assets of youth living in different circumstances and help them to become self reliant by developing their own simulation projects, sharpening their academic skills, forming positive attitudes about themselves and their communities as well as the skills required in the workplace.

Young people benefit from teachers' and a mentor's knowledge, resources and community connections. They are based on the adoption of appropriate local technologies and are often built around and respectful of existing community social structures and resources. Training providers may include governmental and non-governmental organizations (NGOs), church groups, small-scale enterprises (including family subsistence groups).

III.4.1 Economic and ecological literacy

Historically, employment creation and shifts in economic growth patterns throughout the world have been negligent of their social and environmental impacts. This is beginning to change. In the areas of entrepreneurship and enterprise education, certain programmes have evolved in recent years to promote greater awareness of the wider context for enterprise and business, and an understanding

The Plan of Action of the World Summit on Social Development stated that countries should work towards...

“promoting patterns of economic growth that maximise employment creation [with respect to].... the conservation and management of natural resources, the promotion of alternative livelihoods in fragile ecosystems and the rehabilitation and regeneration of critically affected and vulnerable areas and natural resources....” (III, 50.i).

among youth of how enterprise impacts on the local environment and community. Complex topics are broken down into their essential components and explained in the most straight-forward terms possible. In many cases, participating students are encouraged to think of ways of getting involved and taking action.

The majority of programmes usually include initial classroom instruction towards some or all of the following elements:

- Awareness of the global, national and local context within which enterprise, trade, industry and consumption patterns operate.
- Contemporary environmental, political and international issues.
- Insight into the role and importance of entrepreneurship and small business creation to local and national economic and social development and the preservation of local heritage.
- Awareness of each localities' local economic development strategy and industrial structure.
- Exploration of entrepreneurship as it relates to a particular sector or industry.
- Knowledge of connections between production, consumption and sustainability and the alternatives that are most meaningful in different situations.

International: EcoVentures International (EVI)

This not-for-profit learning provider focuses on moving youth from environmental compliance projects into prevention projects – for example moving from recycling projects to renewable energy.

EVI works to develop the life skills necessary to operate in a sustainably-orientated environment: co-operative decision-making; planning; managing; effective communication; and holistic thinking.

The curriculum facilitates the identification of environmental and social challenges in the local area and leads students through a process in which they find appropriate business solutions. In this way they get not only an appreciation for environmental challenges and appropriate life style and mindset changes, but simultaneously develop their own sustainable livelihood opportunities and entrepreneurial potential.

For further information, please see: <http://www.eco-ventures.org/>

III.4.2 Entrepreneurship skills

Apart from having an idea, an entrepreneur needs specific skills and knowledge to be able to operate his or her activity on a daily basis. This aspect tends to be ignored by young people. Entrepreneurship is both a science and an art. Science must be learned through training, but managing an enterprise is an art, which could be learned, at least partially, by doing. Those who choose to become self-employed or start a business need to be trained in business management, marketing, financing and accounting, human resources management and informational technologies. They also need to learn the legal and fiscal aspects of business.

Some schools have tried to increase authenticity by focussing on the development of new businesses that may replace those now economically defunct. Others have formed partnerships with local businesses to ensure that real role models are available to give guidance on aspects of business development and to ensure that learners are developing products that meet commercial quality standards. In other instances, students are guided towards developing social enterprises that create innovative infrastructures for tackling real community issues.

The orientation of entrepreneurship skills training is usually shaped by the individuals' particular ideas and interests, as well as the local economic context. For example, students in a rural area thinking of going into farming would be exposed to the skills and knowledge for sustained crop production and strategies for the prevention of food losses during harvest, storage, marketing and processing. In urban areas, the range of opportunities may be broader.

In many cases, irrespective of the region, country or local environment, many programmes support entrepreneurship skills training within a lifelong learning model.

Programmes usually include some or all of the following elements:

- *Entrepreneurial knowledge*
 - understanding the role of enterprises in a broad and narrow sense;
 - the role of enterprises in society;
 - typical characteristics and behaviour of entrepreneurs;
 - business ethics and standards;
 - the general types of decisions and skills necessary for entrepreneurship, self-employment and career path development.
- *Starting a business*
 - identifying opportunities based on market and community needs;
 - knowledge of different types of business model (small businesses, corporations, cooperatives, not-for-profits, high-tech enterprises, etc.);
 - using appropriate technology;
 - estimation of start-up capital;

- identifying sources of capital and alternative financing and securing resources;
 - conducting a feasibility study.
- *Running a business*
- assessing of markets;
 - developing a marketing campaign;

REAL (Rural Entrepreneurship through Action Learning) Enterprise Programme

The REAL Enterprise Programme targets high school students in the rural areas of the USA by linking education with rural economic development. Without alternatives, rural communities are at risk of lacking qualified individuals for vital roles in local communities and economic activities. The initiative assists young people in identifying a business opportunity or utilizing untapped opportunities in the local economy. Classroom activities help them to prepare a business-plan, to initiate their businesses while they are still at school, and later on, to transit them into real enterprises. In doing so, the school sets out to help foster a sense of empowerment and heighten the capacity to be successful and productive community members.

Since 1990, more than 5,000 youth and young adults have received intensive entrepreneurial training within REAL programme. Their school-based enterprise programmes represent an example of how rural school can play a significant role in community economic development. A survey of 400 REAL graduates (from 1992-1998), conducted in 1998, showed that these businesses had not only survived, but also expanded, reaching a total volume of sales of \$6 million and creating 686 new jobs. Another study found that the survival rate of the REAL enterprises after 7 years since their establishment was 91-92 per cent. In the 1999-2000 academic year, NC REAL was serving 64 of North Carolina's 100 counties through their local schools and community colleges.

Activities are based on the premise that action learning enhanced skills depends on active student participation and decision-making. Students conduct a community survey to identify needs that could lead to entrepreneurial ventures. Once these are identified, business plans are developed, funds are secured and a business site is established, thus providing students the opportunity to learn the concepts and responsibilities of managing/owning a business. REAL businesses then "spin off" from the school and are independently owned and managed by students who have participated in the REAL Enterprise Programme and have graduated from school. Examples of REAL Enterprise student ventures initiated range from a day care centre to a training booth/exercise centre.

The successful experience of the REAL programme was replicated in other rural areas of America, and its business-incubator approach has been tested in urban areas as well. The attractiveness of this approach lies in its effectiveness to match the local supply of skills with the local demand for skills as close as possible, but also to provide young people with appropriate skills for self-employment. In the urban settings, the focus has been on youth in- and outside school, dropouts and other disadvantaged youth.

For further information, please see: <http://www.ncreal.org/REALInfo/>

- management and business skills;
- legal implications of self-employment and enterprise creation (unemployment insurance, health cover, and pensions);
- aspects of communication and presentation;
- developing a business plan to include various components such as financing and marketing using financial statements; and
- Identifying and using support services available from the public and private sector.

Finally, it is important that would-be-entrepreneurs become familiar not only with the potential benefits, but also with possible risks entrepreneurs have to face and about the tradeoffs they have to make. Apparently, the biggest risk entrepreneurs usually face is, not at the initial stage of starting up their businesses but rather later, after the business established itself and has to be developed further. This aspect needs to be taken into consideration not only by would-be-entrepreneurs, but also by organizations, which provide services for young entrepreneurs. The United Nations Economic Commission for Europe has developed a guide to help start-ups and advanced entrepreneurs to understand and cope with business risks.³

III.4.3 Social entrepreneurship skills

Another focus of entrepreneurship programmes may be encouraging the students to develop projects that directly tackle community issues, e.g. food security, ensuring clean water supply, running HIV/AIDS prevention campaigns, environmental protection, organizing outreach campaigns, participate in the upgrading of their neighbourhoods, joining networks with community leaders.

The meaning of “Social Entrepreneurship” was developed by J. Gregory Dees (professor at Stanford’s Graduate School of Business). He states: “For social entrepreneurs, the social mission is explicit and central. This obviously affects how social entrepreneurs perceive and assess opportunities. Mission-related impact becomes the central criterion, not wealth creation. Wealth is just a means to an end. Social entrepreneurs operate in markets, but these markets do not provide the right discipline. In particular markets do not do a good job in valuing social improvements, public goods and harms and benefits for people who cannot afford to pay. These elements are often essential to social entrepreneurship.” J. Gregory Dees gives a definition of social entrepreneurs (with reference to Say, Schumpeter, Drucker and Stevenson) as follows:

3. Please see UNECE documentation: <http://www.unece.org/indust/sme/ece-sme.htm>

Social entrepreneurs play the role of change agents in the social sector by:

- Adopting a mission to create and sustain social value (not just private value);
- Recognizing and relentlessly pursuing new opportunities to serve the mission;
- Engaging in a process of continuous innovation, adaptation, and learning;
- Acting boldly without being limited by resources currently in hand; and
- Exhibiting heightened accountability to the constituencies served and for the outcomes created.

III.4.4 Employability Skills

Programmes usually include some or all of the following elements:

- Awareness of required pre-employment skills;
- Developing skills such as communication, numeracy, problem solving, using ICT and working with others;

Arab States: Economic Education and Job Skills Training

Within the framework of the Global Development Alliance, Junior Achievement International (JAI) has partnered with Exxon Mobil Corporation, Citigroup, MEPI, USAID, INJAZ Jordan and other private sector companies throughout the Middle East and North Africa to develop seven self-sustaining Junior Achievement organizations in the Middle East.

Through a \$1,000,000 grant, 98,240 secondary school students and youth in Bahrain, Egypt, Lebanon, Oman, Qatar (West Bank or Tunisia or Morocco), and United Arab Emirates will complete at least one of twenty Junior Achievement programmes to gain a fundamental understanding of business, economics and entrepreneurship.

In Jordan, INJAZ is a national initiative launched in 2003 with funding from Save the Children/USA. With 62 per cent of Jordan's population below 25 years of age, and 25 per cent between the ages of 14 and 24, it was felt that a programme framework should be developed to promote economic opportunities for Jordanian youth.

INJAZ will foster entrepreneurship and workforce preparation for 14 to 24 year olds. The programme was launched in Amman schools and in economically disadvantaged regions of the country. Approximately 220 youth in Amman have benefited from the programme in 2004.

The curriculum focuses on personal and business economics, entrepreneurship, leadership and community service courses that serve to foster creative thinking and critical problem solving among the learners.

With the cooperation of the Ministry of Education, vocational training centres and volunteers, the programme has extended its operations last year from Amman to Maan and Zarka, to be followed in the near future by Irbid, Karak and Aqaba.

For further information, please see: http://www.savethechildren.org/countries/middle_east_eurasia/jordan.asp

- Developing team-building skills by working cooperatively with others (independent and group research, working with people of different backgrounds and ages, and with different points of view, sharing ideas, investigating sources, peer mentoring); and
- Using Internet and CD-ROMs for research.

III.4.5 Economic and social integration and life skills

Both entrepreneurship and enterprise education usually try to develop a solid skills foundation so that students have the creative capacities and confidence to express themselves, apply the knowledge they have learned and generate their own opportunities throughout their lives. Students also learn how to cooperate with one another and to make sound value judgements.

Examples can be found in the programmes of where learning activities are used as a vehicle to nurture talents in areas such as public speaking, independent thinking, research and technological competencies, as well as fostering forms of cultural expression such as dance, art, drama and video production.

Programmes usually include some or all of the following elements:

- Learning how to put one's ideas, talents and creativity into action and take calculated risks;
- Applying enquiry, reasoning, critical thinking, problem solving and analytical skills to different situations;

Scotland: Life Skills Through Enterprise

Glencryan School in North Lanarkshire reaches 175 pupils aged 3 to 18 years with moderate learning difficulties and/or emotional and behavioural problems. An extensive programme of education-business links, enterprise activities, work experience, careers education and supported employment has been carefully designed according to the age and needs of the pupils.

In the senior school, a major focus is on a Life Skills Unit which concentrates on core skills developed by a core teacher and subject specialists. Skills and subjects such as English, maths, science, languages and expressive arts are delivered through an "enterprise in education" approach. Running a company and other enterprise activities allows students to be independent – by taking responsibility for decision-making and problem solving – and also to work with others. Work experience in S4-S6 relies on matching opportunities from local employers to the specific skills, attributes and needs of the young people.

The programme has shown that through varied experiences, careers can develop a comprehensive action plan for pupils.

For further information, please see: <http://www.scotland.gov.uk/library5/lifelong/reie-05.asp>

Argentina: The Educational Opportunity Project

The Educational Opportunity Project is an initiative of COINED, the Argentine intercultural exchange student organization, better known in Spanish as the “Comisión de Intercambio Educativo”.

This project promotes education at a local level for Argentine secondary school students with a high academic achievement but low economic status. It originated in Cordoba at IPEM 18 school, in a neighbourhood called Granjas de Funes, where most students’ families lack the basic economic resources to encourage their children to complete their education.

In order to stimulate enterprising and proactive behaviours and attitudes among the students, COINED provides them with scholarships and the proper tools to carry out a small entrepreneurship project, through which they create and elaborate products to be sold in the market.

With the professional assistance of the Psycho-pedagogic Department of the Institution, students with the right motivation are awarded scholarships. In 2004, the project had 11 scholars, and the number of applicants is increasing year on year.

As part of the project framework, students are provided with a free uniform. A nutritionist also advises the school on dietary needs so that the students are well nourished. Funds also cover medical services, including blood tests, dentological checking, and medical supply.

As part of a longer term vision, the school has also introduced a vocational guidance and counselling system, as well as advice on post secondary pathways and further education registration procedures.

For further information, please see: www.coined.com.ar/.../Scholarships-Argentina/1-arg-scholarship-educational-opportunity-argentina.html

- Developing decision-making responsibility in a wide range of areas;
- Absorbing the values and attitudinal changes needed to be respectful of, and better manage resources in their lives and in their communities.

III.5 Curriculum connections

Schools vary in how they introduce entrepreneurship or enterprise education. For some, it has meant approaching a subject or curricula topic from a new angle or with different tools in order to convey meaning and enhance learning. Others have introduced entrepreneurship as a new subject altogether.

On the whole, connections to the curriculum take place in a number of ways, including:

- the introduction of entrepreneurship or enterprise education as a specific subject in the formal curriculum;

- the re-orientation of different subjects so that they incorporate an enterprising flavour;
- as an extra-curricular activity, for example as a fund-raising initiative;
- the convergence of a range of subjects under the “umbrella” of enterprise education, with expectations that students will develop enterprising relationships

Malaysia: Invention Curriculum Project

This curriculum is designed to stimulate students who are creative, innovative, inventive, capable of adapting themselves to and participating in current technological changes and development through creating inventions that help to overcome certain identified problems. They also master a variety of technical skills, including use of computer-aided design software. Students' individual products and folio presentation of their work serve as an evaluation of their learning.

Overall, the project enables students to:

- i) be creative in their thinking, innovative and inventive;
- ii) be capable of creating an invention that is beneficial to the nation;
- iii) be sensitive to the surrounding problems and current technology;
- iv) be interested in the field of entrepreneurship and practise the characteristics of entrepreneurs;
- v) become moral individuals.

The new inventive curriculum is designed as part of the **Living Skills** subject which is compulsory for all primary and lower secondary students in Malaysia. At the upper secondary level, invention is offered as a technology elective subject.

The Curriculum Development Centre trains resource teachers at the national level and these in turn conduct courses for other teachers at the state level. Enrichment courses are also provided from time to time to consolidate and further upgrade the skills of teachers. These courses are also attended by officers from the various Education Divisions and State Education Departments.

In addition to teacher orientation programmes, curriculum and supporting materials have been developed with the assistance of personnel with expertise in specific fields. These personnel include staff from universities and relevant organizations as well as experienced teachers. To support the curriculum project at the upper secondary level, a launching grant is provided during the first year of implementation for the purchase of materials and equipment. In addition, an annual per-capita grant is provided.

Fourteen schools have been selected throughout Malaysia for a pilot trial in 1995. Since 1996, the project has expanded to all primary and lower secondary schools and to 160 upper secondary schools.

In order to achieve greater relevancy or to strengthen learning, attachment programmes of students to local industries are being developed between the private and government sectors. Students will then be exposed to current technological concepts and practices, real problem-solving situations and realistic entrepreneurial practices.

For further information, please see: <http://www.ibe.unesco.org/International/Databanks/Dossiers/imalaysi.htm>

- between themselves in the different classes. This may involve cooperation between technology, art and literacy classes in a shared project;
- the development of entrepreneurship or enterprise education through a “pathway approach”, such as courses based on a learning project that may continue from the junior to the senior years of high school, perhaps incorporating VET competencies and enterprising opportunities; and
 - the development of a whole-school enterprising focus that then acts as the centre-point for the development and implementation of the curriculum across different learning areas.

Some schools have moved past the curriculum to change the way they relate to students, providing all students with opportunities to make decisions about their learning and apply it in the real world.

III.6 Instructional approaches

The research found no universal model of entrepreneurship education, but many programmes have proven successful because they offer flexible delivery methods that take into account students’ preferred learning styles. The manner in which the students are required to respond to the teacher and/or to the instructional approach is also flexible. In many projects, responses may be expected orally, visually, graphically, or in written format.

Other similarities exist between programmes. Many schools adopt a classroom-based approach, with entrepreneurship and enterprise education integrated across the curriculum or as an optional subject. In other cases, multiple sites are employed with programmes offered as an after-school activity such as an after-school club, or even summer camps and weekend workshops.

Nearly all programmes are guided by the principles of action and experiential learning and suggest, to varying degrees, that the key to promoting entrepreneurial initiative is engaging learners as active generators of knowledge, rather than passive receivers. They are encouraged to explore for themselves the link between entrepreneurship theory and practice through structured exercises, diagnostic tools, peer networking, self-help groups and mentoring. In the case of entrepreneurship education, they also begin to understand real-world applications by applying their knowledge in the development of their own business ideas and through participation in competitive events and networks.

Some entrepreneurship programmes also address the psycho-social aspects of dealing with life challenges, vulnerability and poverty. This dimension of

France: *Entreprendre au Lycée*

Launched in 1991 through cooperation between the Provence-Alpes-Côte d'Azur regional governments, in partnership with the regional education authorities (Academies) of Aix-Marseille and Nice, *Entreprendre au lycée* is coordinated by the Regional Institute for the Creation and Development of Enterprises (IRCE), in partnership with the two regional education authorities.

Entreprendre au lycée is a pedagogical tool based around the methodology of creating an enterprise. It works towards developing the knowledge, skills and behaviours needed in today's socio-economic climate through a real world application linked to professional career options. It allows secondary school students to develop competencies and behaviours linked to innovation, creativity and organization favourable to labour market entry.

Enterprises created by the students must be registered either as not-for-profit associations, or be attached to the socio-educational structure of the college. The profits are limited in order not to create a competitive disjuncture with the local economy. The pedagogical team, made up of 2-4 teachers, accompanies the young entrepreneurs in their relationships with enterprise partners (clients, suppliers, bankers, accountants and administrators) in order to confront real economic situations. In turn, these partners are asked to provide their experience and advice to the young entrepreneurs and members of the pedagogical team and to help them expanding their support networks.

