



**MINISTRY: FINANCE**  
**REPUBLIC OF SOUTH AFRICA**

Private Bag x115, Pretoria, 0001 • Tel: +27 12 323 8911 • Fax: +27 12 323 3262  
PO Box 29, Cape Town, 8000 • Tel: +27 21 464 6100 • Fax: +27 21 461 2934

Trevor A Manuel

Minister of Finance, South Africa

11 December 2006

Cape Town

**OPENING ADDRESS – 16<sup>TH</sup> COMMONWEALTH CONFERENCE OF  
EDUCATION MINISTERS**

Education is a substantial industry in its own right – the largest category of public expenditure in most Commonwealth countries, and up to 10 per cent of national output and income in many economies, including both public and private sector activities and institutions.

Yet the links between education and the rest of the economy are seldom explicitly addressed in education planning and finance.

We broadly understand that economic development relies on skills, knowledge and expertise, and education contributes to generating these. But we don't have much confidence in formal skills development plans any more –

what used to be called “manpower requirements planning” has largely been discredited as an approach to social and economic development.

We also understand that education has collective “public good” characteristics, and so it is largely financed and organised by governments rather than the business sector. But there are also important contributions of non-governmental organisations and enterprises to the education and training industry, and the interaction between government and private sector activities and responsibilities are complex and vary from one country to another.

Parts of this conference programme deal with these and related issues – how we can make more rapid progress towards meeting the millennium development goals for education enrolment and opportunity, how we can learn from each other’s experience in improving the quality and effectiveness of schooling, the role of higher education in development, partnerships across international borders and engagement between education institutions and local community initiatives. Behind these practical and institutional challenges are several deep and analytically difficult aspects of the interaction between education and the economy.

You have a special and exciting opportunity here to reflect on these issues, jointly and in the separate forums of Ministers and officials, stakeholders, teachers and youth participants. Of course you will do so as committed participants in the global project of education development, but perhaps you will allow me to share with you a few ideas that come from outside the education discourse, yet may have some relevance to your conference deliberations.

The first is a concept associated with economic theorist Kenneth Arrow, who wrote a paper called “learning by doing” in the early 1960s that greatly influenced subsequent thinking about growth, productivity and investment. It’s an idea that has some bearing on the economic revival South Africa is currently experiencing, and probably also helps explain why those old

“personpower planning” models, even when more acceptably named, don’t help very much.

There is nothing new, of course, about the idea of learning by doing – practical experience in the classroom has always been part of well-structured teacher education programmes; engineers, lawyers and accountants all know that until they have actually experienced the difference between concrete slurry and backyard sludge or between an audit statement and the first trial balance spreadsheet, they don’t have any claim to professional status. And the difference between two years on the job and ten years of professional practice is not just a few thousand dollars a month; it is also a good deal of real knowledge and valuable capability.

But the implications of learning by doing for how we think about productivity and growth largely went unrecognised in economic theory until the 1960s, and there is still a lot of unreconstructed policy advice around. Kenneth Arrow’s insights helped explain a puzzle in growth economics – that measured productivity improvements typically follow rather than lead growth spurts, although the standard theory treats productivity as a determinant of output. It’s an idea that also helps explain the dynamics of enduring growth accelerations, increases in investment, productivity, output and employment that become self-reinforcing virtuous cycles of economic advancement. Well-directed investment in infrastructure and technology *generates* the learning, organisational change and skills acquisition that emerge in the national accounts statistics as rising productivity.

Faster economic growth in South Africa over the last five years has highlighted our own skills shortages and the need to recruit and train larger numbers of engineers and city planners and accountants. But faster economic growth also generates a whole lot more activity, industrial capacity building, technology replacement and organisational renewal that in turn stimulate learning opportunities and increase the reward to skills acquisition.

This has become more evident in South Africa in the last five years, but it is also a powerful global dynamic at present – in some respects not entirely

welcome, because rapid demand for skills has contributed to rapidly rising remuneration in skilled and professional occupations, associated with widening earnings inequality in many countries. This “high-skill” learning by doing in the last thirty years has largely been concentrated in the financial services and IT industries, associated with investment in electronic software rather than infrastructure or equipment.

