

Vocational education: the come-back?

Technical and vocational education and training has fueled phenomenal economic growth in some countries and fallen short of expectations in others. Globalization is prompting governments to take renewed interest in this branch, still perceived as second-class.



It is every politician's nightmare: unemployed youths, hanging out in the streets, with little chance of finding a job or going to university. While the parents of those youths may digest their own dashed hopes for a better life, frustration can reach revolt when that bleak horizon confronts the next generation.

For governments, rich or poor, the solution seems straightforward. Catch those kids before they fall into the cracks by teaching them skills in secondary school to carve their niche in the labour market. Of course, reality is never so simple, which partly explains why technical and vocational education and training (TVET) can be a dirty

word. Principals and teachers point to the heavy expenses required to develop curricula, train staff and equip classrooms for these specialized subjects, which generally cost three times more than academic courses. For most parents and students, it remains a 'second-class' education. The truth is TVET provides training but no guarantee

for jobs. Even the world's most sophisticated and expensive programme is doomed to fail if the labour market cannot absorb the students, despite their skills and expectations.

This backdrop has led many experts and policy-makers to conclude that training is best left to the workplace, especially after the radical policy shift in the World Bank, which was once considered TVET's staunchest supporters. The very first Bank loan for education, granted in 1963, was for TVET, which accounted for about 40 per cent of all educational loans in sub-Saharan Africa until the early 80s. But in 1991, the Bank reversed gears, thanks to a policy paper, co-authored by Arvil Van Adams. Widely respected, Adams retired from the Bank in January with a single regret: "people took us—the policy—too much at face value."

"The easy message of our policy was that TVET is not a good investment but that ignores the nuance of what we said," insists Adams. "We argued for a shift away from heavy investment in workshops, instructor training and curriculum in order to invest resources into policy development. The point was not to do away with TVET but to reform the policy process."

A time-bomb

But few appreciated the nuance of Adam's analysis and TVET virtually disappeared from the international aid agenda. The Bank began investing heavily in primary education at the expense of TVET, which now accounts for just 8 to 9 per cent of educational spending. International strategies intended to reduce poverty completely ignored the need to develop skills, according to Trevor Riordan, of the International Labour Office (ILO).

"We are now seeing a skills-divide emerging," says Riordan, "with the least developed countries falling further and further

Vocationalizing secondary education

Vocationalisation of Secondary Education Revisited, a new publication by the International Centre for Technical and Vocational Education and Training (UNEVOC), takes a concise look at the pros and cons of educational innovations to prepare young people for the world of work. By focusing specifically on reforms underway in sub-Saharan Africa, the book provides valuable insight and hard data for policy-makers, educational planners, teachers and administrators.

Released in March, the book is edited by Jon Lauglo and Rupert Maclean and published by Springer.

Based in Bonn (Germany), UNEVOC has four main functions: to develop an international network of centres promoting TVET; to disseminate best practices and innovations through publications, databases and an electronic clearinghouse; to develop the human resources of TVET specialists at the sub-regional level and to encourage inter-agency cooperation.

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behind, particularly in sub-Saharan Africa and South Asia."

Add to this "a time-bomb waiting to happen as hundreds of thousands more kids finish primary school and look for secondary education or work opportunities which do not always exist," says Wataru Iwamoto, Director of UNESCO's Division of Secondary, Technical and Vocational Education. In many of the least developed countries, pupils have little chance of either pursuing their schooling or finding a job. "So we advocate a new vision of vocational education that focuses on practical or 'life skills' integrated at the primary or secondary levels, depending upon the country's resources," says Iwamoto.

A growing interest

In countries rich and poor, Mohan Perera, Head of UNESCO's Section for Technical and Vocational Education, sees a growing interest in TVET. Countries realize that it's a means to jumping on the bandwagon of globalization. "Look at the tremendous shift of employment from the United States and

Europe to India and China, where you have such highly skilled work forces," comments Perera. "By substantially investing in TVET, these countries laid a major plank in their economic foundations."

For UNESCO, TVET goes beyond the narrow confines of economic planning. It is part of a larger vision of promoting sustainable development. Since its founding, UNESCO has been developing recommendations and organizing policy debates, while serving as a policy-advisor for governments trying to reform or create vocational education systems.