For further information, please see: <http://www.ac-aix-marseille.fr/daet0203/fichiers/entconcept.html>

entrepreneurship education has been important in at-risk communities where there may be problems that adults have identified as issues, but students have not. Here, the students work out solutions for themselves.

In projects such as *Entreprendre au lycée* in France and the *Youth Enterprise Society* (YES) Programme in South Africa, teachers and students are supported in their entrepreneurship activities by pedagogical teams established either in the locality between different partners or at the school level.

Classroom activities

Teachers engage in direct instruction to convey the central concepts and principles of economic and ecological literacy, entrepreneurship and social entrepreneurship and preparation for work and society. Through direct instruction and group discussions, teachers challenge assumptions, expectations and values. Classroom activities may also involve detailed project work on an operational or organizational problem of the community or a small enterprise with students required to submit a project report. This gives them an opportunity to apply the theories, concepts, tools and techniques they have learnt and develop their written and oral communication skills.

South Africa: Youth Enterprise Society (YES) Programme

The YES Programme's mission is to help young South Africans become business creators rather than simply job seekers. Honed during a three year pilot programme conducted in the north-eastern Free State, YES is a multiracial school programme based on "learning by doing" for grade 9 (std 7), grade 10 (std 8) and grade 11 (std 9) pupils.

The programme involves whole communities, including local business people, trade union representatives, educationalists and other community members, and is designed to create awareness and interest in free-market entrepreneurship as a career option amongst young people. After meeting certain requirements, interested parties form a "Local Partnership" (LP) which then initiates YES Societies at one or more schools in their area.

Students are invited by their peers to join and each YES Society involves three to six specially trained teachers who act as YES Advisors and 45 students, broken down into three teams:

- 15 × grade 9 (standard 7), entitled "Pioneers"
- 15 × grade 10 (standard 8), entitled "Champions"
- 15 × grade 11 (standard 9), entitled "YES Entrepreneurs"

Society leadership is with the youth who select their own office bearers and run their own affairs. Teachers act purely as facilitators and a link to the Local Partnership (LP), whose members judge and evaluate the students' progress. Campaigning by the students is usually their first exposure to mass motivation and is in itself a good learning experience, resulting in an executive committee comprising: President, Vice-President, Secretary, Treasurer, Public relations Officer, Constitutional Adviser and Team Chairpersons.

Throughout the three year programme, YES members focus on developing skills in the 17 entrepreneurial competencies, with the content of each becoming broader and more complex with each passing year.

The 3 day Annual National Competitive YES Conference celebrates those YES participants who have excelled during the course of the school year; it gives them the opportunity to compete against each other nationally. For a student to make it to the conference, he must not only excel in his own society, but also within his full LP area, his region and finally gain selection to represent his province.

For further information, please see: <http://www.ewet.org.za/yes/yes.html>

Business simulation activities

The aim of business simulation and practice enterprises is to put students in the situation of an entrepreneur and make them aware of the reactions, the styles of communication and management that are used in small businesses. This is a pedagogical method for giving entrepreneurship both form and content.

When students work together in a practice enterprise, they become responsible for the enterprise's success, which gives them a stake in the learning process, as well as securing their commitment and participation. Since there are a wide variety of problems to be solved, all participants must equally contribute to the final result. This promotes the notion of cooperation and interdependence. The projects also provide an opportunity to apply maths, science, technology, and language in a real-world context.

Nigeria: Owerri Digital Village

Since September 2003, the Owerri Digital Village (ODV), supported by the Youth for Technology Foundation in Nigeria, has been opened as part of a Global Education Tele-Community Initiative (GEI). GEI is a joint venture of international grassroots public schools, community technology and learning centres, science museums, universities and leading international businesses to achieve education reform. GEI itself receives support from the EDS Foundation, EDS Corporation, Microsoft Corporation, and iLinc.

By interfacing innovative K-12 (elementary and secondary school) science, math, engineering and technology programmes with civics, government and economics, the GEI shows at risk youth the connections between classroom curricula and their applications to real-world projects, while inculcating the organizational skills, discipline, self-confidence, and multicultural awareness and understanding needed for success in today's global economy.

Young people work collaboratively on real-world science and engineering projects, in partnership with local and international engineering firms. Learning occurs during school hours and in extended learning communities after school. Education HUBs in different countries are connected with one another, and with leading international scientists, engineers, educators, business executives, and civil leaders for training and collaboration.

The Owerri Digital Village ran a pilot programme from November 2003 to May 2004. During this time, 15 young participants, aged 12 to 16, worked collaboratively, developing a business plan focusing on water purification in their communities. ODV participants also worked with their global peers. The programme was designed in such a way that the youth were virtual business owners of an engineering firm hired to research, investigate and report on water conditions confronting them in the 21st century.

The young participants gained computer skills (Word, PowerPoint and Excel), online research skills, business entrepreneurship skills and developed a solid understanding of the water purification process (water contaminants, water treatment cycle). The youth also improved their written and verbal communication skills as a result of collaborative efforts each week with other youth and educators using LearnLinc, the distance learning software application that forms the backbone of the GEI web-collaboration network.

In September 2004, the full programme was launched at the Owerri Digital Village. Fifty youth participated and the focus of the six month programme was on science and prevention of communicable diseases, including HIV/AIDS.

For further information, please see: <http://www.unites.org/cfapps/wsis/story.cfm?Sid=22>

Participation in special events

Many national Ministries of Education, in association with business and other partners, sponsor national awards schemes recognizing and promoting excellence in entrepreneurship education and promoting their impact to parents and the wider community.

Role models and mentors

Mentors from the business and not-for-profit community provide advice on technical, financing, marketing, legal, insurance and a host of other issues. Mentors also

Bahrain: Al-Hekma International School

Fifty-six students of Al Hekma International School (AHIS) were awarded by Mr. Abdul Raheem Al Saeedi, Head of Commerce and Company Affairs at the Ministry of Commerce, for organizing a unique car show in 2004.

The award ceremony, held under the patronage of his Excellency the Minister of Commerce, Ali Saleh Al Saleh, was part of an educational programme designed to provide students with the opportunity to learn and experience the fundamentals of starting and managing a real business enterprise. The programme has enabled these students to put into practise the business theories they learned in the course of an entrepreneurship programme launched at their high school in 2001. Around 80 students appearing for the American Diploma were involved in setting up the Car Show.

For further information, please see: <http://www.alhekma.com/>

Canada: Enterprise Olympics

Enterprise Olympics is a yearly competition celebrating the best student entrepreneurship activities in Newfoundland secondary schools. The competition consists of a showcase and business plan competition. Students in each school district participate in regional showcases to determine those that will go forward to attend the Enterprise Olympics competition. The showcase provides an opportunity to celebrate the achievements of regional winners, who share \$10 000 prize money between them.

The Enterprise Olympics “Teacher’s Guide”, which is distributed to participating schools, includes goals and objectives, rules and regulations, tips for developing successful student projects and presentations, judging rubrics, and a host of other material that will help participants who may want to set up a similar competition in their own state or province.

For further information, please see: www.mps.k12.nf.ca/enterprise

Ireland: Youth Entrepreneurship Scheme (YES)

The Golden Vale Young Entrepreneurs Scheme aims to stimulate enterprise and innovative activity amongst young people. For several years, the Scheme has been encouraging and assisting the organization of YES within secondary schools nationwide. Students, either individually or in groups (up to 5 students), create and operate their own real mini-businesses. These businesses sell products or services to students, or outside the school.

The specific objectives of YES are:

- to assist the development of entrepreneurial skills, self-confidence and self-reliance;
- to help create an enterprise culture and stimulate entrepreneurial activity; and
- to help young people respond to the changing employment situation by encouraging initiative.

YES is organized by the Young Entrepreneurs Association, which is an informal group of parents and teachers, working on a voluntary basis. It coordinates the overall Programme; provides extensive support to local organizers; and arranges Regional and National Competitions. The first YES was established in 1991. Since then, it has expanded very rapidly throughout Ireland and over 50,000 students have participated. In 2000, 8,000 students from 271 schools took part in the programme.

For further information, please see: europa.eu.int/comm/enterprise/enterprise_policy/charter/docs/ireland.pdf

provide individual counselling, business skill training and education. Small business owners, as well as executives from large companies, volunteer time to perform one of the basic fundamental roles, that of a business adviser.

Field trips

Students may visit various businesses and organizations, providing an opportunity to observe and experience the real life situations described in the classroom sessions. They also offer the students an opportunity to interact with the managers and other functionaries and assimilate skills and attitudes relevant for managing different situations.

Indonesia

In Indonesia, the Youth Employment Network (I-YEN) has developed a number of practical aids for young people seeking work or looking to start their own businesses. These include:

A *Pocket Guide for Youth Seeking Work* which targets young people both in and out of school, unemployed and new entrants to the labour market. The Guide provides young Indonesians with information on how to profile themselves for work and what to do to seek work.

The I-YEN has provided funding support for Youth Entrepreneurship Start-up, a youth business programme for aspiring university graduates with good business ideas but no access to capital, based on the model of business mentoring and loans developed by Youth Business International.

In partnership with the Ministry of National Education, the ILO has started a pilot test with its Know About Business entrepreneurship education programme at secondary vocational education, involving more than 50 schools during the academic year 2005/2006. The pilot test started with the training of 120 teachers from secondary schools and from teacher training institutes. The KAB programme will be combined with the ILO start-up programme SYB that had been tested during the previous academic year.

These programmes are designed for young women and men in senior vocational secondary schools (15–18 year olds) to help them stimulate their entrepreneurial consciousness and skills and to consider business development as a viable income-generation alternative.

The pilot test will allow the Ministry of Education to take an informed decision for the general introduction of KAB and SYB in vocational education.

Other important activities include the development of a toolkit for municipal officials that will facilitate work with young workers in the informal sector and the publication of an employers' guide and a workers' guide to youth employment in Bahasa.

The World Bank and the United Nations Development Programme are working with the Ministry of Education and youth organizations to focus on the special needs of marginalized youth through the development of life-skills programmes for in-school and out-of-school youth, especially those who are poor or otherwise marginalized.

For further information, please see: www.ilo.org/public/english/employment/strat/yen/leaders

Networking

Students are encouraged to participate in national and international business simulation networks on the internet and acquire global economic knowledge. Such projects facilitate cultural sharing and understanding.

III.7 Teaching tools

The use and sophistication of teaching tools in different programmes depend to a large extent on the resources available to the schools.

Materials and resources in western countries tend to be fairly advanced, relying on specially-designed course materials, multimedia and internet. These are designed or supplied by national education systems (often the case in Europe) or are purchased by local education authorities from not-for-profit organizations specialising in entrepreneurship or enterprise education (as is often the case in the United States).

In developing and transition countries, the tools have more frequently been developed with the technical assistance of international development partners, such as the International Labour Organization and the United Nations Development Programme, bilateral funding agencies and/or international non-governmental organizations. Private sector sponsorship of campaigns is also common, particularly in Latin America and Asia (see box on opposite page).

III.8 Professional training and development

The success of any educational and training programme depends on teachers who have had quality training, who appreciate the approach and can use the materials properly. Some countries include teacher training and on-going professional development as part of the programme framework.

South Africa

The Foundation for Entrepreneurial and Business Development (FEBDEV) provides entrepreneurial skills to individuals, companies and educational institutions in Gauteng, Western Cape and North West Provinces in South Africa, and the programmes are regionally specific. FEBDEV aims to provide educators with the skills to assist students to become entrepreneurial, and believes it contributes to creating a spirit of enterprise through workshops and networking with decision-makers.

For further information, please contact: febdev@iafrica.com

Australia

The Ministerial Council on Education, Employment, Training and Youth Affairs has provided all schools with a package of professional development resources for leaders and teachers in both primary and secondary schools. The package includes:

- *The Enterprising School*, Format: PDF (849 kb, 32 pages);
- *Enterprise Education in Primary Schools*, Format: PDF (1,206 kb, 128 pages);
- *Enterprising Education in Secondary Schools*, Format: PDF (1,246 kb, 148 pages).

An accompanying CD-ROM has been distributed containing all the activities and strategies in the books. These resources aim to assist teachers and school leaders in helping young people develop an understanding of what business is about, including all aspects of what it means to work in a private business or a community organization.

For further information, please see: www.mceetya.edu.au/aboutmc.htm

Kenya

Entrepreneurship education was introduced in the national curricula already during the mid-nineties. A syllabus had been developed and the teacher lectured the subject without being particularly prepared and trained for it. It turned out that the teachers used a rather theoretical approach that does not raise the expected interest among the young students. After a KAB workshop organized in Kenya in 2004, the Ministry of Education, Science and Technology asked the ILO to train 200 teachers with the KAB methodology and content in order to deliver entrepreneurship education through all vocational training institutions starting with the academic year 2006/2007.

For further information, please see: www.ilo.org/seed youth entrepreneurship

United States

EdTec (a social enterprise) provides teacher training through videoconferencing and the EDGE University “certified entrepreneurship instructor” training, annual entrepreneurship educators conference. The New Youth Entrepreneur Instructor’s Guide was developed in conjunction with the Ewing Marion Kauffman Foundation, and provides a companion guide to the New Youth Entrepreneur curriculum with information on implementing the curriculum, module overview, supplemental learning activities, and handouts.

For further information, please see: www.edtec.biz

Chapter IV

Impact

There seems to be a general consensus that, ultimately, the outcomes of entrepreneurship or enterprise education programmes at secondary level should not only be to stimulate employment opportunities, but to prepare young people for the complexities of life in today's urban and rural communities. Through the acquisition of practical learning, work and life skills, programmes should improve the ability of students to anticipate and respond to changes in society more easily.

Measuring the success of entrepreneurship and enterprise education programmes, however, is still a major challenge. Unfortunately, there are few tracer studies available, i.e. tracing graduates of enterprise education and self-employment programmes to assess whether they have successfully been integrated into the social, cultural and economic mainstream of their communities. More importantly, it is extremely difficult to isolate the impact of a particular intervention without considering the interaction among different cultural, institutional and family influences on entrepreneurial behaviour in any given local or country context.

Much of the evidence is anecdotal, but still valuable. Beyond quantifiable indicators, the success of youth entrepreneurship interventions could therefore be measured in terms of contribution to learning, contribution to teaching practice, to the community and poverty reduction and to more joined-up decision-making. The following section takes a brief look at these areas.

IV.1 Contribution to learning: changes in skills, attitudes and behaviours

Most programme designers and implementers believe that the potential effectiveness of such programmes should be measured not just in terms of the acquisition of entrepreneurship skills, but in increased motivation, engagement, self-esteem and self-confidence in different aspects of school life and in preparation for post secondary pathways, the world of work and beyond. In many programmes, the linkage between the learning taking place and its immediate application has been shown as a motivating factor with regard to attendance and staying in secondary school. When skills have an immediate relevancy to prospects for developing a sustainable livelihood, families are more likely to encourage their children to stay in school.

The acquisition of practical life skills, such as critical thinking, problem solving, communication and behaviour management skills, enables students to anticipate and respond to societal changes more easily. Indeed, they are better prepared for postsecondary education, careers and the new economy.

IV.2 Contribution to teaching practice

Different projects suggest that teachers working in enterprise education have valued opportunities to work in new and different relationships with their colleagues, students and the community. Many of these opportunities enable them to exercise responsibilities they may not have previously encountered. Most will have had no particular knowledge about or skills in the enterprising activities.

In Australia, some of the teachers interviewed as part of the “Action Research Project in Enterprise Education” perceived this as a strength, as the approach required them to engage with their students outside traditional relationships of knowledge provider and receiver. The manner of engagement of teachers with the learning frameworks produced for this Project indicates growth of professional understanding.

IV.3 Contribution to business employability or self-employment

Determining the ability of young people to work more effectively and be more mobile in flexible labour markets requires a long-term trajectory and a good deal of interaction with employers. Tracing the effect on business start-up would also be a long-term goal since opportunities or aspirations often take many years to come to fruition.

South Africa: Techno girl project

A five-day Science, Mathematics and Technology camp at Lydenburg High School in South Africa gave a group of young girls from Mpumalanga time to discover career opportunities in previously male-dominated sectors of science, engineering and technology. The 75 girls in Grades 10 and 11 were chosen from the three regions in Mpumalanga to participate in the camp, which was facilitated by Technology for Women in Business (TWIB), an initiative of the Department of Trade and Industry, in partnership with the Mpumalanga Education Department.

After the career guidance workshop, the girls were taken to various mines where they were shown different engineering applications and the chemicals used in the industry. The girls were also exposed to the various technologies used in mining plants. The teenagers responded well to the camp and its activities throughout the educational journey. Entertainment was also part of it!

A process engineer in the solid state reduction of chromite ore, Karishma Fewtersad, said the learners are open-minded and this helped them assimilate everything they were taught at the camp. "They were very receptive, got involved in conversations and showed great enthusiasm. However, in the field of maths, science and technology, a lot is dependent on one's determination" she said.

Girls who previously succumbed to society stereotypes and socialisation, which are barriers for them to move into science and technology-based careers, said the camp opened their minds to new things and motivated them to tackle the challenging industry of science. Mapule Lebotse (15), a Grade 10-learner at Pine Rich Secondary School in Witbank, said: "The camp was an experience of a lifetime. I did not know there was so much to follow in industry. I was initially interested in entertainment, but my mind was changed at the camp and I realized I am into architecture and drawing. I was already interested in science-related studies and I had planned that I will be doing my medical studies at Medunsa."

"The camp provided motivation to keep focus on my dream to be medical practitioner," said a Grade 11-learner, Xolisiwe Mashaba, from Bonginhlanhla Secondary school in Nelspruit. "I experienced a lot, including the knowledge that girls can make it in science," she said. Veronica Mngidi, an educator who accompanied the learners to the camp said, "It was interesting to see the children recognize what they want to do in industry. These careers were mainly for men, but things are changing."

Daphney Mashamaite, TWIB Project Manager, explains more about the Techno-girl project: "The plan is to invest in girls with a passion for science-based careers and who are thus more likely to succeed. Techno-girls are assisted to discover their in-born or acquired attributes, giving them an advantage to do well in science, engineering, technology and entrepreneurship careers. The immediate impact is a good self-image, where girls who have been reserved suddenly open up and talk about their backgrounds with confidence."

Most pupils whom are thinking about starting their own business may wait a period of 5-10 years before doing so. Even so, there are few studies tracing graduates of entrepreneurship education to see whether they have become business owners in the formal or informal sectors or gone into self-employment. Perhaps more importantly, it is extremely difficult to isolate the impact of a particular intervention without

considering the interaction among the different social, cultural and economic influences on entrepreneurial behaviour in any given regional or country context.

Nevertheless, evidence suggests that students in participating schools are gaining a tangible set of skills and competencies and often change their outlook on economic opportunity and education after participation in an entrepreneurship or enterprise activity. More importantly, students display a deeper understanding of the relationship between enterprise and society. Many start out with the widely shared belief that entrepreneurship and enterprise education are only about business activity and making a profit, but learn quickly about the importance of the context of enterprise and the connections to community well-being and environmental sustainability.

