

Forfás



**Forfás Submission
to the
National Council for Curriculum and Assessment
on
Senior Cycle Education**

May 2004

1. Introduction

Forfás is the state agency responsible for providing policy advice to government on enterprise, trade, science, technology and innovation in Ireland. It also provides the secretariat to the Expert Group on Future Skills Needs. Consequently, we are conscious of the importance of education and skills issues. We therefore welcome this opportunity to make a submission to the NCCA on the important issue of Senior Cycle education.

Forfás welcomes the publication of the NCCA's *Directions for Development* document produced as part of its Developing Senior Cycle Education programme, and commends NCCA on its vision.

This submission contains some comments on the aspects of the document that are relevant to the remit of Forfás.

2. Economic Context

A consequence of Ireland's rapid economic progress over the past decade has been the elevation of our cost base to the point where Ireland is no longer a low-cost location. At the same time, globalisation of the world economy has accelerated, spurred on by the emergence of new competitors for international trade and investment such as China, India and Central Europe, and enabled by advances in communications. As a result, Ireland faces the dual challenge of erosion of the traditional enterprise base and increasing competition both in markets and for mobile investment, particularly from Asia.

Against this backdrop, the best way forward for Ireland is to make the transition to an economy driven by expertise and innovation, undertaking higher value activities. Success over the coming years will depend on our ability to respond more quickly and more efficiently than our competitors. The knowledge base required to enable this approach will need to be driven by our educational system.

3. The Importance of the Education System

For the Economy

Ireland's education system as a whole, and the Senior Cycle in particular, has been a fundamental enabler of our economic transition over past decades. However, if Ireland is to sustain and advance its quality of life in the years ahead, the education system must continue to adapt in response to the accelerating pace of change in the economic environment.

We believe the education system must rise to this challenge to equip our people to become the high-skilled workers of the future: the ESRI¹ estimate that employment will rise by about 230,000 between 2003 and 2010. All of this jobs growth is expected to be in the services sector, with jobs growth likely to be particularly concentrated in high-skilled areas such as banking & insurance, internationally traded services, and health & education.

Another future trend is the growing need for indigenous entrepreneurs to drive economic growth and create employment as the competition for mobile investment intensifies. A recent EC report² has identified the important role that secondary education can play in promoting entrepreneurship:

¹ Medium-Term Review 2003-2010, *ESRI*, 2003.

² Education and Training for Entrepreneurship - Final report of the Expert Group, *European Commission*, 2004.

“the objectives of education will include nurturing in young people those personal qualities that form the basis of entrepreneurship, such as creativity, spirit of initiative, responsibility, capacity of confronting risks, independence.”

A key determinant of the long-term prosperity of a nation is the growth in productivity³ of its workforce. Consequently one of the principal, on-going responsibilities of the state is to facilitate continual, incremental improvements in productivity in order to sustain and improve the overall quality of life of its citizens. Productivity is strongly linked to the level of education and training of workers.

For the Individual

Upper secondary education will become increasingly important. Individuals without good second level education will find themselves increasingly disadvantaged in the labour market of the future. Not only will they be excluded from quality employment, their opportunities for further education and training will be severely curtailed. They will find it difficult to access most mainstream opportunities for further and higher education and training.

4. Demographic Trends and Attainment Levels

The number of births in Ireland reached a peak of 74,388 in 1980 and subsequently fell to a low of 48,255 in 1994, a decrease of 35%⁴. This decline in fertility has now percolated through to the school-leaving cohort and will result in a commensurate decline in the numbers available for higher-level studies and/or employment over the period 1998 to *circa* 2012.

Recent evidence indicates that Ireland is ranked 4th among the EU-15 for the proportion 20-24 year-olds with upper second-level qualifications, at 83%⁵. However, five of the ten accession states achieve higher proportions. The failure of 17% of young people to complete the Leaving Certificate constitutes a serious problem, both for the individuals concerned as well as for the economy as a whole, in the light of demographic trends outlined above.

There is now a strong economic imperative to address the imbalances in educational attainment, in addition to the long-standing social and equality ones, which are resulting in the large number of individuals failing to achieve their full potential.

5. General Observations

- Forfás strongly endorses the move to an outcomes-based paradigm and the recognition of the importance of skills as distinct from rote learning.
- Initiatives to increase participation and address regional or gender-based imbalances in attainment must not compromise standards; the integrity and high esteem of the Irish second-level educational system must be protected.
- The fact that in excess of 570,000 people currently in the labour force have not completed senior cycle education⁶ is a cause of particular concern and underlines the

³ Productivity can be defined as the value of goods and services produced per capita.

⁴ Impact of Demographics on the Future Supply of Labour, *The Expert Group on Future Skills Needs*, (unpublished) 2003.

⁵ Quarterly National Household Survey: Educational Attainment 1999-2003, CSO, 2004.

⁶ Census 2002 Vol. 7 Education and Qualifications, CSO, 2004.

need for effective life-long learning. The unique needs of mature students should be reflected in the structure of the curriculum.

- While the importance of consultation and a partnership approach is appreciated, the rate of change of the economic and business climate is such that there is a degree of urgency attached to these reforms and *Forfás considers it imperative that the implementation should proceed promptly and holistically and not in a piecemeal fashion.*

6. Specific Skills-Related Observations

Importance of ICT Skills

The ubiquity of Information and Communications Technology (ICT) in the future will elevate ICT literacy to the status of a core skill, on a par with reading and mathematics. ICT literacy will become a life-skill as much as a career skill. This inevitability should be reflected in the priority afforded both to ICT as a subject and to the use of ICT in the educational curriculum.

ICT will be a key facilitator of life-long learning through e-learning and distance learning. A recent US study⁷ has identified the use of 21st century technologies as one of the six key elements of 21st century learning.

The challenges facing the Irish education system in this regard are further underlined by a recent OECD study⁸ which ranked Ireland 11th of 14 countries surveyed in relation to the use of computers in schools.

In the light of the foregoing, while the five priority areas identified for investment over 2004-2010 are welcomed, *Forfás believes that embedding ICT in the Senior Cycle should also be treated as a priority for investment.* Investment will be required for the provision of the basic infrastructure but crucially should also cover the on-going technical support and maintenance of the infrastructure, the training of teachers, and the development and implementation of computer-based pedagogic models for individual subjects.

Finally, there must be close liaison between the NCCA and the National Centre for Technology in Education in relation to these developments.

Importance of Science Skills

An innovation-driven, knowledge economy is one in which science and technology are a key part of enterprise activity. Ireland's success in developing such an economy will be contingent on, *inter alia*, its ability to provide an adequate supply of science and technology skills in the years ahead.

The OECD has ranked Ireland 5th in terms of the reading literacy skills of 15 year olds⁹. However, attainments for mathematical and scientific literacy, is more modest and Ireland is ranked 9th and 16th respectively; this is a cause for concern in view of the importance of both of skills for a knowledge economy.

⁷ Learning for the 21st Century, *Partnership for 21st Century Skills*, Washington DC, 2003.

⁸ *Completing the Foundation for Lifelong Learning: An OECD survey of Upper Secondary Schools*, OECD, 2004.

⁹ *PISA: Programme for International Student Assessment*, OECD, 2000.

The Task Force on the Physical Sciences carried out a very comprehensive review of the decline in interest in these subjects by young people and put forward a comprehensive set of recommendations for addressing the problem. Forfás strongly endorses these recommendations and urges that the ones relevant to the current review of Senior Cycle education should be actioned.