"In the past, there was a supply-side vision, which created serious problems for developing countries," says Perera. "Either they invested heavily in trying to import foreign models of higher education, which produced a surplus of white collar expectations. Or they tried to set up highly specialized training schools, which didn't correspond to labour needs." Today, the goal is to teach students to adapt to changing working conditions, instead of locking them into specific jobs and skills.





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Unfortunately, these new directions don't come with any road maps. As Fred Fluitman of the ILO explains, "secondary education systems are pretty much the same. But every TVET programme is different and just about every government is constantly trying to tinker with it." In short, constant innovation is a key ingredient in the reform process. If done properly, the results can be spectacular.

The Republic of Korea is a shining example of how TVET can fuel stellar economic growth. While no model should be emulated, the South Korean experience offers key lessons. First, the government took a sequenced approach to education. Money didn't start flowing into TVET until the country nearly achieved universal primary education. By design or accident, major investing began in the early 1980s, just as labour shortages started to pinch the economy. To make the "big push" into export-oriented manufacturing, construction and service-oriented sectors, the country needed a new stream of skilled workers.

At the same time, policy-makers in the Republic of Korea were beginning to be

Rebuilding in the Arab States

UNESCO is preparing plans to rebuild the vocational education system in Iraq once the security situation has stabilized. Close to 3 million dollars in extra-budgetary funds have been earmarked for this purpose and additional funds promised.

UNESCO is also increasingly active with TVET projects in other Arab states, which are trying to reduce their reliance on expatriate workers. For example, over the past five years, UNESCO is assisting Libya to vocationalize its entire secondary education system and revise the curricula of post-secondary training institutes. In Bahrain, where 65 to 70 per cent of secondary students are enrolled in TVET, the government has financed a UNESCO project to create a Centre for Excellence, providing specialized teacher-training services and life-long learning programmes for adults.

alarmed by a growing appetite for higher education. People would become "over-educated", expecting white collar jobs in an economy thirsting for new sources of skilled labour. By expanding TVET, the government planned to satisfy its forecasted labour needs while reducing pressure on universities to enrol more students.

Today, about 40 per cent of secondary students are enrolled in TVET. Yet it is still perceived as a second-class education. So the government is trying to open pathways to higher education. First, TVET students are now getting a healthy dose of academic subjects so that they can apply to university. In some schools, academic and vocational students share as much as 75 per cent of a common curriculum. The government is also channelling public and private investment into new post-secondary training institutes to kill the myth that TVET is an academic 'dead-end'.

The ultimate challenge lies in keeping abreast with technological change. To keep curricula relevant, the plan is to tighten links to the private sector. For example, the Republic of Korea is now experimenting with

> their own version of Germany's famous "dual system", which traces its roots back to post-war reconstruction. It is opting for a "2+1" programme, combining two years of classroom studies with a year of apprenticeship.

Promoting partnerships

Similar reforms are taking place in China, where a third of all secondary students are enrolled in vocational schools, according to the UNESCO Institute for Statistics (see box p. 7). However, it is difficult to draw parallels between the two countries. Whereas a labour shortage shaped the Republic of Korea's policy reform, China is grappling with a labour surplus, with job creation lagging behind the growing economy. And while the Republic of Korea had the luxury of tailoring a new system to forecasted needs, China must overhaul an antiquated machine.

To do so, China has found an ally in the private sector, according to Dingyong Hou, Senior Education Officer for the World Bank. Private companies are providing financing, materials, apprenticeships and guidance as representatives sit on school advisory boards. For Hou, these partnerships reflect a key element of the Chinese vision of lifelong learning: schools will develop and broaden students' capacities and the workplace will provide training.

Open-door policy

Ironically, the great bastion of communism may be increasingly lured to the private sector, while countries of the former Soviet Union are not so keen to relinquish state control of their TVET systems. Here, the Czech Republic gets the highest marks.

This is one of the few countries where vocational education enjoys a prestigious reputation. About 75 per cent of secondary students are enrolled in TVET, estimates Vaclav Klenha, a specialist of the European Training Foundation (ETF), compared to 25 per cent who attend purely academic schools. Instead of abandoning the system to market forces, the government has given greater freedom to principals and teachers to update curricula and introduce new occupational fields as opposed to the specific skills associated with a particular job.