As far as business skills are concerned, students gain an understanding of abstract concepts such as innovation, quality, and networking and are better equipped to examine critically the different processes in their simulation firms and consider areas for improvement. They are now aware that production methods, quality control, and continuous improvement involve every process in the firm and cannot be addressed through isolated interventions. Familiarity with the language of enterprise not only gives students deeper meaning to the activities in which they are engaged, but enables them to describe, monitor, and assess their enterprise learning against wider learning outcomes. Enterprise Australia reports that students regarded as recalcitrant in one secondary school described their learning in enterprise education in terms so sophisticated that their language was regarded by teachers as inconsistent with broader school assumptions about their literacy levels.

IV.4 Contribution to local community development

Beyond quantifiable indicators, the success of youth entrepreneurship interventions can also be measured in terms of impact on the economic vibrancy of the community, building innovative structures for resolving community problems and community optimism. Entrepreneurship education contributes to a much more dynamic development framework by assuring that there are sufficient numbers of people with the ideas and competence, and moreover, sufficient ambition and skills to put ideas into practice.

The case of YES in Ireland has shown that entrepreneurship education serves as a foundation for the economic and business development on a regional and local level. In the United States, the Academies of Entrepreneurship in the New Orleans area are helping to regenerate the local economic environment. With the collapse of local industry in some areas, participating schools have taken the initiative to identify and target alternative industries and give priority to the development of

United States: The Rockefeller Foundation provides assistance to students in impoverished urban areas

The aim of the Rockefeller Foundation is to transform impoverished urban neighbourhoods into working communities by improving the quality of all urban schools, increasing the amount and quality of employment, and increasing the influence and voice of the poor who are excluded from political decisions that affect their lives. The Foundation provides funding for research and policy analysis, as well as grassroots initiatives to improve employment access and income-generation opportunities for low-skilled urban residents.

In the past, the Foundation has supported initiatives such as the School Development Programme (SDP), an education reform initiative targeting America's worst hit urban public schools. To date, 700 schools in 18 states have benefitted.

Since the early 1990s, this initiative has demonstrated several key components to improving the quality of public schools in low-income communities. The SDP has pioneered the comprehensive "whole school reform" model that emphasizes the importance of concentrating on the emotional, cognitive, physical, social and academic development of children and youth. The programme also fosters committed partnerships between administrators, teachers and parents to address children's social and academic needs.

"... schools can change and improve when there is an enabling environment for collaboration", said Dr. James P. Comer, founder of the SDP at the Yale Child Study Center. "SDP's partnership with the Rockefeller Foundation has helped us to demonstrate the critical need to focus on both the whole school and the whole child. We've been able to show that a positive school culture can promote good development, social growth and academic achievement among students from all backgrounds."

The Rockefeller Foundation has released a CD-ROM that provides in-depth perspectives on education reform topics. These include observations that:

- Despite a major growth in the immigrant population in the United States, many schools have not adapted themselves to meet the needs of immigrant children. They added that attacks on bilingual education threaten to hinder efforts to help immigrant students.
- There is a need for greater public support for a combination of standardized tests and performance-based tests that capture students' imaginative and critical thinking abilities.
- Closer ties between schools and communities are needed. Many schools have become more isolated from their communities and neighbourhoods over the past 30 years and closer partnerships can help to reverse this trend.

For further information, please see: www.rockfound.org

student skills for, and understandings about that industry. Environmental sustainability is served by using solar energy instead of fossil fuels, and by collecting rainwater instead of drawing on groundwater for drinking.

Beyond commercial or environmental interests, many schools report shifts in community attitudes towards troubled youth based on the improvements they have seen in participants, and communities have become more supportive of young

people in general. This helps to create a “culture of care” for young people who may have otherwise become further marginalized and excluded.

Programmes, often instrumental in coordinating the activities of a range of other services, have to more effectively support young people in their education and employment transitions. In effect, services for youth have become more ‘joined-up’ in local communities. Different partners understand the goals and operations of each other’s agencies more clearly, which allows for more seamless and holistic methods of service provision between providers, regardless of whether or not a school is implementing a programme.

Chapter V

Lessons learned

V.1 Pedagogical requirements

V.1.1 The need for research and consultations

Many of the programmes have been successful because they were preceded by research on the learning needs and expectations of young people in the socio-economic contexts of their communities, the opportunities already open to them, as well as the skills being sought by employers. This may have started with a youth-oriented situation analysis, including identification of the target groups, issues related to secondary education reform and specific problems such as rural-urban migration trends.

Labour market information is also an important resource to guide planning in education. The success of reforms to secondary education will depend on a better understanding of labour markets, predicting their evolution and understanding skill trends and structures resulting from changes in products, technology and forms of work organization. Meanwhile, the increasing focus on prevention to diminish the risks of vulnerability involves greater cross-sectoral research to inform planning, especially the linkages between education, urban and rural migration patterns, health, livelihoods and community empowerment mechanisms.

Research is also needed to identify factors that support and inhibit the integration of entrepreneurship education into secondary school systems in different contexts. This would include a dynamic analysis of entrepreneurship trends in different cultural and social settings, the attitudes of key decision makers at different levels of government and across sectors, teachers' assumptions and beliefs about entrepreneurship and its relationship to sustainability issues and the willingness of local businesses, NGOs, community organizations to actively support its integration into secondary schooling.

Indonesia: Youth for Youth

In 2003, the International Labour Organization instigated a number of nation-wide youth consultations and school-to-work transition surveys. In the youth consultations, covering 3 provinces, more than 400 young Indonesians were given the opportunity to express their views and to get actively involved in the Indonesian Youth Employment Network.

Some of the most frequent comments included concerns about:

- The high price of education.
- Unequal opportunities in the workplace, especially for young women.
- The education system not providing students with vocational qualifications increasingly sought after by employees.
- The lack of policies conducive to the creation of business start-ups.

The *school-to-work transition surveys* carried out by the Ministry of Manpower and Transmigration (MoMT) with the support of the ILO interviewed 2,180 young people between the ages of 15-24.

The key findings have fed into the development of a *Career Guidance Manual* for the use by secondary and technical schools in pilot regions.

For further information, please see: www.ilo.org/public/english/employment/strat/yen/download/indones.doc

Korea

In order to make the education system more responsive to the needs of a knowledge-based society, the Korea Education and Research Information Service (KERIS) has carried research on the needs of industry and communities and recommended changes to the education system. The first is a change of direction based on learning, not on education to cultivate new intelligence essential for a successful knowledge-based society. The second change is to have the education system focus on students. The third change is the introduction of a creative and self-directed education method.

For further information, please see: http://www.logos-net.net/ilo/150_base/en/init/kor_9.htm

V.1.2 *The need for dynamic school leadership and management*

If schools are to inspire their students to creativity and creation, they must be creative themselves. This starts with dynamic head teachers and senior staff generating a sense of excitement and enthusiasm from the opportunity to do something different from the norm. They will need to motivate staff who have conventionally relied upon rote teaching and functional expertise to refocus in their teaching style and attitudes upon more entrepreneurial approaches. They will need to support teachers' professional development, give them time for discussion, exchange of ideas and planning.

V.1.3 The need to foster a supportive environment for learning

Because of population movements and changes in family demographics, the learning environment now includes schools, teachers, assistants, neighbours, the business community, and an ever-expanding list of concerned citizens. Innovative schools, rather than seeing themselves at the primary source of knowledge and expertise, acknowledge their position as one actor within broader (and resource-rich) learning communities. They create frameworks for learning exchanges with different bodies within the civic realm at local, national and international levels, linking individuals, organizations and institutions both physically and electronically, to enable students to become informed and resourced. They also recognize the diversity of students' situations within classes. Even those classrooms that appear to be homogenous contain diversity in terms of gender, personality, motivations, physical abilities, ages, learning styles, and religious and political beliefs of students and therefore the programme sets out to make the learning process as **inclusive** as possible.

V.1.4 The need to integrate new educational approaches into the curriculum

On a practical level, the idea of introducing a new subject into an already overcrowded curricula will be problematic for many teachers. This is especially so for those already working in over-crowded and under-resourced classrooms in developing and transition countries. Furthermore, a large degree of professional development will be needed, requiring extra efforts, motivation and commitment on behalf of school teaching and administrative staff.

The good news is that there are many different paths for fostering an entrepreneurial spirit in the classroom and school community and beyond.

It may mean capturing the concepts and skills of entrepreneurship through the learning process. For learners, it may mean finding solutions to problems raised at different stages of the taught curriculum for different subject areas or allow students to offer up innovative ideas for improvement in the school environment.

Furthermore, there are a number of subjects already present in the curriculum which appear fertile ground for the inclusion of entrepreneurship and enterprise education concepts. The teacher may want to make a short reference to the entrepreneurship topic when the curriculum warrants it. For example, in a language course students might learn about business terminology and practice or making a sale in another country. In a maths class, the students might be asked to work out a cash flow plan for a small business and identify the costs of hiring employees.

Turning personal interests into opportunities

Whatever the reason that puts students in an at-risk category, every single one has an interest, hobby, or fascination with something. This is usually the object of pre-occupation when in the learning environment. Turn to these things as tools in your teaching and you will find not only the attention you have been seeking, but also a devotion to what is being examined and taught.

While many at-risk students have a belief that they are doomed to a life of failure, they do have dreams and aspirations. They are afraid to share them for fear of rejection or ridicule. Share stories of others who have overcome obstacles and use the dreams and interests they have to form your approach to lessons.

A student interested in music probably has no idea of the importance of math in music. Bring in material illustrating this. Talk to them about math as it is applied in several different areas of music. For example, musicians use math to keep measure when writing and performing, they use it to mark and mix studio tracks during recording, and they need it to track finances and balance their budget. Without math, they couldn't survive.

Source: adapted from the article "Turning personal interests into opportunities" found on the web-site of Young Biz http://youngbiz.com/aspindex.asp?fileName=teach_corner/turning_personal_interests_into_.htm

Some teachers may prefer to use one particular entrepreneurship education topic as a hub for teaching different curriculum areas. The integration of entrepreneurship education in this way can provide a substantial clarification of what the learning is for.

The challenge is to use instructional approaches that grab the students' interest and are meaningful and relevant to their concerns, while supporting the achievement of stated educational goals. The amount of preparation will be important, requiring teachers of different subject areas to cooperate to reflect upon, plan and revise lessons.

What is also clear is that entrepreneurship education requires the teacher to look at the totality of subjects in order to determine existing skills and knowledge. They should identify how the students have previously been in contact with enterprise issues. How was the learning framed, and how could it be drawn into an entrepreneurship education framework? How would different instructional strategies be used to foster learning?

V.1.5 The need for a comprehensive package of careers guidance, support and counselling

Whatever the vocational or entrepreneurial content of the school curriculum, the role of careers guidance is in need of greater consideration. Young people need assistance in “navigating” and choosing between alternatives in a vast array of learning and training opportunities that can enhance their careers. Careers guidance is already established in western and some developing countries, such as Botswana or Malawi. However, in some of the poorer developing countries, institutionalized guidance is still almost non-existent as there have never been sufficient real jobs to justify having a careers programme.

In most of the planned economies of Eastern Europe, the former Soviet Union and China, careers guidance was not a priority until very recently, when schools had to begin to orient their leavers to a dramatically less certain, and more diverse, work environment. A similar scenario was recounted for the Arab States at the recent workshop on Youth & Employment in Post-Conflict Arab Countries, held in Beirut, Lebanon, from 28-30 January 2004 at the ESCWA premises.¹

New forms of careers guidance, support and counselling are now needed so that young people can make the transition into the real economy and receive ongoing support in their different choices of career pathways, whether this relates to self-employment or entry into an economic sector. One of the consequences of taking self-employment more seriously might be increasing the supply of information on informal sector careers, as well as information on business registration, sources of seed capital, market information, legal and judicial systems for protecting property rights and resolving contractual disputes, available subsidies and tax incentives. Another would be to invite self-employed local graduates back into the school as role models and sources of information. Especially in developing and transition countries, youth may not realise the discipline and tenacity needed to start a business. They could be helped by having more contact during their schooling with role models who can familiarize them with the various stages of venture creation, while fostering realistic expectations about the amount of work involved. The value of female role models could be enormous.

There is no one “correct” model for support and counselling. Clearly, to be successful, provision must reflect specifically the needs and characteristics of the students and be tailored to the local economic conditions. Schools and local education authorities would need to identify partners whom they could draw on for relevant expertise and perhaps engage in sponsoring provision.

1. Hosted by the Economic & Social Commission for Western Asia (ESCWA) and organized by the Social Integration Branch, Division for Social Policy and Development, Department of Economic and Social Affairs (DESA).

Examples of programmes where information could be relevant for secondary school students

In the United Kingdom, the Department for Education and Skills, together with the Department for Trade and Industry and the Treasury, have developed **New Entrepreneur Scholarships** to help potential entrepreneurs from deprived areas access business management skills, to turn their business ideas into reality and enhance the chances of that business succeeding.

For further information, please see: http://www.odpm.gov.uk/stellent/groups/odpm_urbanpolicy/documents/page/odpm_urbpol_608425.hcsp

In the United States, the **Fund for Social Entrepreneurs**, launched by Youth Service America (YSA) is an annual nation-wide competition to provide youths with start-up funds, professional management and leadership development. Chosen social entrepreneurs receive three years of instruction including two-year living and programme seed grants, computer assistance, and conference attendance reimbursement in the first two years.

For further information, please see: <http://www.swarthmore.edu/students/civic/fellowships/entrepreneurs.html>

In January 2003, **Shell Pakistan Limited** (SPL) launched a programme to provide career assistance to Pakistan youth under its' Shell Tameer Programme. The company is conducting workshops and seminars at local centres in Hyderabad and Sukkur to aid budding entrepreneurs, as well as carrying out entrepreneurship development seminars at the Mehran University, Sindh University and Quaid-i-Awam University.

Citing one of the objectives of the programme, Ms. Afshan Khan Nanji, Manager of Shell Tameer Programme, said that it seeks to address the unemployment problem by supporting and encouraging young people to take on the challenge of starting a business. "We feel that Tameer is a constructive directive taken at the right time", she said. Tameer is an adaptation of the sustainable development programme run under the name of Shell Livewire by the Shell Foundation globally.

For further information, please see: www.jang.com.pk/thenews/oct2003-daily

In Zambia, the **Potential Agribusiness Association of Zambia** (PAAZ) promotes agriculture as a business. The organization provides training in use of the Internet to women and youth whose livelihoods depend entirely on farming. PAAZ provides a nerve centre for marketing and production information on alternative agricultural enterprises that are suitable for small-scale farming. The organization trains resource-poor farmers in enterprise management and entrepreneurship skills and links farmers to micro-financing institutions, out-grower schemes and agribusiness companies.

For further information, please see: main.edc.org/mosaic/Mosaic7/training.asp

V.1.6 The need for teacher training and professional development

The demands of entrepreneurship and enterprise education are high for teachers, especially those working in under-resourced schools and over crowded classrooms. They will need to be willing to revisit their assumptions on the meaning of enterprise and the role it plays in society, besides having knowledge of the context of enterprise, local economic history.

They will need to know how the components of business fit together, as well as how they impact on the environment, the local community and human welfare. They must also be able to blend their education expertise with an understanding of multiple issues facing youth. This means communicating effectively with students, respecting them as people with special needs, and treating them accordingly.

What's more, teachers will be required to constantly update their skills and their experience of current business practices, as well as being prepared to experiment and innovate with different teaching methods that nurture the individual knowledge, distinct talents and motivation of each student. They must also be able to create a community network to support the learning process.

In other words, they need to be driven and entrepreneurial themselves.

In the best circumstances, the training of teachers for entrepreneurship or enterprise education should take place through specialized courses and teacher training seminars. Each country would need a body of nationally or internationally accredited trainers to ensure that standards are maintained, at the same time as new concepts are developed. But this is not realistic for all countries. With the current resource constraints facing many governments, the challenge then becomes how to create scaleable, low-cost teacher training opportunities.

Initial teacher training programmes for secondary level in most countries may already cover business studies or home economics and therefore teachers will already

“Entrepreneurial Education in Pieksämäki area”

The “Entrepreneurial Education in Pieksämäki area” project has created a teaching model and a curriculum for the Pieksämäki area. The central themes are employment and self-employment – the capability and potential to offer work to others, and acquire work for oneself.

Teachers from different schools in the area come together and form a team and then brainstorm ideas for how to foster an entrepreneurial spirit in all the schools from day-care to adult education. At the beginning of the school year, the team prepares a local entrepreneurship curriculum. In the autumn they organize a Young Entrepreneur event. Curriculum is then finalized for all school levels. The team also provides teacher training in entrepreneurial education. Schools themselves organize special days devoted to entrepreneurship education, which also act as outreach opportunities for securing the support of parents.

have basic knowledge of economic concepts. Consequently, they only need a framework for understanding them as a whole and from a variety of perspectives.

There may also be opportunities for secondary teachers to upgrade their theoretical and practical skills as part of their continuing professional development. In the case of entrepreneurship and enterprise education, in-service training should help keep them abreast of economic and ecological concepts, strategies of poverty reduction, workforce trends, and available technologies.

V.1.7 The need to draw lessons from non-formal education

Secondary education is charged with preparing young people for the choice of life pathways and shaping them for their future responsibilities. But until recently, experiences in mainstream schooling seemed removed from the knowledge accumulated in the non-formal sector on the types of education delivery that most successfully meet the basic education, health, life skills and livelihood needs of the most vulnerable, under-served population groups in urban and rural settings.

Around the world, different programmes under the umbrella of micro-finance or community empowerment provide interventions ranging from the development of business skills to mentoring, counselling, outreach, awards and competitions, training of trainers and access to credit, etc., through a variety of partners and modalities. Most try to integrate the natural learning processes and assets of youth living in difficult circumstances and help them to become self-reliant by developing their own small business idea, sharpening their academic skills, forming positive attitudes about themselves and their communities as well as the leadership skills required in the workplace.

Many of the programmes are implemented with a sectoral focus (e.g. entrepreneurship through new technologies, e-commerce) or are offered as part of a livelihoods and life skills package (e.g. HIV/AIDS prevention, drug rehabilitation or adolescent reproductive health), particularly in the developing world. Some programmes also specifically target different population groups, such as minority or indigenous groups, young girls and women or have a geographic focus, i.e. rural areas or urban slum dwellings. A broader model has recently evolved around the concept of life skills which encompasses the psycho-social aspects of dealing with issues related to vulnerability and poverty, as well as education for citizenship, basic skills training, welfare and health services.

The success of these programmes is mostly accredited to their flexibility in delivery methods and the recognition of the multiple needs and diverse issues facing young people. As yet there are still poor linkages between formal education systems and non-formal/not-for-profit training providers in many countries. The introduction of entrepreneurship or enterprise education at secondary education would be speeded up by drawing lessons in the areas of curriculum relevance, professional

development and research from these models and even creating partnerships with non-formal programme suppliers, whom are closely connected to the communities in which they work. Countries such as Australia, Singapore and South Africa are also beginning to integrate such non-formal training supply into national systems of recognized qualifications.

V.1.8 The need to exploit the potential of Information and Communications Technologies (ICTs)

Modern communication and information technologies (ICT), in particular the Internet-based technologies, offer great opportunities. ICTs are used by increasing the number of people as learning tools, since access to them is expanding rapidly in the advanced, as well as in many middle-income countries and free courses are becoming available on the Internet. A recent survey of ICT workers in Vietnam

“Young Minds in Motion”

This international initiative has been funded by the proceeds from Bill Gates’ book, *Business @ the Speed of Thought*. The \$2 million programme will fund community-based charitable organizations worldwide for projects that support the educational and skills development of disadvantaged children through innovative use of technology. Warner Books is also donating a portion of their proceeds to the same causes.