What are the implications for education? One is that the quality of basic language and mathematics schooling is critical, because this is the foundation on which lifelong learning rests. Another is that colleges and higher education institutions need to be ready to adapt and capable of responding to changing economic and labour market trends. Growth and investment create powerful feedback effects on the demand for learning opportunities and the returns to human capital – indeed in South Africa, as in other countries that have experienced an acceleration of growth after a long period of economic stagnation, this feedback effect is like a seismic shock to the education and training system, because it brings such rapid growth in demand for some kinds of skills and qualifications.

This brings me to a second concept that has some bearing on how economists think about education, and in particular on the role of formal qualifications and standards. There is a body of theory about how markets work that focuses on missing or imperfect information, and the transaction costs associated with decision-making with incomplete information. Michael Spence introduced the idea of “signalling” into this literature thirty years ago, and for the first time economists were able to offer a coherent explanation of why we have persisted in our modern education systems with those arcane medieval rites of passage and colourful ceremonies and symbols and formal titles associated with degrees and diplomas and professional qualifications. These are signals, simple indicators that carry information that would otherwise not be evident in the ordinary course of trade and commerce. And so we rely on the advice of a medical doctor or the engineer’s calculations not

because we have conducted an exhaustive due diligence assessment of his or her capabilities, but because a reputable academy of learning has done so.

In this way, formal qualifications play an important role in lowering the costs of specialised transactions and directing consumers or businesses to competent service providers. The system is best developed in the medical field, where there is a whole hierarchy of certified specialisations, each occupying a well-delineated set of conditions and associated therapies. I can tell you that the field of economic and fiscal advice is characterised by no such intelligible order yet: my staff happily offer opinions that are entirely undisciplined in their range and diversity, they trespass merrily on everybody else's area of expertise and they see no embarrassment in contradicting each other and changing their minds. So I have to conclude that economics remains a rather primitive intellectual discipline, and I hope, Ministers, that you enjoy the benefits of better structured ideas and advice in the field of education.

Nonetheless, the idea of signalling is helpful in thinking about the interaction between education and the wider economy and the labour market. If qualifications are to do the job of signalling properly, they need to be reliable and so standard-setting and accreditation of institutions are important. There are interesting implications for institutional autonomy and indeed for international cooperation and alignment of standards. And these are not just questions relevant to high-level professional competences – the entire structure of the education curriculum, from early childhood learning through schooling and further education, how performance is measured and how achievements are communicated, yields a series of signals to parents, teachers and students that influence education choices and occupational aspirations in hugely important ways. It is no exaggeration to say that every aspect of social, cultural and economic development, the life path of every learner, is influenced by the integrity and coherence of this matrix through which educational attainment is measured and signalled.

This surely serves as a reminder of a perspective on education articulated so powerfully by a third Nobel prize-winning economist, Amartya Sen, one of the keynote speakers at this conference in Edinburgh three years ago. In *Development as Freedom* and elsewhere, Sen explains why basic education as a right, an entitlement, as recognised in the millennium development goals and in the main theme of this Commonwealth conference, is both a moral imperative and a practical foundation of social and economic progress.

Taking education as an entitlement seriously means that we have to deal forthrightly and honestly with the challenge of improving the quality of schooling. This means we must get to grips with outcomes, measures of performance, quantitative indicators and searching assessments of the learning process. It means dealing with management problems, proper budgeting and financial administration, more effective long-term funding partnerships between donors and poor countries, maintaining classroom buildings and providing books and equipment, it means investing in technology improvements, it means raising standards of teacher training and monitoring what actually goes on in classrooms.

Education as a basic entitlement means that we need have no reservations about asserting the responsibility of governments for education systems and delivery. But we should also not let ideological presumptions get in the way of supporting initiatives and new ways of doing things that might contribute to more rapid progress in narrowing the education gap. Faith-based organisations make important contributions to schooling in many of our countries, there are effective non-governmental agencies operating in thousands of local communities, regionally or nationally and across national boundaries. Education depends on book suppliers, technology, management support and other kinds of partnership with the private sector – there are no doubt ways in which these arrangements could be strengthened.

In welcoming delegates to this conference from other Commonwealth countries to Cape Town and South Africa, Minister Pandor and I know that we

have a great deal to learn from your experiences in addressing these challenges. Although progress has been made over the past decade, we are still far from realising the quality and availability of education required to ensure equitable access to opportunities and a common South African nationhood. We are here to listen, and to share with you something of what we have learnt by doing, to understand better the signals and indicators that tell us what is happening at the interface between education, the economy and the labour market, and to re-commit ourselves to education as an entitlement and a progressive right that underpins social and economic progress and the shared values on which the Commonwealth is built.