Another major selling point is the 'opendoor' policy to higher education. All secondary students can take the Maturita examination, which is a pre-requisite for taking university entrance exams. In addition, some of the new post-secondary training institutes (set up over the past ten years) allow students to transfer directly into universities.

The Russian Federation is also planning to decentralize its TVET system, permitting regional governments to administer their own programmes. But it is not an easy task. Most of the schools can barely be called educational institutions, according to Peter Grootings of the ETF. "But they do keep kids off the street and provide at least one member of a family with a hot meal everyday. The state's TVET schools are one of the few \rightarrow



remaining welfare institutions for young people and poor families."

> Previously two-thirds of Russian workers were trained in elementary vocational schools and 22 per cent of the population have a secondary vocational education, which is 1.5 times higher than those with a college education.

Finding funds

Experts like Grootings are discussing ways to enable TVET students to pursue higher education or training. New internship programmes might also dynamize the system. The problem lies in finding the money. The private sector is too disorganized for any serious partnership, says Grootings, who argues "that the state must invest in this generation and the country's future."

Governments far poorer than the Russian Federation are doing just that. Botswana, Ghana and Kenya have been shouldering the burden since World Bank loans dried up in the 1990s. Instead of setting up a separate stream of specialized schools, these countries have "vocationalized secondary education." While the curriculum remains academic in nature, between 15 and 30 per cent of courses focus on practical subjects like agriculture, management and entrepreneurialism.

"The aim is to redress the imbalance between the aims of a purely academic secondary education and the needs of society," says Rupert Maclean, Director of the UNESCO International Centre for Technical and Vocational Education and Training (UNEVOC).

Investing in future generations

UNEVOC has just published a series of reports evaluating the impact of vocationalization in sub-Saharan Africa (see box p. 5). There has been tremendous political support for these courses in Kenya, Ghana and Botswana, says the report's co-editor, Jon Lauglo, a former World Bank expert on TVET. Botswana, in particular, has made huge investments to introduce information processing and computer skills at the secondary level.

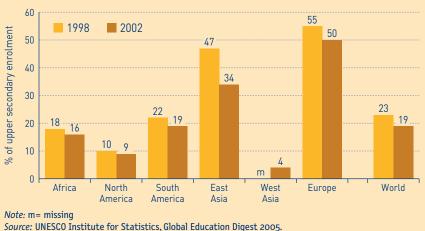
Global trends in technical and vocational education

Globally, almost 50 million students were enrolled in technical and vocational education in 2002. Nine out of ten were enrolled at the upper secondary level, typically designed to serve youth aged 15 to 20 years.

The global average is that one in five upper secondary students are enrolled in technical and vocational programmes. However, the enrolment rates vary widely by regions. In Europe and East Asia, including China, such programmes account for 50 per cent and 33 per cent, respectively, of upper secondary enrolment. In the other regions, technical and vocational enrolment is far less common. In Africa and South America, the share is less than 20 per cent, and in North America and West Asia less than 10 per cent and 4 per cent, respectively.

In the last decade, secondary enrolments have skyrocketed world-wide. From 1998 to 2002 alone, the number of secondary students grew by 15 per cent. However, this growth is largely due to increases in general secondary students. As a result, the share of technical and vocational students has declined since 1998 by 4 percentage points, from 23 per cent down to 19 per cent. This downward trend is observed in all regions, especially in East Asia.

Technical and vocational students as a share of total upper secondary enrolments, 1998 and 2002



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Ironically, the problem may lie with the high hopes and expectations raised by these courses. Parents are rushing to enrol their children in classes that are supposed to lead to jobs. Demand is so high that it is politically impossible to contain the new curriculum to a few regions where it might be tested and refined. As a result, says Lauglo, precious resources might have been spread too thin.

The bottom line is that about 80 per cent of jobs in poorer countries require some form of vocational skills. The urgent challenge is therefore to bridge the demand for jobs with the actual needs of society. Politically, governments cannot afford not to invest in the skills of future generations, says Perera of UNESCO.