An initial donation of \$500,000 was made to the International Youth Foundation in the United States. The donated funds will be used to support technology-based programmes for approximately 10,000 disadvantaged young people to expand their educational and training opportunities. Specifically, funds will be directed at the following programmes:

In northern Poland, 4,000 students in 9 rural schools will have the chance to improve their academic performance and future employment prospects through technology-based learning. Students in this economically depressed region of the country are at high risk of dropping out of school due to social and economic pressures.

In South Africa, technology will be used to promote HIV/AIDS prevention among the 720 adolescents in Mpumalanga, a remote northern province. Over 4,000 young people in Soweto will be provided with technological tools and training to expand their career options and build self-confidence.

In the Philippines, the donation will support a programme equipping 240 low-income and out-of-school young boys and girls with practical skills in computer repair and maintenance. An additional programme will provide 160 hearing impaired children with access to specialized software to improve their speech, reading, and writing skills.

The above activities are planned and carried out in conjunction with IYF’s national Partner in each country: the Polish Children and Youth Foundation, the Children and Youth Foundation of the Philippines and the Youth Development Trust (South Africa).

Source: Microsoft, Bill Gates web-site. For further information, please see: <http://www.iyfnet.org/>

found that 70 per cent of those trained in computer skills had learned them via CD-ROM or on the Internet.

Having said this, programme designers have to be realistic. Programmes will not be affordable, relevant or sustainable unless they are also based on the use of technologies that are easily available within the locality. This covers a whole range of both traditional techniques that have been around for centuries and modern technologies. In developing countries, it will be more realistic to launch programmes through the application of traditional, indigenous knowledge and skills to solving basic problems and thus to reduce communities' dependency on expertise from outside. The low cost of local technologies makes them easily replicable wherever similar problems exist.

Countries wishing to introduce entrepreneurship education should be assisted in carrying out a review of existing materials of development programmes and tools in both formal and non-formal systems, to identify those that could be easily scaled up, replicated or adapted. Education authorities can also identify potential partners in the private and NGO sectors that may be able to sponsor courses or provide equipment.

V.1.9 The need for certification and accreditation

Certification and accreditation systems are necessary to indicate skills standards and competencies achieved through participation in the programme and to act as bench marks for curriculum development, performance assessment and occupational classification.

Some schools have made use of the flexibility allowed in the senior curriculum to ensure community activities are accredited at exit.

V.1.10 The need for monitoring and evaluation

School organizations need to reflect on the increasing awareness that tracking students by academic ability is a strategy that may make teaching "easier" but does great damage to children. Innovating the education process must involve the development of culturally appropriate methods of ascertaining changes in behaviours and attitudes, as well as measuring the outcomes of entrepreneurship and enterprise education in ways that will substantially contribute to students' life pathways.

But while young people cannot be expected to become entrepreneurial overnight, it should be possible to develop a set of quality indicators that will give entrepreneurship and enterprise education a more prominent place within national education agendas and ensure that learning goals are compatible with national education priorities and skills standards.

The University of Durham Business School suggests that short-term indicators for measuring the overall effectiveness of embedding enterprise education into national education systems could include the following questions:

- How many schools are involved? Over what geographical area?
- How many teachers are involved?
- Has enterprise education been integrated into the curriculum?
- Is there a named contact for enterprise education in each school?
- Do parents and employers understand and support enterprise education?
- Are local partners supporting the process?
- How will the programme be sustained financially?
- To what extent has the Ministry of Education integrated enterprise education into any educational reform?

Measuring skills such as decision-making, negotiation and planning before and after an activity can be quite straightforward. More in-depth analysis could be achieved by looking at the extent to which participation in programmes increases curriculum relevance for students, addresses their cultural needs, lessens mismatch between student ability and achievement, increases variety in learning materials, etc.

V.2 Other considerations

V.2.1 The need to create linkages between entrepreneurship education programmes and broader development frameworks

Similarly, programmes at secondary and vocational levels could be more closely integrated into broader development frameworks and training strategies.

For those students who do want to go into self-employment or consider entrepreneurship as a viable career option, education and training must go hand in hand with creating favourable conditions for small enterprise development among young people. This begins with assessing the incentives and disincentives that economic policies may create, perhaps unintentionally, for smaller businesses. Small enterprises must be able to be profitable and competitive. The first step, then, is to examine policies that do not specifically target youth entrepreneurship but may affect it, such as fiscal and monetary policies, trade regimes, education and training, social protection, gender equality, and occupational safety and health.

The contribution of entrepreneurship and enterprise education to broader societal goals also needs to be made much more explicit as there are possibilities for

broad-based support, and for the insertion of these programmes into development frameworks. For example, at international level, the Millennium Development Goals and the new Poverty Reduction Strategy Papers (PRSPs)² go further to locate education and training within a broad, anti-poverty focus. The adoption of sector-wide approaches by several agencies³ articulate the importance of education and skills training to resolving entrenched social community problems. Many agencies, such as the InterAmerican Bank (IDB) and DANIDA have also made explicit the linkages between skills development and environmental protection.

Regional frameworks are also important. For example, in transition countries, links can be established between vocational education reforms and the Phare and Tacis Programmes.⁴ The European Training Foundation, which is facilitating the reform of vocational education in European Community Member States, could be a partner organization, like the Business Educators Network for Entrepreneurship (BENE).

At national level, youth entrepreneurship policies should take account of existing policy guidelines. For example, youth targeted interventions in transition countries should draw on the lessons of the “Entrepreneurship and Enterprise Development in Transition Economies: Policy Guidelines and Recommendations”.⁵ These were developed as a collaborative effort between UNIDO and the OECD, which organized the Forum on Entrepreneurship and Enterprise Development (FEED) in 1999. The guidelines and recommendations contained are intended to be a general framework within which private sector development and the promotion of SMEs can be undertaken in transition countries while, at the same time, recognizing that different objectives, conditions, and resources in each country require a customized approach.

Other guidelines include the Enterprise and Management development working paper (EMD/13/E) “Guidelines for the analysis of policies and programmes for small and medium enterprise development”, by A. Tolentino, and “Socially Responsible Enterprise Restructuring” (chapters I to IV), a joint Working Paper of the ILO and the European Bahá’í Business Forum. Both papers are available through the Job Creation and Enterprise Development Department of the ILO.

All of these trends reinforce and underline the possibilities for a broader application of entrepreneurship education at secondary level in the future. There are and

2. These are now key policy instruments for country agreements with the International Monetary Fund and the World Bank.

3. For example, the Danish Agency for Development Assistance (DANIDA), Swedish International Development Cooperation Agency (SIDA), the Swiss Development Corporation (SDC) and the United Kingdom’s Department for International Development (DFID).

4. The main aim of Phare is to support these countries in the process of economic transformation and the strengthening of democracy. Countries eligible for Phare support include Albania, Bulgaria, Bosnia-Herzegovina, the Czech Republic, Estonia, Hungary, Latvia, Lithuania, Poland, Romania, the Slovak Republic, Slovenia and the former Yugoslav Republic of Macedonia.

5. Available in English and Russian from the Organization for Economic Co-operation and Development (OECD).

will be potential problems in introducing entrepreneurship education into schools. First of all, overcoming the misconception that entrepreneurship is only about business. Secondly, that it has to be taught as a separate subject matter. Thirdly, governments cannot change cultural perspectives overnight.

V.2.2 The need for local government leadership

Local governments are uniquely positioned as they have an overview of what development strategies are being implemented in the locality and can create linkages across sectoral and administrative boundaries. They are also in a unique position to bring all stakeholders to the table and to identify overlapping agendas and the skills businesses needed to develop appropriate education and training programmes.

Local politicians can play a critical role in articulating the case for innovation and creativity in educational planning. Local governments and authorities need to be sensitised to the central role that entrepreneurship education can play in

- long-term local economic growth strategies;
- tackling urban and rural poverty;
- contributing to sustainable development.

Planning for the development of local areas (sub regions) on the basis of such long-term considerations will require joined-up service provision that encompasses education, health, justice, housing, social security, drug and mental health and new institutional approaches.

National frameworks

Improvement Plans and Development Plans are key vehicles for local authorities and schools to take forward the entrepreneurship education agenda.

- National Development Strategies
- National Poverty Reduction Strategy
- Poverty Reduction Strategy Paper (PRSP)
- National Action Plans for Youth
- Education and Training Policy
- The Technical Education and Training Policy
- Policy Paper on Local Government Reform
- National EFA Strategy
- The National Employment Promotion Service Act
- The regional alignments, PHARE, SADC, etc.

V.2.3 The need to extend the scope of strategic partnerships

Economic and social or cultural development issues are now so complexly inter-related that one agency cannot make a dent by itself. Schools need to figure out which organizations have similar goals to theirs, and identify ways they can work together.

Most funding agencies today emphasize the value of partnerships, while governments are beginning to forge genuine alliances with other agencies that possess comparative advantages in various aspects of education and training provision. The closer engagement of a broad spectrum of national institutions, comprising employers and trade unions, Chambers of Industry and Commerce, public and private training institutions, universities and representatives of civil society is helping to greater coherency across traditional sectoral boundaries towards education goals. In particular, partnerships between schools and local NGOs and the private sector increase the relevance of secondary education to local development, social and labour market needs.

The potential for direct private sector participation in the provision of education and training needs to be further explored in developing and transition countries, especially given the need for relevance and the strong political support for it. The private sector, including employers' and workers' organizations, could contribute and participate in curricula reviews, and act as role models/guest speakers on topical issues. But schools can also explore ways in which they could piggyback on broader initiatives by the private sector to support learning in different settings.

There will need to be greater coordination between schools and existing entrepreneurship and enterprise training institutions and providers, whether universities,

Private sector support to digital development in the Middle East

There are an estimated 3.5 million Internet users in the Middle East and the figure is expected to exceed 5 million by 2004. Twelve million people will be logged on by 2005.

In respect of this growth in usage, many Middle East business leaders signed the CEO Charter for Digital Development in September 2003, pledging 20 percent of budgets allocated to community or "corporate citizenship" projects to promoting greater computer literacy.

Jordan in particular has modelled itself as an IT education leader and recently announced a unique partnership – the Jordan Education Initiative – between local authorities and business to reinforce information and communication technology learning in its schools.

Nearly 100 Jordanian schools have been identified as "test beds" for the scheme and 20 corporations, including Cisco and Microsoft, pledged their support. Its patron, King Abdullah II, says that the programme aims to nurture a culture of self-discovery and invention, with the aim to transform the way in which Arab society harnesses the potential of its youth. Clearly, the implications for Jordanian and Arab entrepreneurship in general are profound.

For further information, please see: <http://www.iirme.com/AboutIIR/index.cfm/Action=Press/PressID=46>

Bahrain: Regional Focal Point Country for the Arab Region for the Entrepreneurship Development Institute

In 1998, Bahrain was identified as the Regional Focal Point Country for the Arab Region for the Entrepreneurship Development Institute (jointly sponsored by UNIDO and the Government of India). In 1999, capacity-building activities were initiated at the University of Bahrain and the Bahrain Training Institute. A series of training programmes on entrepreneurship development and investment promotion were carried out and helped establish a cadre of well-qualified professional trainers and contributed to new enterprise creation in the form of small and medium-sized enterprises (SMEs) and partnerships.

In February 2001, the Arab Regional Centre for Entrepreneurship and Investment Training (ARCEIT) was formally opened. The Centre sees its role in the region as a repository of knowledge and information, a forum for the exchange of experience and insights into entrepreneurship and organizer and supporter of entrepreneurship development and investment promotion initiatives.

It has already selected focal point institutions in Jordan, Lebanon, Palestine, Sudan and Syria. Its programmes to date have benefited entrepreneurs and professionals from: Bahrain, Egypt, Jordan, Kuwait, Lebanon, Qatar, Saudi Arabia, the Sultanate of Oman, Sudan and the Palestinian Authority.

For further information, please see: www.unido.org/en/doc/27755

foundations, vocational education institutions, enterprise boards, trade unions, or not-for-profit organizations. International training programmes including the German Development Technical Cooperation SME programme (CEFE), the ILO's "Start Your Business" and the UNDP's Empretec also need to be linked up into plans to expand entrepreneurship education at secondary level.

In some countries, secondary schools have created partnerships with local universities to increase knowledge transfer and sharing of expertise. In the United States, for example, students from the Freeman School (a university business school) in the New Orleans area add value to schools participating in the Academies of Entrepreneurship (AoE) by volunteering their time in the classrooms, sharing their business knowledge and assisting AoE students in developing their business ideas. This permits Freeman students themselves to challenge and apply skills they have learned and contribute something back to the community.

Similarly, since 2000, rural entrepreneurship senior students at the University of Vermont (UVM) majoring in rural entrepreneurship have been working with local high schools registered in REAL programme. Such cooperation was made possible through a service learning curriculum elaborated by the Department of Community Development and Applied Economics (CDAE).

At the international level, the US-based National Foundation for Teaching Entrepreneurship has experience of training teachers and developing curriculum at secondary level in a number of African countries and could become an active partner.

V.2.4 The need for communications and outreach

Communication programmes play an essential role in educating, informing, and motivating young people to the benefits of entrepreneurship. Entrepreneurship may not be part of the culture and traditions of the community and people may have misperceptions about what it actually means. So educators will need to be able to explain it in all its various forms, take the mystery away and help people visualise it as a viable alternative.

Presenting positive behaviour models is important as an environment in which entrepreneurship is esteemed, and in which stigma does not automatically attach to business failure, will generally be more conducive to entrepreneurship. Role models, especially women and minority groups, with real-life stories to inspire are an important part of communications and outreach.

Another critical element is to raise awareness among local and national policy-makers, families and communities about the importance of dealing with the issues facing youth. Functionaries in the education system and support institutions, be they government departments, development organizations or financial institutions, may not appreciate the potential role that entrepreneurship education could play to broader social goals.

The international community and the private sector are already playing a critical role in terms of outreach in some regions. For example, the Inter-American Development Bank is helping to generate awareness among the general public, government agencies and the non-profit and private sectors on the contributions and value of youth participation in development in Latin America. Best practices and model programmes of youth development are being shared among Member States through conferences, audio-visual materials, publications, television programming, press articles, a monthly youth newsletter, an Internet web site, and the creation of project-specific databases.

In the United States and Europe, efforts to communicate the importance of entrepreneurship education at secondary level to school administrators have increased, particularly through the medium of regional and national conferences, workshops, and training events. All of these facilitate opportunities for networking and sharing information on innovative approaches.

In Africa, entrepreneurship and enterprise education are still in their infancy. So substantially greater efforts will be needed to document, raise awareness of and showcase successful pilot projects. This could be carried out through existing regional networks such as the Association for the Development of Education in Africa (ADEA). More use could also be made of local radio and other mass media.

Around the world, best practices and model programmes of youth development are being shared through conferences, audio-visual materials, publications, television programming, press articles, newsletters, Internet web sites and the crea-

tion of project-specific databases. Depending on the context, mass media and folk media in popular formats such as music, serial dramas, and variety shows, can also be used to present messages that can persuade and motivate young audiences to engage in activities towards self-empowerment.

V.2.5 The need to secure adequate financing

One of the main questions for schools wishing to introduce entrepreneurship or enterprise education is that of financing. Programmes can be costly to set up and operate and many schools may have limited facilities, making the use of educational tools such as multimedia an impractical option. There is also the question of who will pay for teacher training and additional professional development, or any extra staff that might be needed?

Schools in Europe and North America have got around these questions by seeking out and leveraging partnership funding from businesses and other social partners. In some cases, funding has also come from national or local governments. In several African and Asian countries, a good number of junior secondary schools are partly or fully managed by their communities. This may give them more freedom to search for alternative funding sources. Different partnership agreements may exist with central governments whereby the latter may provide matching funds, or pay for one or several teachers.

Many of the examples in this report make the claim that a good programme needs creativity and energy, but not necessarily a lot of money. But where it is needed, a case for sustainable funding from the broader development community could be made when partners recognize the rationale for education programmes that provide a “preventive” service, reducing the likelihood that young people will need extensive remedial services later in life.

V.2.6 The need to engage actively in networks

Networking among all the various bodies and institutions is part of implementing entrepreneurship and enterprise education in that it helps to mobilize resources through the government, the administrative bureaucracy and business circles.

With respect to education support, one must not underestimate the importance of co-operative efforts. These can become particularly salient in remote and rural areas.

Brazil and India – working together to address youth employment

On the occasion of the State Visit of President Lula of Brazil to India, on 27 January 2004, a Memorandum of Understanding was signed in his presence between Bhartiya Yuva Shakti Trust <http://www.bystonline.org/> (BYST), an Indian NGO, and [http://www.juventude.org/Instituto Negocios da Juventude](http://www.juventude.org/InstitutoNegociosdaJuventudehttp://www.juventude.org/) <http://www.juventude.org/> (INJ), a Brazilian NGO. BYST and INJ are part of Youth Business International (YBI), a partner organization of the Youth employment Network (YEN).

The purpose of this memorandum is to maximize the help that the two organizations can give to disadvantaged young people seeking to become entrepreneurs in India and Brazil. The organizations will exchange best practices in identifying, mentoring and monitoring young entrepreneurs.

The other areas of collaboration include exploring ways of building linkages between young entrepreneurs and mentors of both countries, especially for future trade links; exchanging ways of building capacity particularly involving the corporate sector; and working together for research and development of new models and tools using ICT and other technology.

Conclusions

With classroom-based learning more explicitly connected to its real life applications, the evidence so far suggests that students taking part in entrepreneurship and enterprise education programmes are rediscovering a reason to learn and a renewed sense of optimism in their future. Furthermore, these programmes are challenging societal beliefs about what we mean by “entrepreneurship” or “entrepreneurial” behaviour.

But education and training, no matter how innovative the model of delivery, cannot by themselves solve all of society’s problems related to youth unemployment and poverty. To think so would be to ignore the importance of the wider environment on the life chances and opportunities available to young people in different contexts. But what education can do is increase a young person’s chances for success by awakening his talents, opening up career options and providing a solid set of tools as he travels along his chosen pathway.

With unemployment endemic among youth in many countries and the potential social costs of inter-generational unemployment high, these important principles are taking now a central position across different dimensions of national development planning and international development cooperation. And, while solutions are individual, there is much to be gained by policy makers and programme managers from hearing and sharing the experience – both the successes and failures – of other countries.

Politicians and education policy-makers are now looking carefully at entrepreneurship and enterprise education as a way of harnessing young people as assets, and making students more ‘realistic’ or ambitious about the world of work and community that lies ahead.

One of the immediate obstacles to overcome will be the hesitancy of educators and teachers. Many will immediately associate entrepreneurship and enterprise

education with business, and with values that have proven to have negative impacts on many of the world's communities. They will also associate such programmes with notions of students being oriented to learning about enterprise and market mechanisms. The wider benefits may not be very clear. But a strong case for entrepreneurship or enterprise education can be made when the linkages to broader social, cultural and environmental goals are drawn out.

Annex 1

Template for an agricultural youth mentoring e-commerce co-operative in the Appalachian region

i) Background

Rural communities, and their diverse cultures, are faced with the urgent challenge to adopt Internet use for cultural and economic survival.

This project will demonstrate how youth mentoring skills, online and face-to-face, can become an immediate community resource, and can evolve into a genuine vocational opportunity, allowing youth to work locally to build a future for their rural communities and/or cultural groups. Those receiving skills mentorship will be asked to mentor others to repay the attention they have received.

Youth are able to identify the BEST resources to benefit the MOST people at the LEAST cost, to be customized locally, for the local context as an “instructional entrepreneurship” service. The International Thinkquest competition has already demonstrated the viability of youth creating high quality web-based instructional resources for worldwide access. The Thinkquest CDROM, complete with software, tutorials, and sample instructional web site, demonstrates an effective and economical way of disseminating training, software, and a vision for their application. <http://www.thinkquest.org>

During a three year period, ten or more teams of up to 10 youth, representing a minimum of six diverse cultures, will engage in a programme of both face-to-face and online mentored learning. The programme will set out to prove not only that youth-to-youth, cross-cultural mentorship is viable, but is the most effective economic and social strategy available. Each team will have an adult team leader.

ii) Key objectives

The key objectives of this programme are to:

- Demonstrate how youth can help rural communities learn to benefit through creating their own 'learning communities' to keep pace with their opportunities, and challenges, related to accelerating change.
- Demonstrate how to retain youth as a community resource by identifying culturally supportive E-commerce opportunities
- Identify and disseminate examples of both benefits and risks of Internet use, and Internet E-commerce, for rural communities and cultures.
- Create a showcase of web-based examples of individual, familial, cultural and community empowerment and expression successes, supported by self-directed instructional materials and a youth-driven mentorship service, offered in both a culture-specific format and a cross-cultural format.
- Provide a model of global citizenship within the context of preserving rural communities and cultural identity.
- Customize the provided online self-directed curriculum for cultural expression and empowerment, for their cultural group, with culturally appropriate examples.
- Demonstrate the effectiveness of cross-cultural youth-to-youth teaching of Internet collaborative skills, as well as within the same culture.
- Create a showcase website of agricultural E-commerce successes, supported by self-directed instructional materials and a youth-driven mentorship service.
- Create original online curriculum to support dissemination of agricultural E-commerce concepts, models and skills appropriate to their rural communities and cultures.

iii) Methodology

A request for proposals will be distributed to selected MIRA¹ teams, and other youth groups, from which ten teams of 4-10 youth will be selected, each with at least one adult mentor, from different geographical regions and cultural backgrounds. Each team will also receive, to share with the local community, a digital video camera, graphics tablet, multimedia projector, musical MIDI keyboard, and appropriate software for multimedia storytelling and E-commerce applications.

Each team member will learn a self-empowerment curriculum of Internet collaborative tools and web-based storytelling skills. Team members will then teach this same curriculum, via Internet in years two and three, to youth in other cultures within a flexible evaluative structure that will thoroughly document successes in both affective and cognitive domains.

Mentoring successes will be rewarded by youth exchange opportunities where participants will earn the opportunity to travel to meet their mentees to further revise their mentoring approaches and instructional materials.

New forms of evaluative metrics will thoroughly document mentoring and instructional effectiveness to create an assessment model to support expansion of this training programme and to create robust employment portfolios for each participating youth. A certification programme based on Internet and mentoring skills development will be created.

Seeding local community technology centres

Youth will present bimonthly, informal community presentations demonstrating use of their teams, equipment and imaginative ideas. Multimedia projectors with sound capabilities will allow students to attract citizens with colourful, exciting presentations to include their original artwork, digital photography and videos, and music.

Students will be able to demonstrate web displays of oral histories of elders, global marketing of local crafts and products, and the best local, and non-local, replicable successes of cultural expression and E-commerce. The ten laptops provided to the youth could be used as a mobile computer lab, able to network into a mobile LAN which could use a single phone line for Internet access by all ten laptops

1. Managing Information with Rural America (MIRA) is a grant making initiative of the W.K. Kellogg Foundation's Food Systems/Rural Development programme area launched in 1997 and concluded in 2001. It sought to draw upon the reservoirs of strength, tenacity, and civic commitment in rural communities and to help rural people use technology (electronic communications and information systems) as a tool to meet current and future challenges. The philosophy is people first, with technology serving communities second.

simultaneously. Offline browsers will be used to have hundreds of the best web pages cached for instant access, allowing for simulation of broadband access. Local communities will be asked to compensate youth for their time if regular hands-on training sessions are organized, and as youth create web innovations for local citizens.

*Leading with digital art and musical applications
to promote gender equity*

Digital art and music applications will be promoted to attract a broader community segment than would be attracted to computers and Internet alone. This will increase gender equity and emphasize the full spectrum of individual and cultural self-expression options. Digital art skills are now at the top of the list of employability skills. Digital music skills relate directly to multimedia use of audio in multiple formats, including Internet streaming audio and video. Via Internet, youth can now host their own radio stations and/or video broadcasts. Aside from these obvious and necessary technical benefits, digital art and musical applications are inherently motivating and represent the best of Internet for humanistic expression. A formal recognition programme will provide social incentives and additional equipment awards for expanding the community technology centres which will grow from each team's activities.

iv) Timetable for activities

Year One: Mentoring and storytelling

Year One will involve mastery of the basic skills and a first experience imparting basic skills to other students, via Internet. These skills will focus on use of Internet collaborative tools, mentorship skills, and web-based multimedia storytelling. Community and cultural identity and experience will be expressed to share with all project mentors and learners.

Individual and cultural self-assessment will be conducted by identifying the benefits and risks of Internet access for individual, familial, cultural and community self-empowerment. Stories that demonstrate 'innovation diffusion' and how citizens within their own culture come to understand and learn to realize the benefits will be a priority.

All participating youth will partner with at least one elder from their culture on a cultural community web-based story-telling project, in addition to each youth telling his/her own background via a web-based pictorial biographical story.

This project component would create a culture-specific mentoring programme using volunteers, college students and citizens, to assist and encourage the online learning of members of their ethnic group utilizing the existing Internet Guide and online courses listed above. This could easily be part of multiple pre-service teacher preparation.

Storytelling collection (Validation of cultural benefits)

This aspect of Culture Club would be to establish web-based forms inviting members of the respective ethnic groups to contribute web addresses representative of innovations by members of their cultural group, to include a web-form for convenient collection and dissemination of stories of cultural empowerment using the Internet. This would provide a convenient, ongoing means for people to support their cultural constituents.

This would include showcasing bottom-up innovations by ethnic group, web storytelling, and bottom-up peer online instruction, integrated with community-building themes of school and community technology centres, community networks, and building effective virtual communities.

While many great stories and models exist, they need to be gathered, organized and presented in a coordinated and accessible format. The use of graphical web pages as a new storytelling medium needs to be properly demonstrated for the effectiveness it can bring sharing visions as to what Internet offers cultural groups. (Storytelling site with “how-to” tutorials: www.digiclub.org) The theme for this initiative is what people can do for themselves and others, not what should be done “to them” for their own benefit. A formal recognition programme will be created, to reward those who are empowering their cultural groups through Internet learning (emphasizing support of others while under-playing individualism.)

Such resources would include documentation of replicable, appropriate E-commerce models which would become part of the training programme. Risks and benefits of Internet and E-commerce for rural communities, and cultures, will be assessed and documented, as an online resource for all rural communities and cultures. It will be a publicized ongoing group effort to keep the above web resources current and truly representative of the best on the web.

Year Two: Cultural expression and agricultural e-commerce

Year Two will involve both receiving and delivering a youth entrepreneurship curriculum with emphasis on agricultural and rural applications. Youth will create their own web-based resources to supplement their instruction of other youth, who will also be participating in creation of resources to assist the learning of all participants.

Emphasis will be on the “brokerage” role of utilizing existing Internet resources presented in an appropriate “local” context.

Examples and skills for cultural expression will be emphasized, including a review of existing and potential ‘cultural entrepreneurship’ opportunities, such as marketing cultural crafts, instruction, and expertise. Agricultural Ecommerce Niche markets will be identified.

Internet entrepreneurship online course

This course would cover: cultural entrepreneurship, instructional entrepreneurship, ecotourism, and cultural tourism, with a primer on existing web tools for small business startups, and culturally specific examples of those who have already succeeded using the Internet successfully for a small business.

Year Three: Instructional entrepreneurship

Year Three will leverage two years of online learning and teaching experience, and documentation, to produce youth portfolios of successes as to which skills were successfully taught across which specific cultural boundaries.

These skills will be marketed to global training entities such as the World Bank, Academy for Educational Development and the US Agency for International Development as well as national governments worldwide. Mentees will have access to all training materials to provide training to others on their own following this scaleable model.

v) Scope and scale

This project will create a highly replicable, economical and sustainable model for imparting essential Internet collaborative, web-expression and E-commerce skills, globally.

Global citizenship concepts, attitudes and behaviours will celebrate diversity while identifying how to protect one’s own culture from accelerating change and shifting economic patterns.

All instructional materials will be available for use by additional teams as they are able to secure local resources of computers and Internet access for direct participation. Where personal mentors are not affordable or available, all instruction will be accessible in a self-directed learning format, modelling optimal scalability

and creating the immediate potential for impacting large numbers of youth and cultures, worldwide.

Global citizenship philosophy development

Youth and elders of all participating cultures will build upon the following vision, and constitution, to create a global culture of inclusion, and celebration, of the diversity of the human family.

The culture club vision for the new millennium

A new global culture will appear, combining caring and connectivity, led by youth and seniors. Youth will prove to be key change agents and technology leaders in all cultures. Unmet needs will be matched with excess resources with radically increased efficiency. World cultures will learn to celebrate their diversity without censoring knowledge of alternative worldviews. We will all have access to our joint knowledge through a combination of social and technical systems.

Niche knowledge specialties will become a viable vocation for individuals, in collaboration with others, keeping the world's knowledge-base current. Multiple tiers of appropriate human assistance and expertise will be available to all, for the asking. Context will enhance content and "less-is-more" will be the measure of value.

"Information condenses to Knowledge which condenses to Wisdom, and Value is created in an information economy."

Everyone will become both learner and teacher; imparting such earned wisdom. Successful mentoring of others will be the measure of individual success, in association with creating effective self-directed learning opportunities which can scale to benefit billions. The BEST resources to benefit the MOST people at the LEAST cost will be identified, to be customized by local citizens, for the local context, as an "instructional entrepreneurship" service.

It will be recognized that "Imagination is more important than knowledge", as Einstein first said. An individual's potential impact on global issues and citizens will be recognized as limitless. We will come to emphasize our abilities to imagine better ways to use the social and technical interconnections between people and knowledge. We will redefine "community" as those to which we give our time. The global cultural goal for the human family will be actualization of our joint full potential.

Transnational activism will evolve to engage daily votes on global issues which will involve more citizens' daily direct participation than any past elections in human history. Ideational leaders will emerge, articulating the pulse of human emotion and thought in the face of limitless possibilities, on a daily basis.

vi) Instructional materials development

A Cross-Cultural Self-Directed Learners Internet Guide will create the opportunity to specifically address the cultural self-empowerment potential of Internet use by multiple ethnic groups, by providing appropriate self-directed learning resources on the web and CDROM. This unique resource will demonstrate the necessary scalability of self-directed learning for citizens as well as educators. Emphasis will be on youth as technology leaders and key change agents in all cultures.

Articulation of the need for individual and cultural self-assessment of the most important learning needs, and opportunities for innovation and self-expression, will be included with emphasis on building self-supportive learning communities, to include use of the latest Internet collaborative tools in a cultural context.

The biggest missing factor, for those across the digital divide, beyond basic Internet access and training materials, is ownership of the bottom-up vision as to what they can do for themselves and their ethnic communities, with Internet. They need to hear about the benefits from within their own cultural groups.

Without this validation, they may understandably lack the motivation, and all the bandwidth in the world won't make much difference! Storytelling and citing examples of self-empowerment are timely and needed. Examples that demonstrate support of others would be most universally accepted with the understanding that individualism is not universally valued. The opportunity exists to attract multiple partners willing to take concrete action to realize the Internet self-empowerment potential for those on the other side of the "digital divide."

Building on the extensive work of Frank Odasz with Native Alaskan, Native American and Migrant educators, a "Self-Directed Learner's Cross-cultural Guide" will be created to be disseminated via print, CDROM, and Web pages. Prototype: <http://lone-eagles.com/guide.htm>

A short introduction to begin this Guide will address the following Universal Social Benefits: E-mail helps families keep in touch and can be an effective, economical way of supporting those living apart.

Search engines can help with health and other information needs to support family members. The Internet offers self-empowerment through self-directed learning and brings to everyone the opportunity to not only learn anything, anytime, but to teach anyone, anything, anywhere, anytime, including sharing worldwide the best of their culture, and will raise self-esteem, general literacy levels and global awareness.

It is viable to maintain the integrity of cultural tradition while accepting that cultural change is necessary for survival, particularly related to learning what the Internet has to offer. It addresses issues of censorship of "outside" ideas, and tolerance of other cultures, in light of becoming a globally connected citizen with the power, and hence perhaps the responsibility, to improve the lives of others.

Internet collaborative tools can build local organizational capacity, and rural schools have a new, enhanced mission to serve in rural communities. Schools are

often the social centre of rural communities and have an expanded role to serve related to lifelong learning Internet applications. Youth can provide community Internet training, and create local entrepreneurial models, through their natural interest in computers and Internet. Community networking and electronic democracy are themes that will increasingly need to be part of every rural school curriculum, out of necessity for community survival.

This guide is based on four progressive levels for “The Internet Style of Learning”, as graphically demonstrated on page 7 of the current guide.

- 1) Learning to become a Self-Directed Learner by using Internet browsers, search engines and existing self-directed learning resources.
- 2) Learning to author web pages and multimedia files as the skill set for worldwide multimedia self-expression, storytelling, online teaching and entrepreneurship.
- 3) Learning to use Internet collaborative tools to support others in a real-world problem-solving context, and to create online collaborative learning pathways by building upon existing online materials as demonstrated by “The Guide.”
- 4) Learning applications of Internet collaborative tools and resources such as
i) building culturally supportive learning communities; ii) “Learning-to-Earn”,
iii) cultural entrepreneurship; and iv) electronic democracy.

The Guide will demonstrate a scalable cross-cultural instructional model that can be further customized by various ethnic groups to be most appropriate, entertaining, and efficient for culturally-specific local, regional, and national training needs. The Guide would serve as a “Train-the-Trainers” resource.

The Guide will include self-directed Web Tours of appropriate free online tutorials, online courses, course-authoring resources, collaborative tools, and motivational, exciting, first web experiences set in an appropriate, simplified context. Health, parenting, entrepreneurial, community building and diverse educational resources will be included. Appendices with Web Tour examples of web innovations from native Alaskan, native American, migrant/hispanic and other cultural “early adapters” will be included, allowing for special printings of the guide for these specific cultural groups. A native Alaskan Web Tour model is at <http://lone-eagles.com/alaskan.htm>

In addition to the Guide’s robust collection of hands-on explorative activities, a series of self-directed online courses will provide additional learning resources, incorporating many other existing online tutorials and online courses.

The newest Internet Instructional tools can be taught to those at the lowest end of our teacher and citizen educational spectrum in a simple fashion to allow them to leapfrog to the levels of highest benefit. This technique is demonstrated by the following two online courses. Both courses, originally created for educators, would be further modified to be appropriate for youth and citizen use.

The Internet Basics would be taught via a two-day face-to-face workshop, supplemented by the Guide and robust online resources. Youth would engage in the following four online courses over the three year period, with the option to customize them further for their own mentoring and use:

The course sequence would cover:

- 1) How to find, and broker, the best resources on the Internet
- 2) How to most easily create online learning resources
- 3) How to use and teach Internet collaborative tools
- 4) How to learn and teach E-commerce models.

For a quick listing of the new genre of online curriculum-authoring tools see <http://lone-eagles.com/currtour.htm>, and/or the lessons for course below: “Designing Online Curriculum” ED 567E: Making the Best Use of Internet for K-12 Instruction; <http://lone-eagles.com/asdn1.htm>

A hands-on, self-directed course focused on skills, strategies and resources for quickly integrating the best Internet resources into your existing curriculum! Three Graduate Credits. ED 567F: Designing Online Curriculum for K-12 Instruction; <http://lone-eagles.com/currmain1.htm>

A hands-on, self-directed course focused on how to quickly learn to create online K-12 curriculum including hotlists, web-tours, lessonplans, project-based learning activities (Webquest, Cyberfair, Thinkquest) and complete online courses.

Next would be creation of an online class with emphasis on hands-on use of multiple new, free, Internet collaborative tools, such as those at www.ecircles.com and as described in “Ten Collaborative Tools” <http://lone-eagles.com/tencollab.htm>

Other related resources for native Americans, migrants, and communities are at <http://lone-eagles.com>

Annex 2

Further examples

1. Europe and North America

Canada

Centre for Entrepreneurship Education and Development (CEED)

In this programme, students not only earn academic credits through self-directed study, they also develop the personal qualities, characteristics, attitudes, and skills needed to be successful in the workplace. They also learn how to start and operate a business. The integrated curriculum works best when it is delivered in an environment outside the traditional classroom. This allows for the freedom of individualized learning and facilitates the links between the educational process and economic reality.

With the assistance of a full-time, certified teacher, students design and complete their own activities to achieve the requirements of their courses. They receive full academic credits for these courses, graduating with the same diploma as their peers.

Between 1993 and 1995, the founders of CEED developed entrepreneurial modules and programmes under the Department of Education's Entrepreneurship Initiative for courses in Maritime Studies, Economics, Science, Computer Related Studies, and one complete year-long programme for Grade 12 students called Entrepreneurship 12.

Training programmes have also been developed for school guidance counselors and teachers of entrepreneurship. By early 1995, more than 38,000 students and 700 teachers had been involved in entrepreneurship education. Today, entrepreneurship training has become part of the curriculum for Nova Scotia students from Grades 3 to 12.

CEED also developed *Venturing Through an Integrated Curriculum*, an activity-based programme that allows students to achieve high-school credits while engaging in entrepreneurial activities.

Enterprise Olympics

Enterprise Olympics is a yearly competition celebrating the best student entrepreneurship activities in Newfoundland secondary schools. The competition consists of a showcase and business plan competition. Students in each school district participate in regional showcases to determine those that will go forward to attend the Enterprise Olympics competition. The showcase provides an opportunity to celebrate the achievements of regional winners, who share \$10 000 prize money between them.

The Enterprise Olympics “Teacher’s Guide”, which is distributed to participating schools, includes goals and objectives, rules and regulations, tips for developing successful student projects and presentations, judging rubrics, and a host of other material that will help participants who may want to set up a similar competition in their own state or province.

Ontario Secondary School Business Plan Competition

Launched on 19 October 2002 by the Ministry of Economic Development and Trade (MEDT), the Ontario Secondary School Business Plan Competition is open to all secondary school students regardless of study stream. The Ministry’s network of Small Business Enterprise Centres coordinates the business plan competition in the communities they serve.

The competition opens in the autumn of each year and students receive classroom assistance from the enterprise consultants in their local area. Business plans are then submitted by students and judged by a panel of local business leaders and sponsors. Winners and finalists receive awards at a local ceremony at the end of the school year. Awards can range from a cash prize to a year’s tuition in a college of further education, depending on the local community and amount of corporate sponsorship available.

The top winner of each local competition then becomes a finalist in the Ontario Secondary School Business Plan Competition and will compete among students in his/her region to become the Regional Champion. Four Regional Champions compete to become the provincial winner. A panel of entrepreneurs and business professionals is recruited by the MEDT to judge the business plans at the regional and provincial levels.

Denmark

Since 1996, the Ministry of Education has been supporting initiatives to promote entrepreneurial skills and attitudes within secondary education throughout the country. Activities are co-ordinated through a special ministerial committee including ministers responsible for various sectors of the economy and society. To date, around EUR 2.8 million (DKK 21 million) has been allocated, resulting in 200 target-oriented initiatives, many of which address teachers and learning methods.

Entrepreneurship awards have been awarded for vocational students at upper secondary level, and various business games developed and promoted in educational programmes for 16-19 year-olds.

A large number of schools have received financial support for experimental work in the area of entrepreneurship. New educational materials have been developed targeting entrepreneurship and self-employment, including books, guidelines for teachers, CD-ROM-based interactive materials, business games, videos, lists of persons from enterprises who are willing to act as guest teachers, etc. These materials have been produced and promoted in co-operation with industry partners.

Activities to date include:

- The production of three packages of general teaching materials distributed to 2000 primary schools, 130 vocational schools and 240 upper secondary schools;
- Distribution of teaching materials to 23000 students aged 13-14 in all study streams;
- Distribution of teaching materials to 65000 pupils aged 14-15 in all study streams;
- Distribution of special pedagogical materials to 24000 teachers of students in the 13-14 age group;
- 2000 schools at primary and lower secondary level (all schools) have received a special “trunk” with information material (all classes);
- Distribution of special pedagogical materials to 240 upper secondary schools to help teachers integrate thematic areas into their teaching across study streams;
- Creation of virtual and personal contact banks for schools wishing to arrange an innovation day in their school;
- Holding of conferences and teacher training courses, involving at least 5000 teachers;
- Holding of student competitions and prize giving.

France

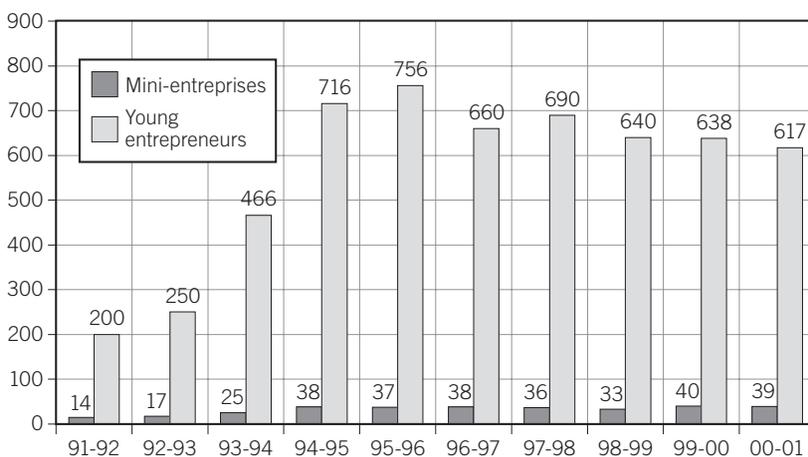
Entreprendre au Lycée

Launched in 1991 through cooperation between the Provence-Alpes-Côte d'Azur regional governments, in partnership with the regional education authorities (Academies) of Aix-Marseille and Nice, *Entreprendre au lycée* is coordinated by the Regional Institute for the Creation and Development of Enterprises (IRCE), in partnership with the two regional education authorities.

Entreprendre au lycée is a pedagogical tool based around the methodology of creating an enterprise. It works towards developing the knowledge, skills and behaviours needed in today's socio-economic climate through a real world application linked to professional career options. It allows secondary school students to develop competencies and behaviours linked to innovation, creativity and organization favourable to labour market entry.

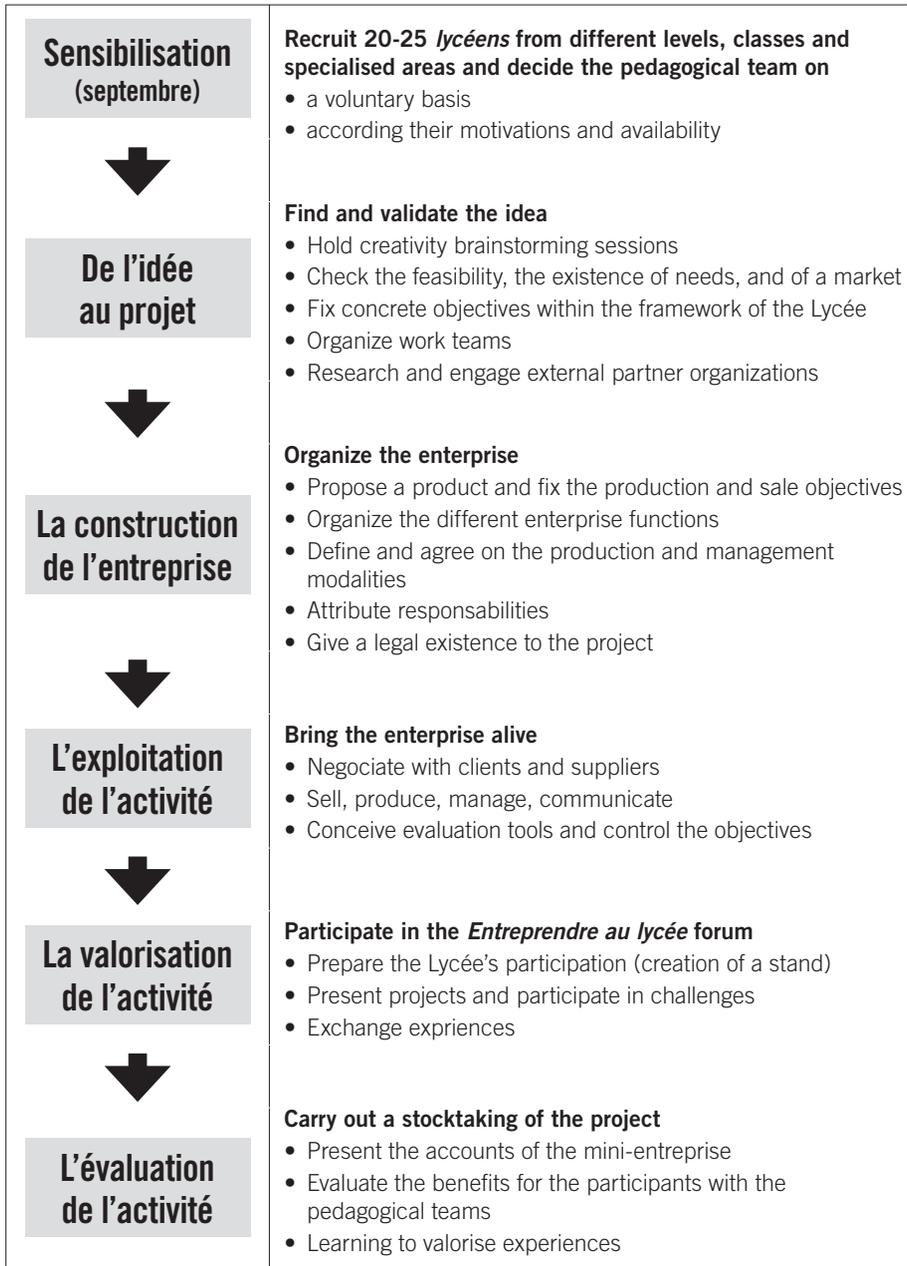
Enterprises created by the students must be registered either as not-for-profit associations, or be attached to the socio-educational structure of the college. The profits are limited so as not to create a competitive disjuncture with the local economy. The pedagogical team, made up of 2-4 teachers, accompanies the young entrepreneurs in their relationships with enterprise partners (clients, suppliers, bankers, accountants and administrators) in order to confront real economic situations. In turn, these partners are asked to provide their experience and advice to the young entrepreneurs and members of the pedagogical team and to help them expanding their support networks.

Since 1991, *Entreprendre au Lycée* has achieved the following results: 317 mini-entreprises, 5633 young entrepreneurs, 509 teachers and 147 Lycées.



Source: <http://www.ac-aix-marseille.fr/daet0203/fichiers/entconcept.html>

Calendar of activities



Ireland

Young Entrepreneurs Scheme (YES)

The Young Entrepreneurs Scheme is a major initiative to stimulate enterprise and innovative business activities among secondary level students (aged 12-18) throughout Ireland by encouraging and assisting the organization of Young Entrepreneurs Schemes within schools. Students either individually or in groups of up to five students create and operate their own real businesses which sell products or services to students or to consumers outside the school for 2-3 months or beyond.

The scheme is supported at school and county level by City and County Enterprise Boards and numerous local businesses. 290 schools and 9 000 students participated in the 1999-2000 programme.

As part of YES, the student businesses participate in enterprise competitions at county, regional and national levels. School winners advance to county-level inter-school competitions run by City & County Enterprise Boards throughout the country. These competitions comprise exhibitions of entries, with judging and prize-giving ceremonies. The YES National Committee coordinates the overall YES programme and provides extensive support to local organisers.

YES is run at county level by City & County Enterprise Boards. These Boards have been set up by the Irish Government to assist the development of enterprise and mini-businesses. They provide *one-stop* shops to local entrepreneurs.

The in-school competitions and related activities are organized by voluntary groups of parents and teachers.

YES has been running for thirteen years and has had an extremely positive response from school principals, teachers, parents and students. To date, over sixty thousand students have participated in YES.

Italy

Marco Polo project

The Marco Polo project, created by the Chamber of Commerce in Padova, in conjunction with the national, regional and local authorities, has introduced a range of instruments to promote entrepreneurship and enterprising behaviours in secondary schools of the city. In 1999, programmes were especially targeted at some 2200 students in over half the schools citywide who were about to enter the labour market.

“Marco Polo 2” targeted 26 secondary schools, around 100 teachers, 2200 students and 478 enterprises. Based on courses intended to promote an enterprise culture, on business games and on work placements, as far as the students are

concerned, the project has also engaged the active support of many of the region's enterprises making them more aware of the advantages of encouraging effective training of this sort. It also included the diffusion of enterprise culture amongst schoolteachers through training and placement in companies.

Norway

The national Government has launched a nationwide effort to enhance entrepreneurship. In 1997, the Ministry of Education, Research and Church Affairs (KUF) presented its plan for "Entrepreneurship in Education and Training", the purpose of which is to make entrepreneurship an explicit educational objective and to motivate and inspire educational institutions to plan and implement entrepreneurship education.

According to the Core Curriculum, education should qualify people for productive participation in the labour force, and supply the necessary basis for any later moves to other occupations. A more explicit focus on promoting entrepreneurship contributes to settlement, employment and economic development in local communities and regions, and encourages students to set up and manage their own enterprises.

Some examples of initiatives where entrepreneurship is promoted in education and training include the following:

- "Entrepreneurship on the schedule", a three-year development project which involves elementary and secondary schools in three counties;
- "Dynamic Local School", a joint project between five ministries, focusing on "student enterprises" as a working method – about 1 000 such student enterprises are now registered in elementary and secondary schools;
- "Resource centres", which are being established in secondary schools to encourage co-operation between schools and local enterprises, and to develop an understanding of common tasks for schools, vocational training and adult educational institutions, local authorities and businesses;
- "Partnership", a programme managed by the Confederation of Norwegian Business and Industry (NHO), which is based on binding co-operation agreements between enterprises and schools. The intention is to give students a better understanding of the world of work and business, by making enterprises a part of the learning environment.

Scotland

Bathgate Academy

The Bathgate Academy has developed a coordinated S1 to S6 programme at secondary level that seeks to cross over traditional subject boundaries and enable young people to develop problem-solving skills, the ability to work with others, entrepreneurship skills, creativity, perseverance, flexibility and personal goal setting. The school recognizes the importance of collaboration among teachers, employers and community organizations.

The Perfect Pizza Promotion brings together Asda (a national supermarket chain) and the school departments of art, business studies, computing, home economics and social and vocational skills to help 200 pupils cost, manufacture and market their own pizza. In S5 and S6 the “Earn and Learn” programme links course work in maths and computer studies to pupils’ enterprise business projects. For example, weekly stocks and shares results are incorporated into learning about charts and graphs. Tasks such as tracking sales and orders, writing to local businesses, and advertising their products on the school website, provide the material for learning computer applications. Bathgate Academy is now working with associated primary schools to start the enterprise programme in P4.

Mindscreen Entrepreneurial Spirit Programme

This programme is implemented in secondary schools in partnership with Westerhailes Education Centre in Edinburgh. It aims to identify young people who exhibit characteristics similar to adult entrepreneurs and engage them through an inclusive and flexible curriculum based on a two year Entrepreneurial Spirit learning programme. The project also aims to support the personal, emotional and career development of all students in their S2 year.

The first year of the programme is undertaken by Mindscreen (an NGO) and is tailored to soft skills development – that is – building team spirit, encouraging student self-esteem and providing experiential business start up learning opportunities. The second year covers business start-up and related skills and is implemented by Young Enterprise Scotland with continuing involvement from Mindscreen facilitators.

The successful pilot project is now being expanded to include five other Scottish secondary schools and one English secondary school: Grange Academy, Cumnock Academy, Milne’s High School, Drummond Community High School, Castlebrae Community High School and Kirkley High School, Lowestoft.

Mouse Maps¹

Pupils from Arran High School on the Isle of Arran set up a Young Enterprise Company called *Mouse Maps*. Pupils have designed, produced and packaged an original product which is a Mouse Mat in the shape of the island overprinted with highlights of local community artisanal activities. Inserted in the pack is an information sheet for tourists.

The concept and design was the work of the pupils using the techniques provided in the “Young Enterprise Scotland Small Business Programme – YES2ME.COM”. The business has caught the imagination of shops and hotels on the island, many of which are now selling the *Mouse Maps*. The original stock order was sold out within four weeks of production. The students are responsible for marketing and distribution and are in constant touch with all of their customers. This activity is now providing them with an income and has enabled the company to go beyond school as a viable business. They are now looking at opportunities to extend their product range to include models of other islands in Scotland.

United States

Academies of Entrepreneurship (AoE)

Academies of Entrepreneurship were established to bring innovative approaches to teaching and learning to New Orleans’ area high schools. The concepts and skills, including business and entrepreneurship, management, budgeting, writing a business plan, and developing presentation skills, help to reinforce fundamental reading, writing and math skills in a way that is relevant to students. Moreover, they reach them early and provide a training ground for experiential learning, self-sufficiency and lifelong learning.

Academies of Entrepreneurship combine classroom education with hands-on learning throughout the 11th and 12th grades. Students are required to form a business that draws on their skills or hobbies in their first formal entrepreneurship class. The curriculum includes field trips, seminars, and guest classroom presentations. In addition, the Academies seek to expose students to positive role models to whom they can relate.

The Levy-Rosenblum Institute for Entrepreneurship (LRI) has partnered with small businesses, local community organizations, universities, colleges, vocational schools, and government organizations that support small business creation to establish a network of contacts that enforces the students’ learning experience. Freeman School (a university business school) students add value to this process by volunteering their time in the classrooms, sharing their business knowledge and assisting AoE students in developing their business ideas. This allows Freeman

1. www.scotland.gov.uk/Library5/lifelong/reic-o5.asp

students to challenge and apply skills they have learned at Tulane and contribute something back to the community.

With the collapse of the one industry that sustained the local economy, the school has taken the initiative to identify and target an alternative industry. The school is giving priority to the development of student skills for, and understandings about that industry. Using these skills in the running of an actual enterprise is a foundation for a pathway that will give students and the community a renewed sense of optimism.

Enriching the curriculum with as many hands-on activities and input from the community is a goal to demonstrate to students that education creates opportunities. Meeting entrepreneurs who speak about what it takes to get to where they are, intergraded with mentoring from Freeman business students, has proven to be an important building block for students.

Rural Entrepreneurship Through Action Learning (REAL)

This curriculum is taught in secondary schools in low-income counties of central and southern Vermont. The long-term goal of the REAL project is to build a sustained secondary school system of entrepreneurship education in Vermont.

The major accomplishments to date have been:

- to establish a REAL Enterprises post secondary model at the University of Vermont (UVM) through the Agricultural and Resource Entrepreneurship major;
- to create a student service learning programme for UVM undergraduates from CDAE including semester or year-long school-based internships with REAL teachers at elementary, middle or high schools;
- to develop mechanisms for student entrepreneurship articulation from high schools into UVM.

Since 2000, Rural Entrepreneurship senior students at the University of Vermont (UVM) majoring in Rural Entrepreneurship have been working with local high schools registered in REAL programme. Such cooperation was made possible through a service learning curriculum elaborated by the Department of Community Development and Applied Economics (CDAE).

Entrepreneurship education as a life-long learning model

The Consortium for Entrepreneurship Education, based in the United States, supports the idea that entrepreneurship is a life-long learning process with at least five distinct stages of development. This life-long learning model assumes that everyone in the educational system should have opportunities to learn at the beginning stages, but the later stages are targeted to those who choose to become entrepreneurs. Each of the five stages is taught with activities that are infused in other classes or as a separate course.

Stage 1: Basics. In primary grades, junior high, and high school, students experience various facets of business ownership. At this first stage the focus is on understanding the basics of the economy, career opportunities that result, and the need to master basic skills to be successful in the world of work and society. Motivation to learn and a sense of individual opportunity are the special outcomes at this stage of the life-long learning model.

Stage 2: Competency awareness. The students learn to speak the language of business, and see the problems from the small business owner's point of view. This is particularly needed in vocational education. The emphasis is on beginning competencies that may be taught as an entire entrepreneurship class or included as part of other courses related to entrepreneurship. For example, cash flow problems could be used in a math class, and sales demonstrations could be part of a communications class.

Stage 3: Creative applications. At this stage, students take time to explore business ideas and a variety of ways to plan the business. Although it is still only an educational experience, students gain a greater depth and breadth of knowledge than either of the previous stages. This stage encourages students to create a unique business idea and carry the decision-making process through a complete business plan. This stage may take place in advanced high school vocational programmes, two-year colleges where there are special courses and/or associate degree programmes, and some colleges and universities. The outcome is for students to learn how it might be possible to become an entrepreneur.

Stage 4: Startup. After adults have had time to gain job experience and/or further education, many are in need of special assistance in putting a business idea together. Community education programmes may be widely available in the vocational schools, community colleges, 4-year colleges, and universities to provide start-up help.

Stage 5: Growth. Often business owners do not seek help until it is almost too late. A series of continuing seminars or support groups can help the entrepreneur recognize potential problems and deal with them in time.

Source: Internet site of "Entrepreneurship Everywhere", Consortium for Entrepreneurship Education, Oklahoma, United States. http://www.entre-ed.org/_arc/home1.htm

"Dream it. Do it"

This is a joint project of Juniorjobs.com and Youth Venture to promote social entrepreneurship among young people aged 13-20. Together, these organizations are providing opportunities for job-seeking teenagers to become Youth Venturers and launch clubs, organizations or businesses that benefit their communities.

The partnership is available to secondary schools and offers young people the support they need to create, lead and launch their own enterprise including, materials, technical allies, media opportunities, national recognition, workshops, training, a Venturers-only web site and up to \$1,000 in start-up seed money.

EcoVentures (EVI)

EcoVentures introduces young people to the concept of entrepreneurship through close integration with social and environmental education.

Environmental projects have traditionally focused on clean up and compliance projects. EVI focuses on moving youth from these projects into prevention projects. (For example: from recycling projects to renewable energy projects.) EVI focuses on developing the life skills necessary to operate in a sustainably orientated environment: co-operative decision making; planning; managing; effective communication; and holistic thinking.

The curriculum facilitates the identification of environmental and social challenges in the local area and leads students through a process in which they find appropriate business solutions. In this way they not only gain an appreciation for environmental challenges and appropriate life style and mindset changes, but simultaneously develop their own sustainable livelihood opportunities and entrepreneurial potential.

EVI focuses on the development of entrepreneurial skills for young people by taking them step by step through setting up and running their own environmental enterprises with the participation of the community.

Methodologies are participative and experiential and focus on building youth motivation, self-esteem and leadership capacities through direct instruction, real world application and peer mentoring. New methodologies, curricula and models are continuously piloted to discover best practices and to disseminate lessons learned to practitioners in the sector. EcoVentures International has a minimum 20 per cent youth representation on its Board of Directors and a 100 per cent on its Youth Advisory Committee.

EVI uses already-established youth programmes as delivery partners and accredits and supports teachers worldwide who are already working with young people to incorporate environmentally-focused entrepreneurial projects into their programmes, through the provision of toolkits, curriculum and teacher training. EVI manages the networking and partnering of these projects.

Enterprise*Prep*...Preparing At-Risk Teens

Enterprise*Prep* is a hands-on, standards-based business ownership and skills curriculum for at-risk, low-achieving teens being implemented in Philadelphia high schools. The programme targets students with a history of poor attendance, grades, and test scores. Business ownership – opportunity, responsibility, authority – gives them a reason to learn, builds self-confidence, and inspires ambition and achievement.

EPrep students immediately invest in a class or club corporation that owns kiosks, in-school single-product-line retail businesses. To maximize profits and dividends, they hold Corporate Meetings during which they master fundamentals of

small business management and, as their corporation is only voting shareholders, make bottom-line business decisions.

In *Workshops*, students develop SCANS-based communication, thinking, teamwork, and autonomy skills to complete increasingly complex tasks at growing levels of independence. Kiosk team members rotate roles; they use corporate contract standards to assess their own and peer performance, set improvement goals, and earn sweat equity for outstanding effort.

EnterprisePrep corporations create wealth for their communities: they pay dividends to shareholders and rent to sponsors, generate seed capital, strengthen business partnerships, and support local economic revitalization. *EPrep* can improve attendance, grades, graduation rates, and test scores. Student businesses can fund curriculum costs and other sponsor expenses.

The prototype began in four Philadelphia high schools in 1996. SBT has received financial and administrative support from principals, the School District of Philadelphia Office of Education for Employment, Communities in Schools of Philadelphia, The National Mentoring Partnership, local corporations and foundations.

Junior Achievement

This is a 75-year-old volunteer-based group that educates young people from elementary school to high school about business and economics. Programmes give young people practical, engaging, and informative lessons that educate them about business and economics and help prepare them for fulfilling professional careers. They are designed to complement existing curricula and are easily integrated into the lesson plans of each grade level.

The middle school programmes build on Junior Achievement's Elementary School Programme and include:

- *Personal Economics*. A programme that helps students assess their personal skills and interests, explore career options, learn job-hunting skills, and discover the value of an education. Students also learn about budgets, personal and family financial management, and the use and abuse of credit.
- *Enterprise in Action*. These lessons teach students the principal characteristics of the American economic system and the role of business in this system. Students learn the steps of organizing a business and producing and marketing a product. They also study the social responsibilities of business and the role of government in the U.S. economy.
- *The International Marketplace*. This programme helps students appreciate how they are connected through trade to people and cultures throughout the world. The programme illustrates how resources of selected countries affect their cultures, governments, and economic systems.

- *The Economics of Staying in School.* With a series of powerful lessons, at-risk students are introduced to the benefits of education through activities including a board game, household budgeting, and role playing. The programme will take a look at career opportunities and the skills required for each type of job.

The Junior Achievement High School Programme includes:

- *Economics.* A one-semester course for 10th-, 11th-, and 12th-grade students. It is taught by an economics teacher in partnership with a business consultant who visits a class ten or more times during the school semester. This programme meets the guidelines of those states and school districts across the nation that require a course in economics for high school graduation.
- *Company Programme.* Students learn about the role of business and operate their own company as part of a school-based organization, club, or classroom enterprise or as an after-school activity. During a semester or over 15 weeks, they sell stock to raise capital, elect officers, buy materials, market a product or service, pay a dividend to stockholders, and liquidate their company.
- *Success Now.* This programme takes students through an assessment of personal and academic skills. Students explore the relationship between their current personal and academic accomplishments and future employment and academic goals.
- *Globe.* Through an international enterprise, students learn the basics of foreign trade, set up and operate a company, work with students from other nations, and begin to appreciate the diversity of business cultures worldwide.

Making Cents

Making Cents builds the capacity of community development organizations, primary and secondary schools, micro-finance institutions and organizations working in the micro-enterprise sector to deliver effective entrepreneurship and micro enterprise training to entrepreneurs and potential entrepreneurs. Making Cents also trains loan assessors and micro-finance professionals to assess loan applications.

The programme provides curriculum and Facilitator Training Courses to prepare teachers and trainers to deliver more effective micro enterprise and entrepreneurship training. Making Cents uses experiential-learning methodologies in our curriculum and Facilitator Training courses.

Making Cents also offers 2-day teacher training courses which enhance entrepreneurship instruction and the use of Making Cents' curricula. The content covered includes:

- Highlighting goals and objectives of entrepreneurship education.
- Building facilitation skills.
- Developing skills for teaching in an interactive way.
- Discovering how to develop a creative learning environment.
- Implementing Making Cents' Business Ventures in your entrepreneurship curriculum.
- Learning how to integrate practical, theoretical, and simulated business teaching.

Course participants receive:

- 15 hours of high-level, hands-on, interactive training.
- Teacher's training course manual.
- Youth entrepreneurship teaching certificate.
- Resource guide.

National Association for the Advancement of Colored People (NAACP), Reginald F. Lewis Youth Entrepreneurial Institute (YEI)

The NAACP Reginald F. Lewis Youth Entrepreneurial Institute has been created to inspire African American young people to view entrepreneurship as an option for success and to teach them the skills required to become successful business owners.

Through the Youth Entrepreneurial Institute, participants have an opportunity to develop their entrepreneurial talents through several programme components.

The Saturday Business Institute provides additional business development resources, leadership training, and professional and personal development.

The Mentoring Programme pairs students with mentors in a one-on-one relationship over a prolonged period of time to provide consistent support and guidance, and help YEI students develop their entrepreneurial talents.

The Summer Business Internship Programme allows students to gain additional exposure and professional experience in a business environment.

The Alumni Association tracks the success of YEI participants and provides an opportunity for participants to communicate yearly through the quarterly newsletter that highlights their accomplishments in academics and entrepreneurship.

The NAACP Reginald F. Lewis Youth Entrepreneurial Institute is currently located in nine cities and housed at the following educational Institutions: Huston-Tillotson College-Austin, Texas; Clark Atlanta-Atlanta, Georgia; Morgan State University-Baltimore, Maryland; Benedict College-Columbia, South Carolina; Johnson C. Smith University-Charlotte, North Carolina; Florida Memorial College-Miami, Florida; Indiana University Northwest-Gary, Indiana; Virginia State University-Richmond, Virginia and Howard University-Washington, D.C.

Tiger Mart

Tiger Mart was a bankrupt local grocery store in Rothsay, Minnesota, until students from Rothsay Public School took it over through a corporation comprised of junior and senior students. With the legal assistance of an attorney, the students successfully applied for and received grants for inventory, stocked the shelves and reopened the business.

Tiger Inc. is now a legal enterprise and Rothsay Public School serves as a fiscal agent for all grant monies awarded to Tiger Inc. The business decisions that affect the daily operation of Tiger Mart rest with the students, so in effect they determine whether the operation succeeds or fails. Students perform all book keeping, fiscal, record-keeping and reporting responsibilities. They act as store management – assigning work schedules, ordering inventory, supervising customer relations, handling payroll and conducting fiscal inventories and cash register check-out. They are also meat cutters, so they order, prepare and display the meat in addition to operating the cutting equipment safely.

Ongoing training is accomplished through cooperation between seniors and juniors. Each student starts working at Tiger Mart as a junior with a senior advisor. The following year the junior becomes a senior advisor to a new junior. The position of store manager passes to a new senior each year, so the business continues to be associated with the school as students graduate.

The curriculum tie-in is through the mentorship programme. The bookkeeping, store management, meat-cutting, fiscal inventory and cash register check-out, interviewing, presenting and displaying responsibilities are linked to Accounting II, Marketing Occupations, Advanced Consumer Math, English and Art classes.

Grades reflect the store's success and its accountability to all state and federal regulations. Not surprisingly, student performance has improved over time.

The National Foundation for Teaching Entrepreneurship

The National Foundation for Teaching Entrepreneurship (NFTE) was founded in 1987 and is based in New York City. The Foundation was founded as a dropout prevention and academic performance improvement programme for students who were at risk of failing or quitting school. NFTE's intention was, and still remains, to teach and directly impact students' basic academic and life skills through a hands-on entrepreneurship and business ownership curriculum.

NFTE's intensive "mini-MBA"-style programmes not only train participants in the basics of starting and operating small businesses, but also teach maths, reading, and writing, and develop critical thinking and workplace readiness as well as teamwork, planning, organization, communication, and decision-making skills. By mastering these essential academic and life skills, young people of all backgrounds are able to learn how to become successful entrepreneurs and economically self-sufficient.

NFTE operates year-round programmes in: Boston; Chicago; New York City; New Haven, Connecticut; Pittsburgh; Sacramento, California; San Francisco; Washington, D.C.; Fairchester (Fairfield County, Connecticut, and Westchester County, New York); and Wichita, Kansas. NFTE also runs summer BizCamps in multiple cities throughout the country and internationally has licensed programmes in Argentina and Belgium.

Since its inception, NFTE has reached over 26,000 youths and trained and certified over 1,100 teachers in 40 states and eight countries through our “NFTE University” teacher training programme, in partnership with Babson College in Massachusetts and Georgetown University in Washington, D.C.

An evaluation carried out by Brandeis University indicated that 65 per cent of NFTE “alumni” had at some point run their own business, compared with 2 per cent of a control group. While 33 per cent were still in business and earning enough to pay themselves a salary, none from the control group fell into this category. High self-belief meant that 83 per cent regarded themselves as “entrepreneurs” even if they were employees or in further education.

YoungBiz, Inc.

YoungBiz, Inc. is a publishing and training company that specializes in entrepreneurship and financial literacy education for young people aged 8-18 and adults who work with youth. The company specializes in teacher training, youth programmes, curricula, resources for educators, and custom development of online and offline educational tools.

These include:

- *You’re the Boss Entrepreneurship Teacher Training* – This two-day workshop equips educators and youth leaders to guide students through the decision-making process of identifying marketable skills, assessing needs in the marketplace, and starting a business. Participants are trained to present the hands-on activities and lessons outlined in the *You’re the Boss Lifeskills & Entrepreneurship Programme*, published by YoungBiz.
- *Smart Start to Money Teacher Training* – Participants in this two-day workshop learn how to empower students with financial skills, habits, and long-term thinking that will help them earn, save, invest, and manage money as well as prepare for greater financial independence. Teaching techniques, lesson agendas, games, and activities come from the YoungBiz Smart Start to Money personal finance curriculum.
- *Smart Trek to Business* – This self-directed online course provides 10 interactive lessons that help students discover business ideas, create marketing materials, write a business plan, and launch their own enterprises. Classrooms and organization memberships are available. *Y&E Magazine with Leader’s Guide* – Filled

with stories of young entrepreneurs and business tips for youths and educators, this publication is funded by the Kauffman Foundation and is free to youth organizations. All issues are available online at <http://ye.entreworld.org>.

- *Turn-Key Youth Entrepreneurship Programmes* – Ready-to-teach programmes such as *Smart Start to Business* and *Jump Start to Business* with materials, supplies, and teaching aids.

YoungBiz also works with numerous agencies that help high school drop-outs develop marketable skills and prepare to enter the workforce. Schools, youth agencies, non-profit organizations, Kauffman Foundation, NASDAQ Foundation, Entrepreneur Magazine, Home Depot, Bureau for At-Risk Youth, Rural Opportunities, Inc., Skills-USA, YouthBuild, Job Corp, 100 Black Men of America, and numerous school districts and government organizations both within the U.S. and internationally.

Youth Entrepreneurship Community Development (YECD)

The objective is to establish a self-sustaining entrepreneurial community by training high school students to become tomorrow's entrepreneurs. A two-pronged strategy is adopted:

1) Provide youth with entrepreneurial skills and knowledge through the school system

Integrating entrepreneurship curricula and skills into schools requires an informed and supportive environment. The success of this programme depends upon the support of the Superintendent of Education, the principal of the school and the enthusiasm of the facilitator (teacher). This means that the school must select a committed facilitator and support him/her by providing training in the skills of entrepreneurship and community network building and perhaps even providing a small salary stipend. The YECD programme utilized an established programme, Alabama Rural Entrepreneurial Action Learning (REAL Enterprises), administered through the Programme for Academic and Cultural Enhancement of Rural Schools (PACERS) (www.prsr.us.edu) affiliated with the University of Alabama.

Numerous other programmes are available and each delivers training to teachers and students in a different format. Some utilize a summer camp method to deliver training to students while others teach the methods of entrepreneurship but do not establish a business for the students to operate.² Through programmes such as REAL, facilitators are provided with training, in-service, and technical assistance. The infusion of entrepreneurship curricula into the secondary programmes in a local education agency helps prepare young people to start and expand their own businesses and contributes to building dynamic and self-sustaining local economics.

2. Samples of these programmes may be found through the Appalachian Regional Commission at www.arc.gov/programmes.

2) *Establish a “community owned” volunteer management system*

A) A Community Volunteer Management Team made up of appropriate individuals will be responsible for introducing a youth entrepreneurship training programme to the school system, developing a strategic plan for implementing the training with the assistance of the school system, assisting in the implementation of the training, fund raising and business establishment, and monitoring and reporting back to the community the progress of the programme.

B) Key school system personnel will work with the Community Volunteer Management Team to facilitate the incorporation of a youth entrepreneurial skills training programme into the school curriculum.

The community volunteer management component provides a knowledgeable, supportive, and sustaining environment for the development, continuation, and expansion of youth entrepreneurship programmes within the community. The infusion of established expertise from voluntary organizations and businesses will serve to provide advice, financial assistance, and other resources. Community ownership and pride in student’s entrepreneurial achievements greatly improves the likelihood that the programme will succeed. Opportunities are available for developing support, sponsors and/or partnerships within the community by utilizing this model.

Step 1. Select a group of high profile, effective community leaders to serve in a temporary capacity as community volunteer advocates for a youth entrepreneurial training initiative within the local high school.

Step 2. Become familiar with available youth entrepreneurial training programmes.

Step 3. Provide orientation to advocacy team utilizing examples of available youth entrepreneurial training programme materials and/or representatives of such initiatives.

2. Central and Eastern Europe

Poland

EJE

Secondary school students are participating from 7 schools in EJE (Public School Complex from Jordanów, Secondary School from Rajbrot, Secondary School no 1 from Zawoja Centrum, Public School Complex from Bochnia, Public School Complex from Dąbrowica – Chrostowa, Secondary School No 2 and The Cultural Center in Dąbrowa Tarnowska and Special Secondary School No 2 at Youth bringing up Center in Debrzno). They have partners from Spain. The Polish schools arrange import-export activity based on local products from their areas.

There are 3 stages in one year full-course activity. During Phase 1, students are starting up the company: schools are linked, 1st videoconference, company start-up, name and logo design. During Phase 2, students get involved in running the business, catalogue of products using ICTs, market research, 2nd videoconference, orders are placed. Phase 3 is the winding up, orders are received and sent, point of sale design, market-day, sales record, profits investment.

Junior Achievement

Junior Achievement Foundation has been present in Poland since 1992. Its competition “Managing a Company” (Management and Economic Simulation Exercise) prepares high school graduates for work in “small business”. It also organizes the “Polish National Competition for the Best Student Company” as well as the annual “Young Talented Businessman Competition”. In addition, the foundation is introducing educational programmes aimed at high school and secondary school level students.

3. Asia and the Pacific

Australia

Young Achievement Australia (YAA)²

Founded in 1977, this is an independent, non-profit, non-governmental organization which operates nationally through a network of state and regional offices. YAA is an extension of Junior Achievement which was founded in 1911 in the United States. YAA’s programmes, which are free of charge, are available for secondary and tertiary students, for youths at risk and unemployed, for aboriginal and disadvantaged groups.

Each year, YAA reaches over 2,000 schools, teachers and principals, and more than 25,000 parents. To date, more than 115,000 young Australians have participated in YAA programmes, many of which receive sponsorships and annual donations.

The main elements of YAA entrepreneurship education include:

1. The Business Skills Programme (BSP)

This is a government-accredited cross-disciplinary programme, aligned with the Small Business Management Competency Standards of the government to ensure

2. Source of information: Internet search at www.curriculum.edu.au

that students cover the skills and knowledge that underpin real-world commercial success. BSP enables students to acquire the knowledge, skills and attitudes required to organize and operate a business.

Students have the opportunity to gain experience in three areas that promote self-sufficiency:

- (a) *entrepreneurship* (e.g. being innovative, adapting to change, making decisions, developing business strategies, understanding competition, dealing with risk/reward, setting/achieving goals, utilizing resources, operating a business);
- (b) *work force readiness* (e.g. range of work experiences, managing finances, gaining practical experience, thinking critically, working in self-directed teams, planning, accepting accountability, networking, and practicing presentation skills); and
- (c) *life skills* (e.g. communicating, accepting responsibilities, gaining consensus, taking leadership roles, increasing self-esteem, refining social skills and community involvement).

The programme lasts from 16 to 24 weeks, bringing together 12-25 senior secondary or tertiary students with three to five advisers from business and industry. With guidance from comprehensive programme manuals, the students experience all the stages of a concentrated business cycle, taking responsibility for all essential business processes, including: selling shares to raise capital; establishing the company with an organizational structure modelled on successful long-term enterprises; electing an executive management team; researching, designing and producing goods or services to fill a profitable market niche in the community; planning and implementing quality systems in the key areas of finance, manufacturing, human resources and marketing; preparing business plans and an annual report, and liquidating and paying dividends to shareholders at the end of the programme.

During the programme, students also participate in special events such as trade fairs, intensive management skills seminars, and an optional four-day National Convention. The programme culminates in the presentation of the prestigious YAA Student Business Person of the Year, Company of the Year and other Awards.

2. *The Business Enterprise Programme (BEP)*

This programme develops the enterprising capacities of year 7 and 10 students by introducing them to the world of business. The programme is designed to ensure that the students see the relationship between school and their working lives and to introduce business life and life skills across all curricula. Students start, develop and run a real life business.

The resources to implement BEP include: student booklet, teacher handbook, vocational and educational initiative materials, outside business mentors, and YAA staff and organizational structure. The benefits related to the Schools include:

- excellent, well-structured teacher handbooks and student workbook,
- establishing links between schools, community and businesses,
- developing links between subject areas,
- cross-curriculum programme promoting internal communications,
- developing/promoting innovation within the school and wider community,
- encouraging ownership and responsibility of students in a variety of ways,
- complimenting concepts covered within the year 9 commerce curriculum, e.g. use of technology,
- encouraging leadership,
- need for teamwork and communication, and
- individual accountability.

3. *The YAA Business Alive Programme (BAP)*

This is a curriculum-based enrichment programme, teaching students in secondary school about business through interaction with outside consultants from local businesses or larger organizations. The programme offers students a practical insight into a particular business's operation. The content that the consultant(s) cover throughout the programme complements what students are learning within various subject areas. In year 10, the programme is a great opportunity for students to strengthen their understanding of particular senior subjects and career choices. In year 11 the programme is applicable to core topics within the Business Studies curriculum.

The Business Alive provides an opportunity to:

- witness the importance of job roles within an organization,
- gain a practical understanding of business concepts that are covered within the school curriculum,
- interact with positive business role models,
- gain listening, presentation and decision-making skills,
- increase understanding of career and business opportunities within the industry, and
- develop business acumen, industry contacts and become “job ready.”

Japan

“Let's Make a Company” programme

This programme was developed by E. Yamane and T. Iwata in 2003 for the “time for integrated study” in junior high schools in Japan. It was practiced at two junior high schools in Mie Prefecture in 2003 and 2004. According to the programme, 5-10 students make a team (a company), plan to make some com-

modities, produce the commodities, sell them to their parents and the public and manage profits. Companies within the schools compete to see which company gains the highest profit. At the start of the programme, each student is given about \$10 as start-up funding. In one school about 160 students attended the programme and practiced from October to December 2003.

Philippines

An early attempt at introducing entrepreneurship education at secondary level was made in the 1970s, with high school students of selected pilot schools in a central Philippine province. The piloting included orientation workshops for faculty members and administrators, training of faculty members, workshops on handouts and case development, actual implementation, monitoring and evaluation. Students set up their own business such as selling newspapers and stationeries, running food stalls in the schools, providing services, etc.

The course is structured in modules. “Entrepreneurship and Small Business” is part of the syllabus and contains seven modules in the first year:

1. entrepreneurship and how to establish your own business,
2. alternative methods of obtaining a business and important information for a successful business,
3. growth and the different phases of a business,
4. franchising the business,
5. import, export and internationalization of a business,
6. marketing of a small business, and
7. basic principles of financial management for a small business.

Singapore

Bizworld

Secondary One students in Anglo-Chinese School (Independent) take part in *Bizworld*. This programme teaches basic business skills such as product design, financing and marketing through team-based activities. Secondary Two students take part in *Odyssey of the Mind*, a school programme that aims to foster creative thinking and problem-solving skills. East View Secondary School has a Thrift Shop run by students. Among other things, the Thrift Shop sells customised school-themed merchandise and collectibles, targeted at current and former students.

The annual Shell LiveWIRE Young Business Start-up award focuses on young, upcoming entrepreneurial talent below 35 years old. The Spirit of Enterprise Awards engages students to write up interesting stories of home-grown entrepreneurs, which are then put up on a website for public polling. Citigroup runs an annual innovation challenge called “Ideas in Action”, which provides groups of students or teachers with grants of up to \$2,500 to develop their ideas, or up to \$10,000 to develop a project commercially.

BizWorld Singapore

Led by volunteers and teachers, the BizWorld programme enacts a business simulation in which groups of kids initiate and run their own businesses of designing, manufacturing, selling, and financing their own friendship bracelets. BizWorld teaches business concepts while engaging kids in activities that reinforce the use of maths, science, art and language skills. Each group represents a company and with the aim of making a profit, the programme encourages teamwork among the kids and enables them to experience group dynamics. At the end of four two-hour sessions, the kids will understand the fundamentals of business. They will learn the difference between debt and equity capital structures, understand the relationship between company ownership and the stock market, appreciate the importance of design and marketing, practice basic salesmanship, learn the basics of supply and demand and understand some business terminology. Most importantly, it is all about learning through hands-on sessions and having loads of fun in the process!

With a strong belief in the benefits of this programme for Singaporean kids, a not-for-profit organization – BizWorld Asia Ltd was born. In March 2002, the BizWorld programme kicked-started in Singapore and since then, we have been steadily increasing our base, with key sponsorship from venture capital firm, Draper Fisher Jurvetson ePlanet Partners. So what are you waiting for? Take a journey, explore the BizWorld programme and see for yourself, how easy, fun and beneficial it is for both kids and even adults.

To date, about 5,400 students have gone through the BizWorld programme, 330 teachers and 204 volunteers have attended the BizWorld trainings! Last but not least, we have added 11 new volunteers who’ve helped out in our inaugural BizWorld Competition.

Thailand

“Think Smart, Act Smart”

This is a collaborative effort of the National Youth Bureau, the Ministry of Education and the Thailand Productivity Institute. These three partners have contributed to the strengthening of enterprising competencies among high school students. The objective is to make the productivity concept more directly meaningful to the students by helping them develop the skills, habits and practices found in highly productive individuals. These included creative and thinking skills, the ability to manage through using processes, measuring progress, and making adjustments, and team work.

Under the slogan, “Start Them Young”, the pilot project adopted an activity-based approach as against one which is classroom-oriented. The campaign was piloted in 37 schools in Bangkok and five neighbouring provinces. Each participating school had to fulfil three main tasks. One was to set up a “Think Smart, Act Smart” club. Club activities had to be undertaken by the students themselves with the teachers playing an advisory role. The second task was to assign a core team of one teacher and two students to attend a productivity and quality training programme. The same team would later impart what they had learned to others in the school involved in the project. The third task was for each school to undertake a productivity improvement project. Part of the training content included introduction of the PDCA (Plan, Do, Check and Act) method with the attendant skills and tools such as brainstorming, team building, conflict management, survey methodology, among others.

The school’s projects were evaluated by a group of assessors at the end of one year based on the following criteria: (a) support and commitment of school teachers, (b) integration of PDCA and quality tools in the improvement efforts, (c) project outcome and performance, (d) effective internal/external communication, and (e) teamwork.

Entrepreneurship education consists of two programmes/projects, namely:

1. Curriculum for Career Education at Lower Secondary Education Level under the Promotion of Entrepreneurship for Pupils Project implemented in 1988.

The objectives were for the pupils to be able to: (a) know and understand the principles of career choice in order to improve their life, (b) acquire sufficient vocational skills, (c) have a good attitude and ethics to work, and (d) learn management, marketing, and corporate procedures in business.

2. Curriculum for Career Education at Upper Secondary Level under the Promotion of Entrepreneurship for Student Project

This programme has been implemented since 1981 with curriculum revision in 1990. The objectives were to enable students to: (a) know, understand and experience running a business, (b) acquire vocational skills, (c) have a good attitude and ethics for working, and (d) apply knowledge and skills for working and develop the quality of work.

Some issues that had to be resolved in connection with entrepreneurship education included the following:

- model curriculum (adapting/fitting CEFE training into the educational environment),
- grading of students (how to grade business plans and practicum),
- need for team teaching (subjects are handled by single faculty members),
- time element and scheduling (most 3-unit subjects are offered for 16 sessions conducted in one hour, three times a week),
- time to do fieldwork (students do not have enough time and means to conduct fieldwork for their business plans and practicum),
- budget (CEFE exercises require a lot of training materials, co-facilitators and resource persons/evaluators), and
- support of school administrators (school policy to support is a must).

4. Latin America and the Caribbean

El Salvador

“Youth Entrepreneurship Initiative”

TechnoServe and the National Foundation for Teaching Entrepreneurship (NFTE) launched a “Youth Entrepreneurship Initiative” in El Salvador in August 2001, beginning with a 10-day intensive programme called BizCamp™.

The first BizCamp™ in El Salvador brought together 30 young Salvadorans aged 17-23, selected for their willingness to learn and their leadership skills. They each received full scholarships to attend the training programme. NFTE provided the methodology, curriculum and three experienced instructors to teach this soup-to-nuts crash course in entrepreneurship.

Since the pilot initiative, TechnoServe and NFTE have conducted a second BizCamp™ in El Salvador with training and certification for 24 Salvadoran educators to use the NFTE curriculum in their classrooms. Field trips were organized to San Salvador’s Metrocentro market, students engaged in real business activities, first buying and later re-selling products in order to learn about consumer preferences, how to market successfully, how to react to customers face-to-face and, of course, to make some money!”

Instructors spent many hours tutoring students one-on-one, making sure that concepts such as Return on Investment, Cash Flow and Market Research were understood. I believe that most of our students were very inspired by the BizCamp™ training. It gave them more confidence in their own abilities and they felt better prepared to develop and pursue their business ideas.

Mexico

Technology based entrepreneurship course and project oriented learning

In Mexico, youth represent a large portion of the population. They require positive attitude and abilities in order to transform their ideas and goals into successful realities. The country needs people with own development and with social responsibility. The ITESM, as an educational system is committed to educate students to levels of excellence in their chosen fields while fostering values and characteristics needed in entrepreneurship.

ITESM teaches entrepreneurship via leadership and community service initiatives. The Entrepreneur Programme is an important part of the ITESM System because it fulfills the entrepreneurial aspect of our mission. By entrepreneur, we mean those who create their own businesses and those who apply their creative talents within existing organizations. Our mission is to educate students to levels of excellence in their chosen fields and to develop the values and characteristics of entrepreneurship, leadership, honesty, and service.

In the educational environment, there is a constant need for developing new methodologies that could enhance the teaching learning process. In the business arena, there is a need for creative people who can transform ideas into reality. Our world of constant change demands the vision, innovation, and dedication of entrepreneurs. Both, the business and the educational areas had been impacted by a technological trend that seems that will continue becoming an essential part of our lives.

The Project Oriented Learning methodology gives an innovative approach in order to improve teacher's performance in the Entrepreneurship class, the interaction is based on a technological platform that gives flexibility and develops skills among both teachers and students.

5. Africa

Ghana

"BizCamp™"

From 7-16 July 2003, two Ghanaian teachers from the Northern Region trained by the National Foundation for Teaching Entrepreneurship (NFTE) joined other NFTE instructors and national TechnoServe staff to conduct Ghana's first-ever "BizCamp™" – an intensive and interactive training programme – in Tamale, the Northern Regional capital.

Up to 30 young secondary school and university graduates and budding entrepreneurs from the Northern Region attended to learn the fundamentals of entrepreneurship and what it takes to start and run a successful business. In addition to classroom seminars, workshops and guest lectures on many topics – including “elements of a business plan,” “supply and demand,” “successful negotiating,” “record keeping and cost analysis,” “market research,” and “production and distribution chains” – BizCamp™ students went on field trips to a local factory and bank to learn about quality control, pricing, inventory, packaging, merchandizing and all of the other elements needed to produce and successfully market a product.

During the BizCamp™, students worked with instructors and mentors to prepare individual business plans. The students presented their business plans to a panel of judges, who then selected the winners during a daylong “Business Plan Competition” on 16 July. TechnoServe staff and two NFTE “certified entrepreneurship teachers” from each of the remaining four regions replicated the Tamale BizCamp™ in the Upper East and Central Regions concurrently, from 21-30 July 2003. BizCamps™ for the Upper West and Volta Regions took place from 4-13 August 2003 at Wa and Ho.

South Africa

Youth Enterprise Society (YES) Programme

The YES Programme’s mission is to help young South Africans become business creators rather than simply job seekers. Honed during a three year pilot programme conducted in the north-eastern Free State, YES is a multiracial school programme based “learning by doing” for grade 9 (std 7), grade 10 (std 8) and grade 11 (std 9) pupils.

The programme involves whole communities, including local business people, trade union representatives, educationalists and other community members and is designed to create awareness and interest in free-market entrepreneurship as a career option amongst young people. After meeting certain requirements, interested parties form a “Local Partnership” (LP) which then initiates YES Societies at one or more schools in their area.

Students are invited by their peers to join and each YES Society involves three to six specially trained teachers who act as YES Advisors and 45 students, broken down into three teams:

- 15 × grade 9 (standard 7), entitled “Pioneers”
- 15 × grade 10 (standard 8), entitled “Champions”
- 15 × grade 11 (standard 9), entitled “YES Entrepreneurs”.

Society leadership is with the youth who select their own office bearers and run their own affairs. Teachers act purely as facilitators and a link to the Local Partner-

ship (LP), whose members judge and evaluate the students' progress. Campaigning by the students is usually their first exposure to mass motivation and is in itself a good learning experience, resulting in an executive committee comprising: President, Vice-President, Secretary, Treasurer, Public relations Officer, Constitutional Adviser and Team Chairpersons.

The Society and Teams can appoint their own Temporary Committees to handle delegated projects and all office bearers and committee members receive instructions on their specific duties and responsibilities.

The whole Society meets once a week to review, discuss, initiate and delegate "Society projects". These sessions are chaired by the Society President, with the Society Secretary taking the minutes and other committee members reporting when called upon to do so. This is akin to divisions meeting within a large corporation. Teams separate for their other weekly meeting, each chaired and run by their own committees. These are the workshop sessions where teams focus on their specific "Team projects" and receive guidance and skills training in a variety of essential business competencies.

Throughout the three year programme YES Members focus on developing skills in the following 17 entrepreneurial competencies, with the content of each becoming broader and more complex with each passing year: (1) Life Skills, (2) Understanding The Market Economy, (3) Business Ideas, (4) Evaluating The Community, (5) Setting Goals, (6) Market Research, (7) Plan The Business, (8) Plan Business Finance, (9) Plan Human Resources, (10) Business Promotion, (11) Selling The Product, (12) Business Accounts, (13) Business Records, (14) Leading and Managing, (15) Business Communications, (16) Entrepreneurship as a Career, (17) Our Business (Team Project).

Throughout the year teams are required to make presentations to panels from their LP, usually comprised of local business people and the relevant YES Advisor. Those individual team members then receive the "Credit Sticker" for their level of that particular competency to attach to their competency certificate.

The 3 day Annual National Competitive YES Conference celebrates those YES participants who have excelled during the course of school year, it gives them the opportunity to compete against each other nationally. For students to make it to the conference they must not only excel in their own Society, but also within their full LP area, their Region and finally gain selection to represent their Province.

At the conference, YES Members compete in 10 individual events and 4 team events, for Gold, Silver and Bronze medals. In addition to that the following national awards are also made:

- YES Member of the Year
- YES Advisor of the Year
- YES Team of the Year
- YES Society of the Year
- LP of the Year.

While the overall objective of the YES Programme is to help alleviate unemployment by encouraging young people to consider entrepreneurship as a career option, to expect all who participate to start their own businesses would be unrealistic. For this reason The Education With Enterprise Trust (EWET) envisages that YES Graduates will successfully go one of three ways:

- Start own business (target 21%)
- Further their education
- Secure formal sector employment.

Tanzania

The “Youth Entrepreneurship Initiative” was launched in rural Tanzania on 4 December 2002 with a three-day teacher training programme in the city of Mbeya, in southwestern Tanzania. Three secondary school teachers and one university professor were selected to participate. Following training, they were certified by NFTE as “Certified Entrepreneurship Teachers” and provided with the NFTE curriculum.

From 9-18 December 2002, the four newly certified teachers joined NFTE instructors and TechnoServe staff to conduct Tanzania’s first-ever “BizCamp™,” an intensive hands-on training programme. The BizCamp took place in the south central city of Iringa (about halfway between Mbeya and Dar es Salaam), and will be held on the campus of Tumaini University.

A total of 30 students, ages 18-21, from three secondary schools in Mbeya and Iringa attended the all-expenses-paid camp to learn the fundamentals of entrepreneurship and what it takes to start up and run a successful business. The students came from various regions of Tanzania and represented different economic backgrounds.

In addition to classroom seminars, workshops and guest lectures, the BizCamp™ students went on field trips to two local factories and the local market. Here they took turns as both the customer (a “buying event”) and the business owner (a “selling event”) to learn about quality control, pricing, inventory, packaging, merchandising and other elements needed to produce and successfully market a product. During the BizCamp™, students worked with instructors and mentors to prepare individual business plans. The students presented their business plans to a panel of judges who then selected the winners during a daylong “Business Plan Competition” .

Before this BizCamp™, only three out of the 120 Tanzanian students who were interviewed for the programme had ever seen a university campus. After the programme ended, all 29 students felt more confident about pursuing higher education

after high school. Based on results like this, TechnoServe and NFTE launched three school-based youth entrepreneurship programmes in Iringa and Mbeya. NFTE-certified instructors taught business fundamentals to 20 students per class, educating a total of 58 students by the end of the programme.

Most recently, in December 2003, TechnoServe and NFTE launched a teacher-training programme at the University of Dar es Salaam. Twenty teachers from Tanzanian secondary schools, universities, vocational training institutions and non-profit organizations were selected to take part in the five-day programme. TechnoServe provided full scholarship for all 20 participating teachers who were named NFTE “Certified Entrepreneurship Teachers” upon completion of the programme. The teachers can now teach the NFTE entrepreneurship curriculum in their classrooms and thus have the potential to train thousands of Tanzanian students.

TechnoServe is now working with a team of 31 NFTE-certified Tanzanian teachers in Iringa, Mbeya, Songea, Tanga, Mbinga, Dar es Salaam and Sumbawanga to teach Tanzanian young people the fundamentals of starting and operating a business. By the end of 2004, TechnoServe expects to reach some 700 young people in Tanzania; to place over 50 students in marketing, farm management and finance internship programmes; and estimates that 20 new businesses will have been created by young graduates of TechnoServe’s and NFTE’s Youth Entrepreneurship Initiative.

Annex 3

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Annex 4

Acronyms

DESD	Decade of Education for Sustainable Development
DFA	Dakar Framework for Action
EFA	Education for All
HIV/AIDS	Human Immunodeficiency Virus/ Acquired Immunodeficiency Syndrome
ICTs	Information Communication Technologies
IHP	International Hydrological Programme
ILO	International Labour Organization
MDG	Millennium Development Goals
MOST	Management of Social Transformation
NGO	Non-Governmental Organization
UN	United Nations
UNCED	United Nations Conference on Environment and Development
UNEP	United Nations Environment Programme
UNFPA	United Nations Population Fund
UNHCR	United Nations High Commissioner for Refugees
UNICEF	United Nations International Children's Emergency Fund
UNLD	United Nations Literacy Decade
WHO	World Health Organization
WSSD	World Summit on Sustainable Development

Annex 5

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